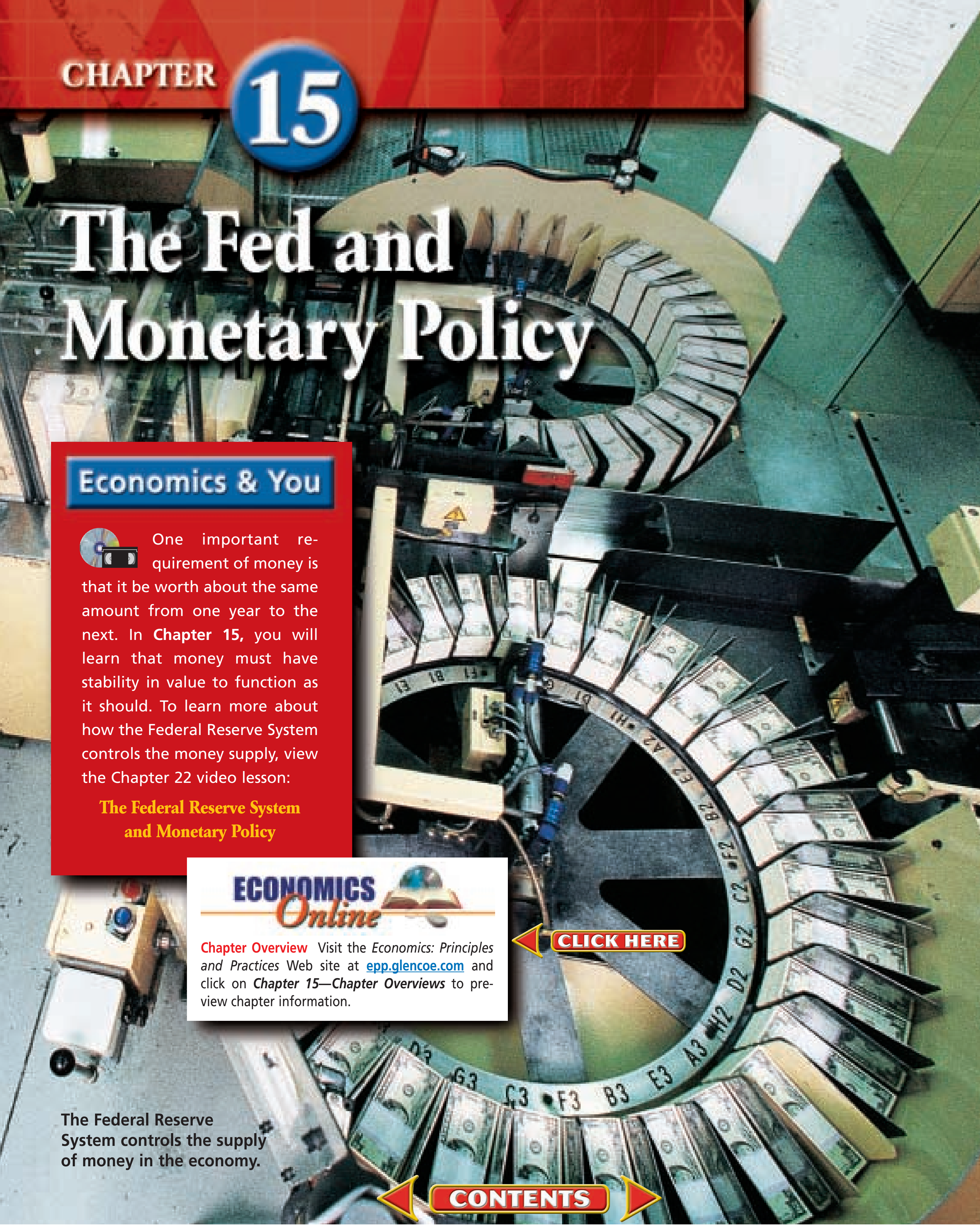
CHAPTER 15

The Fed and Monetary Policy



Economics & You

One important requirement of money is that it be worth about the same amount from one year to the next. In **Chapter 15,** you will learn that money must have stability in value to function as it should. To learn more about how the Federal Reserve System controls the money supply, view the Chapter 22 video lesson:

The Federal Reserve System and Monetary Policy

ECONOMICS Online

Chapter Overview Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 15—Chapter Overviews*** to preview chapter information.

CLICK HERE

The Federal Reserve System controls the supply of money in the economy.

CONTENTS

SECTION 1

The Federal Reserve System

Study Guide

Main Idea
The Federal Reserve works to strengthen and stabilize the nation's monetary system.

Reading Strategy
Graphic Organizer As you read this section, complete a graphic organizer similar to the one below by listing the components that make up the Federal Reserve System.

Key Terms
member bank, bank holding company, Regulation Z, currency, coins

Objectives
After studying this section, you will be able to:
1. **Describe** the structure of the Federal Reserve System.
2. **Explain** the major regulatory responsibilities of the Fed.

Applying Economic Concepts
Truth-in-Lending Laws Have you or your parents ever bought anything on credit? Read to find out how the Fed influences the type of information you receive from the lender.

Cover Story

Design by Sculptor of Vietnam Women's Memorial Selected for Coin

A rendering of Sacagawea by the New Mexico sculptor who created the Vietnam Women's Memorial will appear in millions of Americans' pockets starting in 2000.

Rendering of Sacagawea used for the coin

After sorting through more than 90,000 comments delivered via the Internet, U.S. Mint officials [selected a design by] Glenna Goodacre of Santa Fe. . . . It will depict the Shoshone teenager who accompanied explorers Meriwether Lewis and William Clark to the Pacific Ocean in 1805. . . . Just 16 when she accompanied the explorers, Sacagawea acted as an interpreter and go-between with tribes along the way. . . .

Officials weren't sure Americans would accept the nontraditional look, . . . but Internet responses overwhelmingly favor the mother and child theme and the realistic portrayal.

—*CNNInteractive*, December 17, 1998

On December 23, 1913, Congress created the Federal Reserve System, or "Fed," as the central bank of the United States. Today, the Fed provides financial services to the government, regulates financial institutions, maintains the payments system, enforces consumer protection laws, and conducts monetary policy. Even the new Sacagawea dollar coin featured in the cover story is warehoused and distributed by the Fed. Because everyone uses money, and because interest rates affect the overall level of economic activity, the Fed's activities affect us all.

Structure of the Fed

Figure 15.1 outlines the main organizational structure of the Federal Reserve System. The Fed's main components have remained practically unchanged since the Great Depression of the 1930s.

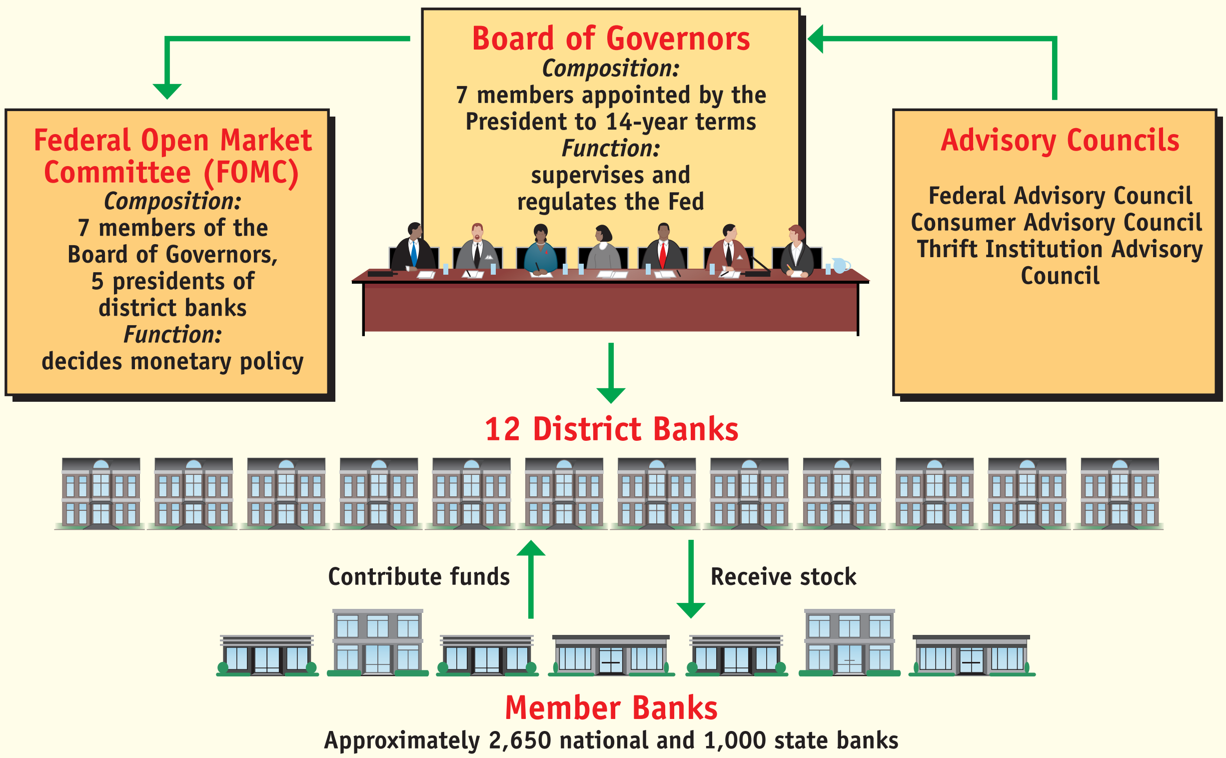
Private Ownership

One of the unique features of the Fed is that it is privately owned by its **member banks**—commercial banks that are members of, and hold

ECONOMICS AT A GLANCE

Figure 15.1

Structure of the Federal Reserve System



Using Charts The Board of Governors supervises the Federal Reserve System. The FOMC has primary responsibility for monetary policy. The member banks contribute a small amount of funds and receive stock ownership shares in return. Three advisory councils also provide direct advice to the Board on a regular basis. **What functions does the Board of Governors perform?**

stock in, the Fed. When the Fed was established in 1913, it was organized as a corporation that issued shares of stock, just like any other corporation. Individual banks may or may not belong to the Fed. National banks—those chartered by the national government—*must* belong. Those chartered by state governments have the choice to belong or not.

When privately owned banks joined the Fed, they were required to purchase some of its shares. This made them part owners of the Fed, just as someone might own shares in IBM, Ford Motor, or Microsoft. Only member banks can own shares. Private individuals can only own shares indirectly by owning shares of stock in a Fed-member bank. Today, Fed membership consists of all national banks and some state banks.

Board of Governors

In 1935 Congress established a seven-member Board of Governors for the Federal Reserve System. Each member is appointed by the president and approved by the Senate to serve a 14-year term of office. These appointments are staggered, so that one appointment becomes vacant every two years. As a result, there are always experienced people on the board.

The Board is primarily a regulatory and supervisory agency. It sets general policies for Federal Reserve and member banks to follow, regulates certain operations of state-chartered member banks, and conducts some aspects of monetary policy. It also makes a report each year to Congress and puts out a monthly bulletin that reports on national and international monetary matters.

Federal Reserve District Banks

When the Fed was established in 1913, it was intended to operate as a system of 12 independent and equally powerful banks. Each reserve bank was responsible for a district, and Federal Reserve notes even carried the name of the district bank on the seal to the left of the portrait. Restructuring minimized, and later eliminated, the Fed's regional nature. The new Fed seal does not incorporate any mention of the district banks.

Today, the 12 Federal Reserve district banks and 25 additional branch banks are strategically located so that they can be near the commercial banks they serve. While each of the 12 banks has its own president and board of directors, the Reserve banks are supervised by the Federal Reserve Board in Washington, D.C. The Federal Reserve banks carry out the same functions for banks and thrift institutions as those institutions carry out for people. The district banks accept the deposits of and make loans to banks and thrift institutions, just as banks perform these functions for the public.

Federal Open Market Committee

The Federal Open Market Committee (FOMC) makes decisions about the growth of the money supply and the level of interest rates. It has 12 members: seven members from the Board of Governors, the president of the New York district Fed, and four district Federal Reserve bank presidents who serve one-year rotating terms.

The committee meets eight times a year in Washington, D.C., to review the country's economy and to make decisions about the cost and availability of credit. Most decisions are made in private but are announced almost immediately. The FOMC is the Fed's primary monetary policy-making body.

Advisory Committees

The Fed has three advisory committees that advise the Board of Governors directly. The first is the Federal Advisory Council, which consists of representatives from each of the 12 district banks. It provides advice to the Federal Reserve on matters concerning the overall health of the economy.

The second committee is the Consumer Advisory Council. The council's 30 members meet with the Board three times a year on consumer credit laws.

Board of Governors

Responsibilities The Board of Governors supervises the entire Federal Reserve System. ***What role does the Fed play in mergers of member banks?***

Members include educators, consumer legal specialists, and representatives from consumer and financial industry groups.

The third advisory group is the Thrift Institutions Advisory Council. On the council are representatives from savings and loan associations, savings banks, and credit unions. It meets with the Board annually to advise on matters pertaining to the thrift industry.

Regulatory Responsibilities

The Federal Reserve System has a broad range of responsibilities ranging from member bank supervision to enforcing consumer legislation.

State Member Banks

All depository institutions–including commercial banks, savings banks, savings institutions, and credit unions–must maintain reserves against their customers' deposits. The Fed is responsible for monitoring the reserves of its state-chartered member banks, while other federal agencies monitor the reserves of nonmember banks and other depository institutions.

While reserves were originally a matter of prudent banking practice, they fulfill two key roles today. First, the banks use reserves to clear checks. Second, the Fed uses reserves to control the size of the money supply.

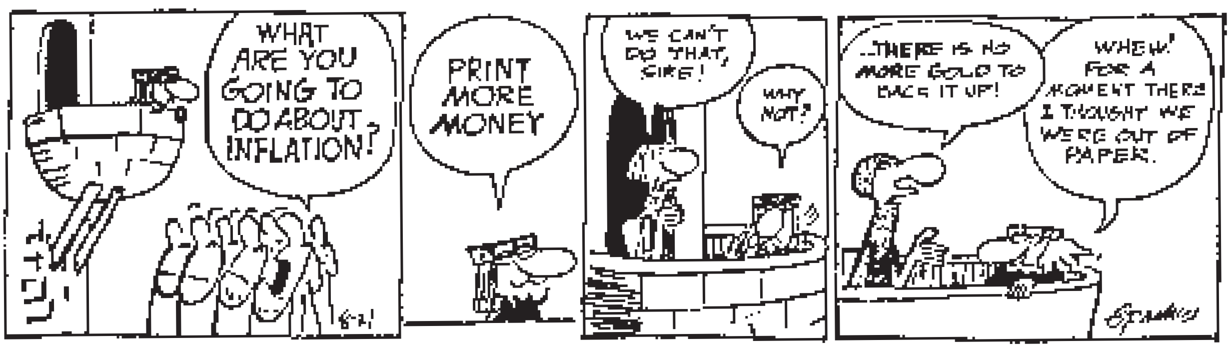
Bank Holding Companies

The Fed also has broad legislative authority over **bank holding companies**–corporations that own one or more banks. Holding companies, unlike banks, do not accept deposits or make loans. When individuals buy stock in a bank today, they generally purchase the stock of the holding company, which in turn owns one or more individual banks.

This arrangement may seem unusual, but it can be traced to the many restrictions placed on banks after many of them failed during the Great Depression. At the time, bankers tried to sidestep the restrictions by setting up holding companies that would not be subject to banking laws because they were not banks in the traditional sense. Later, Congress gave the Fed the power to regulate the activities of the holding companies so that they could not evade restrictions.

Today about 6,000 holding companies control approximately 7,000 commercial banks. In many cases, the holding company structure has resulted in even more regulation and supervision. For example, the FDIC may inspect and regulate three nonmember state banks that a single holding company owns, while the Fed regulates the holding company itself.

Financial Services



Managed Money Because nations no longer back their money with gold, they rely on central banks, like the Fed, to manage the amount of money in circulation. ***What financial services does the Fed provide to the government?***

International Operations

Foreign banks have a large presence in the economy. Banks from 60 different countries operate about 500 branches and agencies in the United States. In addition, foreign banks own shares of many large United States banks. In all, foreign banks control about 20 percent of all banking assets in the United States.

The Fed has broad authority to supervise and regulate these foreign banks. Branches and agencies of these banks are examined annually, and the Fed even has the power to terminate the domestic operations of foreign banks.

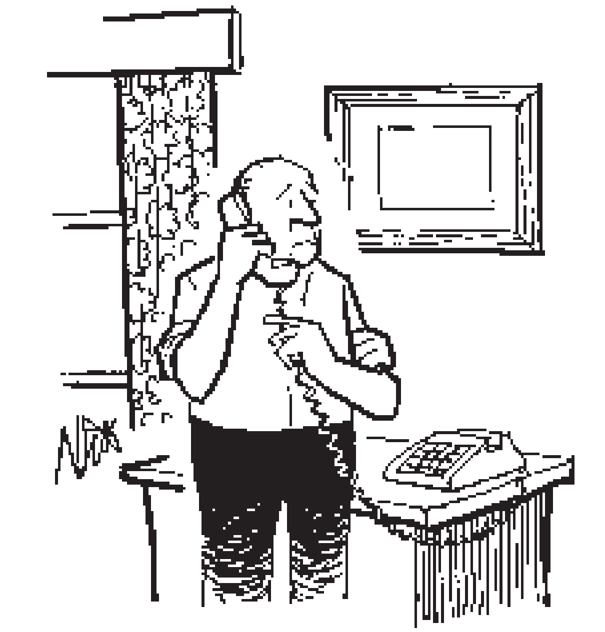
In addition, the Fed authorizes and supervises the international operations of United States member banks and holding companies. Currently, Fed member banks operate about 800 branches in foreign countries.

Member Bank Mergers

A merger of two or more banks requires the approval of the appropriate federal banking authority. If the surviving bank is a state member bank, the Fed must approve the merger.

Other banking authorities approve other mergers. If two national banks merge, the Comptroller of the Currency, a Treasury Department official, must approve the merger. If two nonmember state banks merge, the FDIC must approve the merger.

Bank Mergers



"For credit-card information, press one; for a current statement, press two, for the bank's present owner, press three."

The Fed's Role Mergers are a fact of economic life. ***What is the Federal Reserve's role in bank mergers?***

Other Federal Reserve Services

The Federal Reserve has other responsibilities as well. These include clearing checks, enforcing consumer legislation, maintaining currency and coins, and providing financial services to the government.

One major service the Fed performs is that of clearing checks, a process that makes extensive use of the reserves in the banking system. In general, the deposits that member banks keep with the Fed are shifted from one bank to another, depending on the way checks are written on the member banks.

Figure 15.2 illustrates the check-clearing process. The person in the example writes a $5 check. As the check is processed through the banking system, funds are moved from one member bank's account to another until the check returns to the issuer. The money is then removed from the issuer's checking account.

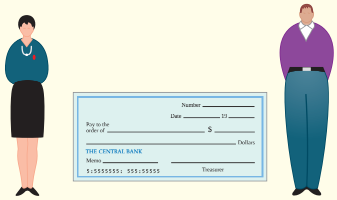
The Fed clears millions of checks at any given time by using the latest high-speed check-sorting equipment available. In some cases banks gather information from a check when it is deposited, and then transfer the information to computer files. These files are sent to the Fed, which uses the information to adjust member banks' accounts. In this way, the member bank's balance can be adjusted without the check having to go through the entire system.

The Fed is also responsible for some consumer legislation, primarily the federal Truth in Lending Act that requires sellers to make complete and accurate disclosures to people who buy on credit. Under **Regulation Z,** the Fed has the authority to

ECONOMICS AT A GLANCE

Figure 15.2

Clearing a Check

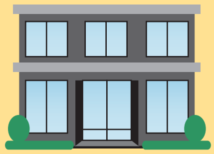


The process begins with Anna, who has a $100 demand deposit account (DDA) with Bank X. Anna writes a check for $5, which she gives to Nathan. At the same time, she records the amount in her checkbook to show a new balance of $95. (Note that only the accounts affected by the $5 check are shown in this figure.)

Nathan	
DDA ~~$100~~ 105	

Nathan deposits the check.

Bank Y

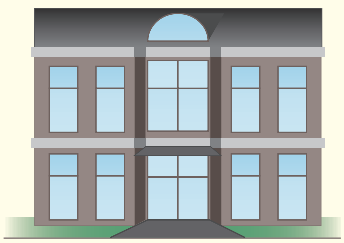


Nathan, who banks at Bank Y, now has the check. If he decides to cash it, he will have $5 in currency in addition to his DDA of $100. If he decides to make a deposit, his DDA will rise to $105. Either way, Bank Y ends up with the check written by Anna.

Because the check is drawn on Bank X, Bank Y gets payment for it by sending the check to the district Federal Reserve Bank. The Fed then processes the check by transferring $5 from Bank X's MBR account to Bank Y's MBR account. The Fed then sends Anna's check to Bank X.

Bank Y	
MBR ~~$10~~ 15	Nathan's DDA ~~$100~~ 105

Bank Y sends the check to the Fed district bank for payment.



District Federal Reserve System Bank	
	MBR Bank X ~~$10~~ 5
	MBR Bank Y ~~$10~~ 15

Bank X learns of Anna's check only when it arrives from the Fed. The bank then makes up for the loss of the $5 in its MBR account by reducing Anna's DDA by $5.

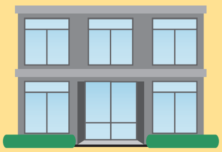
Bank X	
MBR ~~$10~~ 5	Anna's DDA ~~$100~~ 95

Bank X has its MBR reduced, and receives Anna's check.

Anna	
DDA ~~$100~~ 95	

The check is returned to Anna.

Bank X



Bank X then returns Anna's check to her at the end of the month, along with any others she wrote during the same period. When Anna gets the canceled checks, she balances her checkbook to make sure her records agree with the bank's.

extend truth-in-lending disclosures to millions of individuals who purchase or borrow from corporations, retail stores, automobile dealers, banks, and lending institutions.

If you buy furniture or a car on credit, for example, you will discover that the seller must explain several items before you make the purchase. These items include the size of the down payment, the number and size of the monthly payments, and the total amount of interest over the life of the loan.

Today's **currency,** the paper component of the money supply, is made up of Federal Reserve notes–fiat paper money issued by Federal Reserve banks and printed at the Bureau of Engraving and Printing. This currency, issued in amounts of $1, $2, $5, $10, $20, $50, and $100, is distributed to the Fed district banks for storage.

The Bureau of the Mint produces **coins**–metallic forms of money–such as pennies, nickels, dimes, quarters, and the new Sacagawea dollar coin. After the coins are minted, they are shipped to the Fed district banks for storage. When member banks need additional coins or currency, they contact the Fed to fulfill their needs.

When banks come across coins or currency that are mutilated or cannot be used for other reasons, they return it to the Fed for replacement. The Fed then destroys the old money so that it cannot be put back into circulation.

Did you know?

Commercial Banks Commercial banks are the largest financial institutions in the country and are the main sources for exchanging money. The first commercial bank in the United States was founded in 1782 in Philadelphia. Today, commercial banks hold about two-thirds of the nation's money deposits.

One of the Fed's important functions involves the financial services it provides to the federal government and its agencies. For example, the Fed conducts nationwide auctions of Treasury bills, bonds, and notes. It also issues, services, and redeems these securities on behalf of the Treasury. In the process, it maintains the equivalent of numerous demand deposit accounts for the Treasury and clears all checks drawn on those accounts. Other accounts are used to process the tens of millions of dollars of U.S. savings bonds that are sold and redeemed annually.

The Fed also maintains accounts for the IRS, which holds federal taxes paid by individuals and businesses. In fact, any check written to the United States Treasury is deposited in the Fed. Any federal agency check, such as a monthly Social Security payment, comes from accounts held at the Fed. In essence, the Fed serves as the federal government's bank.

Section 1 Assessment

Checking for Understanding

1. **Main Idea** What is the purpose of the Federal Reserve?
2. **Key Terms** Define member bank, bank holding company, Regulation Z, currency, coins.
3. **Describe** the structure of the Fed.
4. **List** eight areas in which the Fed has responsibility.

Applying Economic Concepts

5. **Truth-in-Lending Laws** Visit any local store that sells goods on credit—appliances, cars, or furniture, for example. Ask the owner or manager about the type of information that the store is required to disclose when the sale is made. Obtain copies of the disclosure forms and share them with your classmates.

Critical Thinking

6. **Synthesizing Information** One of the responsibilities of the Fed is to approve or disapprove mergers between state member banks. Explain how the mergers of two such banks would be classified according to the discussion of mergers in Chapter 3.

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

Profiles in Economics

Enormous Power:
Alan Greenspan
(1926–)

In some ways, Alan Greenspan is like many other people in government today—a longtime public servant, a respected administrator, and a fiscally conservative theorist with a Ph.D. in economics. What sets him apart, however, is that he is widely regarded as being the second most powerful person in America, after the president.

Greenspan is chairman of the Federal Reserve System's Board of Governors. As such, his views on the economy are closely monitored by almost everyone in the business community.

MOVING MARKETS

In late 1996, when stocks were setting record highs during a bull market, Greenspan asked publicly if prices weren't being propelled by the "irrational exuberance" of investors. The reaction to his remarks was almost instantaneous: investors, fearing that the Fed chairman was about to implement restrictive monetary policies that would drive stock prices down, began to sell. Within hours, stock exchanges around the world lost 2 percent of their value, and the Dow-Jones Industrial Average fell 145 points. Such is the power of Greenspan.

FISCAL CONSERVATISM

Greenspan is a longtime conservative. Early in his career, he was even a staunch advocate of the gold standard, which he saw as a way to assure monetary stability and fiscal responsibility by government. In his career he has worked as an economic consultant to private industry and served on a number of corporate and industry boards. Greenspan served from 1974 to 1977 as chair of the president's Council on Economic Advisors during the Ford administration. From 1981 to 1983, he chaired the National Commission on Social Security Reform, leading to the reform of the nation's Social Security system.

Greenspan joined the Fed in 1987 and was appointed chair of the Fed's Board of Governors by Presidents Reagan, Bush, and Clinton. Greenspan continues to be a strong supporter of the free market and an opponent of government intervention in the economy. As the second most powerful person in America, people will continue to scrutinize his every statement.

Examining the Profile

1. **Synthesizing Information** Explain how Greenspan's position as chairman of the Federal Reserve System's Board of Governors makes him extremely influential.
2. **Evaluating Information** Do you think Greenspan has too much power? Explain your answer.

CONTENTS

SECTION 2

Monetary Policy

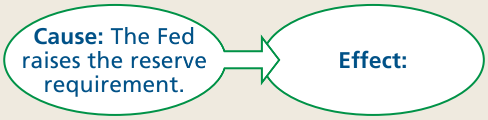
Study Guide

Main Idea

Federal Reserve actions intended to stabilize the economy make up what is called monetary policy.

Reading Strategy

Graphic Organizer As you read the section, complete a graphic organizer similar to the one below.



Key Terms

monetary policy, fractional reserve system, legal reserves, reserve requirement, excess reserves, liabilities, assets, balance sheet, net worth, liquidity, savings account, time deposit, member bank reserve, easy money policy, tight money policy, open market operations, discount rate, margin requirement, moral suasion, selective credit controls

Objectives

After studying this section, you will be able to:

1. **Describe** the use of fractional reserves.
2. **Understand** the tools used to conduct monetary policy.

Applying Economic Concepts

Fractional Bank Reserves Did you know that most of our money supply exists in the form of intangible computer entries? Read to find out how the fractional reserve system works.

Cover Story

Is the Fed Ready to Hike Rates?

NEW YORK (CNNfn)—If recent reports of unexpected strength in the nation's economy are any indication, the Federal Reserve is likely to raise interest rates sooner rather than later, analysts said Wednesday.

Interest rates on the rise?

A rise in short-term rates would follow three rate cuts by the Fed late last year that were intended to insulate the United States from economic problems in Asia and elsewhere. . . . By [last fall] Asia's economic woes had spread to Latin America and much of Europe and looked poised to hit the shores of the U.S. . . .

The Fed sprang into action, cutting rates three times, and the rate cuts worked. By January, the U.S. economy was back on track . . . [But now], . . . Fed officials are likely to raise rates. . . .

—*CNNfn*, June 2, 1999

One of the Federal Reserve System's most important responsibilities is that of monetary policy. **Monetary policy** is the expansion or contraction of the money supply in order to influence the cost and the availability of credit. The Fed, as you read in the cover story, does not hesitate to change interest rates whenever the economy's health is threatened.

Monetary policy is a structured process. In order to understand it better, it helps to understand the fractional reserve system that our banking system is based on.

Fractional Bank Reserves

The United States has a **fractional reserve system,** which requires banks and other depository institutions to keep a fraction of their deposits in the form of legal reserves. **Legal reserves** consist of coins and currency that depository institutions hold in their vaults, plus deposits with Federal Reserve district banks. Under this system, banks are subject to a **reserve requirement,** a rule stating that a percentage of every deposit be set aside as legal reserves.

To illustrate, the banking system today operates with a 12 percent reserve requirement against demand deposit accounts. That means that whenever someone deposits $100 to open a checking account, $12 must be set aside as vault cash or kept as a deposit at the Fed. The other $88 is called **excess reserves**–legal reserves in excess of the reserve requirement. The excess reserves are the funds the bank can lend to others who may want a loan.

How Banks Operate

To understand how a bank operates, it helps to examine the bank's liabilities and assets. Its **liabilities** are the debts and obligations to others. Its **assets** are the properties, possessions, and claims on others. Liabilities and assets generally are put together in the form of a **balance sheet**–a condensed statement showing all assets and liabilities at a given time. The balance sheet also reflects **net worth**–the excess of assets over liabilities, which is a measure of the value of a business.

Organizing a Bank

Suppose someone obtains a charter to start the hypothetical State Bank of Highland Heights. The bank is organized as a corporation, and the owners supply $20 so that the bank can obtain buildings and furniture before it opens for business. In return for this investment, the owners receive stock, which shows as net worth or equity. **Panel A** in **Figure 15.3** shows how the balance sheet of the bank might look as soon as it is organized.

The balance sheet shows the assets on the left and the liabilities and net worth on the right. To see why net worth is placed on the right side of the balance sheet, rearrange the definition of net worth from

$$\text{Assets} - \text{Liabilities} = \text{Net Worth}$$

to

$$\text{Assets} = \text{Liabilities} + \text{Net Worth}$$

The balance sheet in the figure is sometimes called a *T-account* because of its appearance, separating the assets from the liabilities and net worth the same way the equal sign does in the above equation. The T-account also works like an equal sign in that the entries on the left must always be equal to the entries on the right.

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Student Web Activity Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 15—Student Web Activities*** for an activity on the Fed's monetary policy.

Accepting Deposits

Suppose that now a customer walks in and opens a checking account with $100 in currency. This transaction, shown in **Panel B** of **Figure 15.3,** is reflected on the balance sheet in two ways.

First, to indicate that the money is owed to the depositor, the $100 checking account (or demand deposit) is carried as a liability. Second, to indicate that the cash is the property of the bank, it also appears as an asset on the balance sheet. Actually, the $100 appears in two places on the asset side–$90 appears as cash, and $10 appears as required reserves. The size of the reserve is determined by the reserve requirement, which is assumed to be 10 percent in this example. If the requirement was 15 percent, $15 would be set aside.

Making Loans

Now that the bank has some cash on hand, it can make loans. Specifically, it is free to loan out $90 of excess reserves, the cash and currency not needed to fulfill the reserve requirement.

If another person enters the bank and borrows an amount equal to the excess reserves, the $90 is moved from the cash line to the loans, or accounts receivable, line in the balance sheet. These changes appear in **Panel C.** Note that there is no change in total assets, only in their distribution–a change from a noninterest-earning asset (cash) to an interest-earning one (a consumer loan).

If the bank charged 12 percent interest on the new loan, it would earn 12 percent of $90, or

$10.80 each year. This income, along with income earned on other loans, would then be used to pay its officers and employees; its utility bills, taxes, other business expenses; and its stock dividends.

Reaching Maturity

In time, the bank would grow and prosper, diversifying its assets and liabilities in the process. Most of the bank's deposits would eventually return to the community in the form of loans, and some of those loans would return to the bank in the form of new deposits.

The bank might even use some of its excess reserves to buy federal, state, or local bonds and other securities. The bonds and securities are helpful for two reasons. They earn interest and, therefore, are more attractive than cash. They also have a high degree of **liquidity**—the potential to be converted into cash in a very short time. Liquidity adds to the bank's ability to serve its customers. When the demand for loans increases, the bank can sell its bonds and then lend the cash to customers.

The bank also might try to attract additional funds by introducing different kinds of products. One product is a certificate of deposit, a receipt showing that an investor has made an interest-bearing loan to a bank. Most banks also offer **savings accounts** and **time deposits,** interest-bearing deposits that cannot be withdrawn by check. The two accounts are similar, except that prior notice must be given to withdraw time deposits, while no prior notice is needed to withdraw savings.

Unless costs are extremely high, the bank should be able to make a

ECONOMICS AT A GLANCE

Figure 15.3

Balance Sheet Entries for a Hypothetical Commercial Bank

A **When a bank is organized as a corporation, the owners contribute cash used to buy buildings and furniture. In return, the owners receive stock.**

Assets		Liabilities + NW	
Required Reserves:		Demand Deposits:	
Cash:		Net Worth or Equity:	$20
Loans:			
Bonds:			
Buildings and Furniture:	$20		
	$20		**$20**

B **When a customer opens an account, some of the deposit is set aside as a reserve, while the excess can be loaned out. Note that Net Worth (NW) remains unchanged.**

Assets		Liabilities + NW	
Required Reserves:	$10	Demand Deposits:	$100
Cash:	$90	Net Worth or Equity:	$20
Loans:			
Bonds:			
Buildings and Furniture:	$20		
	$120		**$120**

C **When another person wants to borrow money, the bank can lend all cash in excess of its required reserves.**

Assets		Liabilities + NW	
Required Reserves:	$10	Demand Deposits:	$100
Cash:		Net Worth or Equity:	$20
Securities:			
Loans:	$90		
Bonds:			
Buildings and Furniture:	$20		
	$120		**$120**

Using Charts The T-accounts for the hypothetical bank trace the receipt of deposits through the loan-generating process. **If the reserve requirement was 20 percent, how much could the bank loan?**

profit if it can maintain a 2- to 3-percent spread between the rate it charges on its loans and the rate it pays for borrowed funds in the form of CDs, savings accounts, and time deposits. If a bank pays 6 percent interest on money it receives, for example, it must loan money at a minimum of 8 or 9 percent to make enough income to pay expenses.

Fractional Reserves and Monetary Expansion

The fractional reserve system allows the money supply to grow to several times the size of the reserves the banking system keeps. **Figure 15.4** uses a reserve requirement of 20 percent to show how this can happen.

Banks as Businesses

Services to Customers Banks provide a source of loans for individuals and businesses that need to borrow money. Banks also provide safety and interest income for their depositors' money. ***What are time deposits?***

Loans and Monetary Growth

In the figure, a depositor named Fred opens a demand deposit account (DDA) on Monday by depositing $1,000 cash in a bank. By law, $200 of Fred's deposit must be set aside as a reserve in the form of vault cash or in a **member bank reserve (MBR)**—a deposit a member bank keeps at the Fed to satisfy reserve requirements. The remaining $800 of excess reserves represents the bank's lending power.

On Tuesday, the bank lends its excess reserves of $800 to Bill. Bill can take the loan either in cash or in the form of a DDA with the bank. If he decides to take the DDA, the money never leaves the bank. Instead, it is treated as a new deposit, and 20 percent, or $160, is set aside as a reserve. The remaining $640 are excess reserves that can be lent to someone else.

On Wednesday, Maria enters the bank and borrows $640. She, too, can take the loan in cash or a DDA. If she elects to do the latter, the bank has a new $640 deposit, 20 percent of which must be set aside as a required reserve, leaving $512 of excess reserves.

By Wednesday, Fred has a $1,000 DDA, Bill has an $800 DDA, and Maria has either $640 in cash or a $640 DDA. This amounts to $2,440 in the hands of the nonbank public by the end of the business day—a process that began on Monday with the $1,000 deposit. As long as the bank continues to have excess reserves, the lending process can continue.

Reserves and the Money Supply

Because each new loan is smaller than the one before, the money supply will stop growing at some point. A mathematical relationship exists between the dollar amount of reserves, the reserve requirement, and the size of the money supply. For example, if the total dollar amount of reserves equals 20 percent of the money supply, we could write:

Total Reserves = .20 (Money Supply)
or,
$1,000 ÷ .20 = Money Supply
Therefore, $5,000 = Money Supply

This shows that $1,000 of total reserves, given a 20 percent reserve requirement, will result in a money supply of $5,000. This amount is the final outcome of the example in **Figure 15.4,** after Fred made his initial deposit.

After the money supply has reached its full size, further changes in the amount of total reserves can still affect it. Using the symbol Δ, meaning *change in*, we see that:

Δ Reserves = .20 (Δ Money Supply)
or,
Δ Reserves ÷ .20 = Δ Money Supply

Someone, for example, might withdraw $5 from the bank and keep it permanently in a wallet. The money supply would then change by:

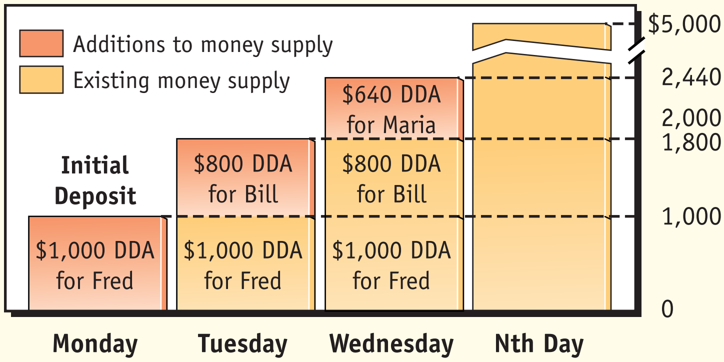
Δ Reserves ÷ .20 = Δ Money Supply
or,
−$5 ÷ .20 = −$25

In other words, the money supply would shrink by $25, from $5,000 to $4,975.

ECONOMICS AT A GLANCE

Figure 15.4

Fractional Reserves and the Money Supply



Using Charts With a 20 percent reserve requirement, a $1,000 cash deposit will result in a fivefold expansion of the money supply. To compute the eventual size of the money supply, use the formula below.

Total Reserves ÷ Reserve Requirement = Money Supply
or $1,000 ÷ .20 = $5,000

If the initial reserves were $2,000, how large could the money supply get?

Tools of Monetary Policy

The Fed has three major and two minor tools it can use to conduct monetary policy. Each tool affects the amount of excess reserves in the system, which in turn affects the monetary expansion process described above. The outcome of monetary policy is to influence the cost and availability of credit. The direction of change depends on the objectives of the Federal Reserve System.

Under an **easy money policy,** the Fed allows the money supply to grow and interest rates to fall, which normally stimulates the economy. When interest rates are low, people tend to buy on credit. This encourages sales at stores and production at factories. Businesses also tend to borrow and then invest in new plants and equipment when money is cheap. Under a **tight money policy,** the Fed restricts the growth of the money supply, which drives interest rates up. When interest rates are high, consumers and businesses borrow and spend less, which slows economic growth.

Reserve Requirement

The first tool of monetary policy is the reserve requirement. Within limits that Congress sets, the Fed can change this requirement for all checking, time, or savings accounts in the country.

This tool gives the Fed considerable control over the money supply. For instance, suppose the Fed lowers the reserve requirement in the previous example from 20 to 10 percent. More money could be loaned to Bill, Maria, and others, and the money supply could reach $10,000. If the Fed raises the reserve requirement to 40 percent, however, less money would be loaned, and the money supply would be smaller. The effects of different reserve requirements are shown in **Figure 15.5.**

Historically, the Fed has been reluctant to use the reserve requirement as a policy tool, in part because other monetary policy tools work better. Even so, the reserve requirement can be a very powerful tool should the Fed decide to use it. **Figure 15.6** summarizes the impact of a change in the reserve requirement on the money supply in the manner just described, along with the impact of the other monetary tools described below.

Open Market Operations

The second and most popular tool of monetary policy is **open market operations**–the buying and selling of government securities in financial markets. Open market operations are one of the methods the Federal Reserve can use to influence short-term interest rates. Open market operations involve the purchase or sale of government securities by the Federal Reserve. When the Fed purchases government securities, it increases the supply of money, putting downward pressure on interest rates. When the Fed sells government securities, it decreases the supply of money, putting upward pressure on interest rates. Open market operations affect the amount of excess reserves in the banking system and, therefore, the ability of banks to support new loans.

Suppose the Fed decides to increase the money supply. To do so, it buys government securities from a dealer who specializes in large-volume transactions of those securities. The Fed pays for the securities by writing a check drawn on itself. The dealer then deposits the check with his or her bank. The bank forwards the check to the Fed for payment. At this

THE GLOBAL ECONOMY

The Euro: Today and in the Future

European industry is transferring to a single currency, the euro. Monetary union means that industries can build plants, sell products, and raise capital in other European markets without worrying about currency fluctuations.

Retooling is costly, however. Most multinational corporations will need to invest millions of dollars. Some are converting their entire operations to the *euro* system immediately. Other companies are instituting the changes in phases. In step 1, for example, companies adapt their computers to bill customers and pay suppliers in euros. At the same time, they will maintain dual accounting in euros and national currencies. Step 2 includes converting transactions such as budget allocations and payments between subsidiaries into euros. Step 3 includes the changeover of human resource functions, including payroll and benefits and paying taxes in eurodollars.

What does the changeover mean for consumers? The old currency units won't disappear until mid-2002, and many consumers may use them till the last minute. Even if consumers aren't yet using euro notes and coins, their bank accounts, retirement funds, and in many cases paychecks will be expressed in euros.

—*Business Week,* December 14, 1998

Critical Thinking

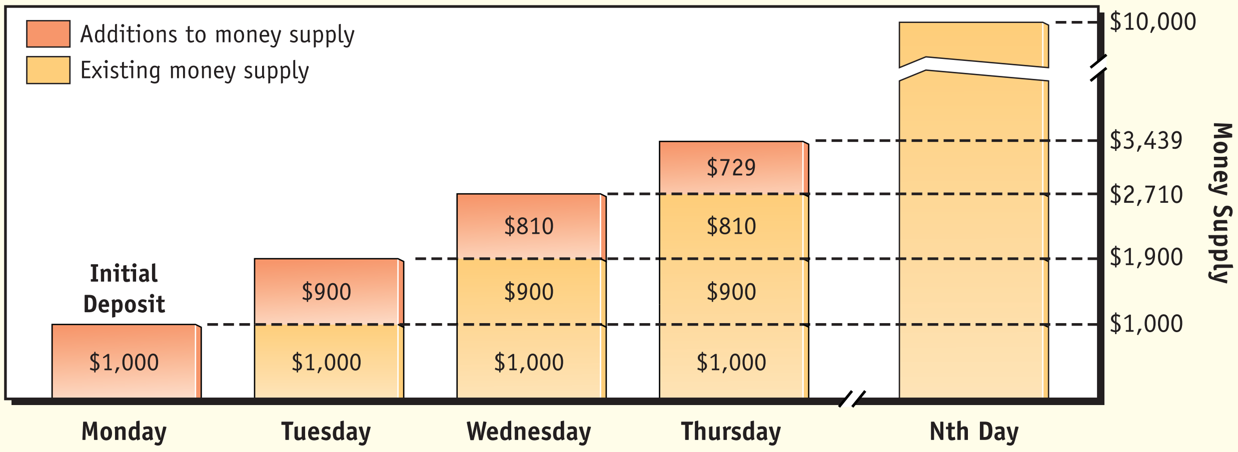
1. **Analyzing Information** What is the purpose of the euro?
2. **Sequencing Information** What steps are involved in the transition to the euro?
3. **Drawing Conclusions** What might be drawbacks that Europe could face during the changeover?

ECONOMICS AT A GLANCE

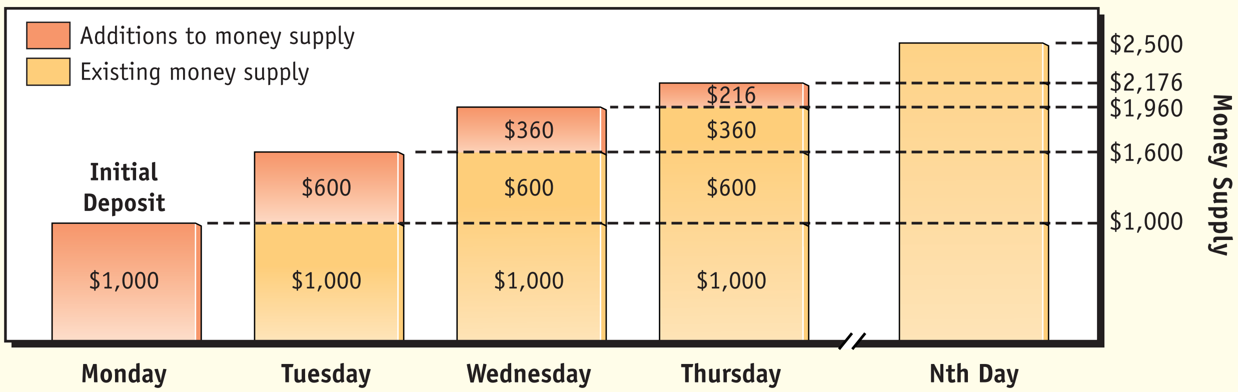
Figure 15.5

The Reserve Requirement as a Tool of Monetary Policy

A Monetary Expansion (10% Reserve Requirement)



B Monetary Expansion (40% Reserve Requirement)



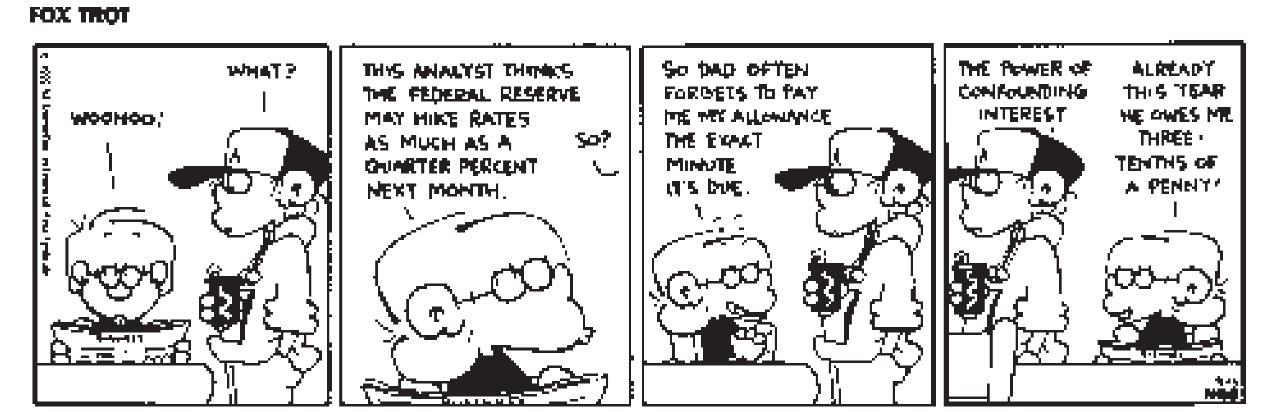
Understanding Percentages If the Fed wants to control the size of the money supply, it can change the reserve requirement. A low requirement, such as 10 percent, can be used to expand the money supply. A higher requirement, such as 40 percent, has the opposite effect.

Low reserve requirement:
$1,000 ÷ .10 = $10,000

High reserve requirement:
$1,000 ÷ .40 = $2,500

What is the size of the money supply if the Fed sets the reserve requirement at 25 percent?

Tools of the Federal Reserve



Changes in Interest The most important job of the Federal Reserve System is to maintain a stable supply of money for the economy. The Fed uses several basic tools to carry out this responsibility. ***How do changes in the discount rate affect other interest rates?***

point, the Fed "pays" the check by increasing the bank's MBR with the Fed.

The result is that whenever the Fed writes a check, more reserves are pumped into the banking system. Because only some of these additional reserves are needed to back existing deposits, the excess reserves can be loaned out, thus increasing the money supply.

If the Fed wants to contract the money supply, it can sell billions of dollars of government securities back to dealers. Dealers pay for the securities with checks drawn on their own banks. The Fed then processes the checks by reducing the MBRs of dealers' banks. With fewer reserves in the banking system, fewer loans are made and the money supply contracts—driving interest rates up.

The Federal Open Market Committee (FOMC) conducts open-market operations. Normally the FOMC decides if interest rates and monetary growth are too high, too low, or just right. After the committee votes to set targets, officials at the trading desk take over. The trading desk is the physical location at the Fed's New York district bank where the buying and selling actually takes place. The officials at the desk buy and sell bonds daily to maintain the targets set by the FOMC. The desk is permanently located in New York to be close to the nation's financial markets.

Discount Rate

As a central bank, the Fed makes loans to other depository institutions. The **discount rate**—the interest the Fed charges on loans to financial institutions—is the third major tool of monetary policy.

Private individuals and businesses cannot borrow from the Fed. Banks can, and frequently do. If the discount rate goes up, fewer banks will want to borrow from the Fed. This will reduce the amount of money these banks have available to loan to their customers and will force interest rates up. Changes in the discount rate usually result in similar changes in other interest rates.

A bank might obtain a loan from the Fed for two reasons. First, it could have an unexpected drop in its MBRs, which would shrink its excess reserves. In this case, the bank could go to the Fed and arrange a short-term loan to cover the shortfall.

Second, a bank could be faced with seasonal demands for loans. A bank in an agricultural area, for example, might face a heavy demand for loans during the planting season. In that case, it would need additional MBRs to support the loans made in the spring.

Most institutions can borrow from the Federal Reserve, including member and nonmember banks, savings institutions, and even credit unions. The Fed, however, views borrowing as a privilege rather than a right. As a result, the Fed may limit the number of times a borrower can borrow from the Fed.

Margin Requirements

Before the Great Depression, people speculated wildly in the stock market. Easy credit in the form of **margin requirements,** minimum deposits left with a stockbroker to be used as down payments to buy other securities, made much of the speculation possible.

For example, with a margin requirement as low as 10 percent, a person only had to deposit $100 with a stockbroker to purchase $1,000 worth of stocks. The stockbroker would supply the remaining $900. If the stock rose to $1,300, it could be sold and the investor would net $400 after repaying $900 to the broker. If, however, the stock dropped to $900, the broker would sell the stock to protect his or her own loan if the investor could not come up with additional money.

Because credit was easily obtained and because margins were so low, the margins were easy to forfeit when modest declines in stock prices occurred. In fact, many investors lost everything they had when stock prices crashed in 1929. Today, most margin requirements are set at 50 percent, meaning an investor has to put up at least half the money needed to buy eligible stocks and bonds. The Federal Reserve sets the margin requirement and also monitors activity on the stock market. It also publishes a list of stocks that are eligible for margin loans.

The Fed seldom uses margin requirements as an active tool of monetary policy. Instead, it uses them very selectively to dampen or stimulate spending on equities in the stock market.

Other Tools

The Fed may also use two other methods to control the money supply. These are moral suasion and selective credit controls.

ECONOMICS AT A GLANCE

Figure 15.6

Summary of Monetary Policy Tools

Tool	Fed Action	Effect on Excess Reserves	Money Supply
Reserve Requirement	Lower	Frees excess reserves because fewer are needed to back existing deposits in the system.	Expands
	Raise	More reserves are required to back existing deposits. Excess reserves contract.	Contracts
Open Market Operations	Buy bonds	Checks written by the Fed add to excess reserves in the system.	Expands
	Sell bonds	Checks written by buyers are subtracted from reserves. Excess reserves in the system contract.	Contracts
Discount Rate	Lower	Additional reserves can be obtained at lower cost. Excess reserves expand.	Expands
	Raise	Additional reserves through borrowing are now more expensive. Excess reserves are not added.	Contracts

Using Charts The key to monetary policy is to see how the excess reserves in the system are affected. **What happens to the money supply when the Fed increases excess reserves? When it decreases excess reserves?**

Tools of the Federal Reserve

Margin Requirements Depositors besiege a merchant bank in Passaic, New Jersey, following the Wall Street crash in 1929. During the 1920s, the common practice of buying on margin attracted thousands of people to pour their savings into stocks. ***What are margin requirements?***

Moral suasion is the use of persuasion such as announcements, press releases, articles in newspapers and magazines, and testimony before Congress. Moral suasion works because bankers often try to anticipate changes in monetary policy.

Suppose that the chairperson of the Fed is called before Congress to give his or her view on the state of the economy. Assume also that the chair states that interest rates seem somewhat low, and that it might be good for the economy if they should rise. These statements might lead bankers to expect a tighter money policy in the next few weeks. As a result, they might be less willing to loan their excess reserves, and they might even raise their interest rates by a small amount. In the end, the money supply might contract just slightly, even if the Fed did no more than offer its views.

A second method is **selective credit controls**—credit rules pertaining to loans for specific commodities or purposes. These controls took the form of minimum down payments on cars and other consumer goods during World War II and the Korean War. Selective credit controls during those periods were imposed to free factories to produce war materials.

Section 2 Assessment

Checking for Understanding

1. **Main Idea** What is the purpose of monetary policy?
2. **Key Terms** Define monetary policy, fractional reserve system, legal reserves, reserve requirement, excess reserves, liabilities, assets, balance sheet, net worth, liquidity, savings account, time deposit, member bank reserve, easy money policy, tight money policy, open market operations, discount rate, margin requirement, moral suasion, selective credit controls.
3. **Explain** how fractional reserves are used.
4. **Describe** the relationship between the reserve requirement, reserves, and the size of the money supply.
5. **Describe** the three major tools of monetary policy.

Applying Economic Concepts

6. **Fractional Bank Reserves** Your local national bank is required to keep its reserves in the form of vault cash and member deposits with the Fed. Why do you suppose that other assets, such as common stocks or real estate, are not suitable reserves?

Critical Thinking

7. **Drawing Conclusions** At times, someone with a good credit rating may not be able to get a loan. When this happens, the potential customer may be told to try again in the near future. What does this tell you about the bank's reserves? How should the customer react to a situation like this?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

BusinessWeek

JULY 20, 1998 **Newsclip**

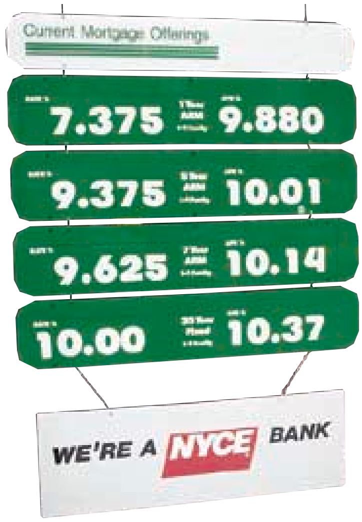
Bank mergers are becoming more common. Supporters and nonsupporters of bank mergers debate whether these consolidations benefit customers.

Bank Mergers: Who Benefits?

Although the number of commercial banks in the U.S. fell from 13,123 in 1988 to 9,215 in 1997, there's still no end in sight to the banking industry's rapid consolidation. But is the merger wave beneficial to consumers?

Advocates claim that mergers produce efficiencies that lower costs and thus permit better service to customers. Skeptics worry that mergers allow banks to cut services because they now face less competition. A recent study by Katerina Simons and Joanna Stavins of the Federal Reserve Bank of Boston tends to support the latter view.

Drawing on nationwide data covering some 500 banks from 1985 to 1995, the two economists looked at how market concentration and mergers affected interest rates on customers' deposits. They found that merged banks actually tend to lower deposit rates in the wake of a merger (but only in the first year following the merger). More important, while rivals of newly merged banks initially boost interest rates after the merger—presumably to gain customers—they subsequently lower rates even more. Thus, their depositors lose out over the long term.



Questions remain as to whether bank mergers benefit or hurt the customer.

Why don't the merged banks follow the lead of their unmerged competitors by lowering their interest rates over the long term? The authors speculate that service declines so much after a merger that merged banks have to pay slightly higher interest rates than their rivals to retain customers.

In any case, the study's overall conclusion is that banks tend to pay lower interest rates in markets that become more concentrated. And that, say the authors, is something that antitrust regulators need to look at more closely.

Examining the Newsclip

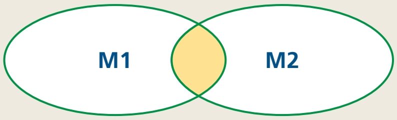
1. **Analyzing Information** Describe how advocates and skeptics view mergers between banks.
2. **Understanding Cause and Effect** How are interest rates on customer deposits affected by bank mergers?

Monetary Policy, Banking, and the Economy

Study Guide

Main Idea
Changes in the money supply affect the interest rate, the availability of credit, and the price level.

Reading Strategy
Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by listing the components of M1 and M2.



Key Terms
prime rate, quantity theory of money, monetizing the debt, real rate of interest, M1, M2

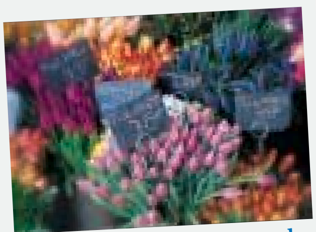
Objectives
After studying this section, you will be able to:
1. **Explain** how monetary policy affects interest rates in the short run.
2. **Relate** monetary expansion to inflation in the long run.
3. **Identify** the two major definitions of money.
4. **Describe** how interest rates are affected by political pressure.

Applying Economic Concepts
Money Where do you keep your money? On your person? In a savings or checking account? Read to find out why the answers to these questions make the definition of money more complicated than it seems.

Cover Story

Fed Worried About Future Inflation

WASHINGTON (AP)—Members of the Federal Reserve expressed concerns about future inflation at their May meeting, leading them to vote unanimously for a policy directive leaning toward an increase in interest rates, according to minutes of the meeting released Thursday.


Inflation can affect many goods.

While the FOMC members agreed that recent improvements in the nation's productivity allowed more room for noninflationary economic growth, they worried that growth, which came in at a 4.3 percent annual rate in the first quarter, was still too rapid to keep inflation under control. . . .

—*The Washington Post*, July 1, 1999

The impact of monetary policy on the economy is complex. In the short run, monetary policy affects interest rates and the availability of credit. In the long run, it affects inflation, which—as we saw in the cover story—is one of the Fed's major concerns. In addition, no one can be sure how long it will take for the effects of monetary policy to impact the economy.

Short-Run Impact

In the short run, an increase or a decrease in the money supply affects the interest rate, which is the price of credit. When the Fed expands the money supply, the cost of credit goes down. When the Fed contracts the money supply, the cost of credit goes up.

This short-run relationship between money and interest rates is shown in **Figure 15.7.** The demand curve for money has the usual shape, which shows that more money will be demanded

CONTENTS

when the price of credit is low. The supply curve, however, does not have its usual shape. Instead, it is vertical, indicating that the supply of money is fixed at any given time.

Before the market is disturbed, the interest rate, as shown in **Panel A,** is at 10 percent. If the Fed expands the money supply to **S^1S^1,** the interest rate falls to 8 percent. A contraction of the money supply, as shown in **Panel B,** increases the rate from 10 to 12 percent.

Although the Fed tries to do what it thinks is best for the economy, people do not always agree with its decisions. In 1981, for example, the Fed was criticized for allowing interest rates to get too high. In that year, the **prime rate**—the best or lowest interest rate commercial bankers charge their customers—reached 21.5 percent. Critics felt that the economy would have been better off if the Fed had expanded the money supply, thus lowering interest rates. Supporters, however, understood that these policies were necessary to achieve long-run goals.

Long-Run Impact

In the long run, changes in the supply of money affect the general level of prices. This relationship, formally known as the **quantity theory of money,** has been demonstrated repeatedly in history.

Historical Precedents

When the Spanish brought gold and silver back to Spain from the Americas in the 1700s, the increase in the money supply started inflation that lasted for 100 years. When the Continental Congress issued $250 million of currency during the Revolutionary War, the economy suffered severe inflation. A similar thing happened during the Civil War when nearly $500 million of greenbacks were printed.

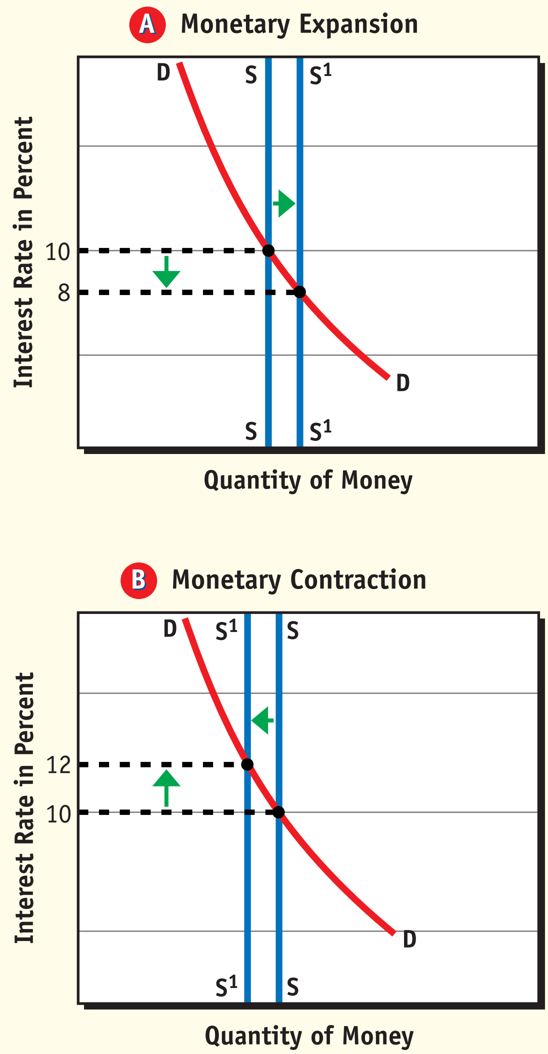
Monetizing the Debt

When the federal government financed the Vietnam War with deficit spending in the 1960s, interest rates started to rise. To keep the rates from going up too high, the Fed decided to **monetize the debt**—create enough extra money to offset the

ECONOMICS AT A GLANCE

Figure 15.7

Short-Run Impact of Monetary Policy

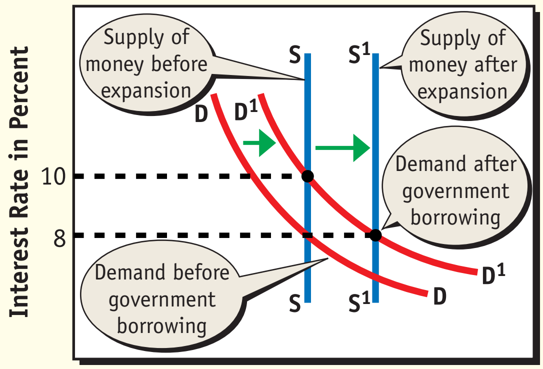


Using Graphs In the short run, monetary policy impacts interest rates, or the price of credit. When the money supply expands, the price of credit goes down. When the money supply contracts, the price of credit goes up. **Why is the supply curve of money, SS, shown as a vertical line?**

ECONOMICS AT A GLANCE

Figure 15.8

Monetizing the Debt



Using Graphs When the government borrows to cover a debt in the federal budget, interest rates tend to rise because of the increased demand for credit. This raises the possibility of crowding out. If the Fed expands the money supply just enough to offset the borrowing, interest rates may remain unchanged. **What are the long-run effects of monetizing the debt?**

deficit spending in order to keep interest rates from changing. The process of monetizing the debt is illustrated in **Figure 15.8,** where **DD** and **SS** represent the initial demand and supply of money.

Suppose that the government borrows $25 billion, shifting the demand curve for money from **DD** to **D¹D¹.** If the Fed does not take any action, the interest rate would rise from 8 to 10 percent. If the Fed wants to keep the interest rate from rising, it could increase the money supply from **SS** to **S¹S¹** and push interest rates back down to their original level.

In the short run, then, the Fed can increase the money supply just enough to keep the interest rate from rising. This procedure is effective if done infrequently. Repeated short-run attempts to keep rates low, however, result in a long-term expansion of the money supply, making inflation worse.

Taming Inflation

Much of the federal debt was monetized from the late 1960s until the late 1970s. During this period, the money supply grew at rates of 12 percent or more for several years in a row. As inflation worsened, the price of most goods and services—including interest rates—also went up. Attempts by the Fed to keep interest rates low by increasing the supply of money worked at first, but eventually the policy intensified inflation.

By 1980 the Fed realized that it had to choose between interest rates and inflation—and it chose to control inflation by restricting the growth of the money supply. When this happened, the prime rate rose and by 1981 reached 21.5 percent. Most people did not like the high interest rates at the time, but today they recognize that the tight money policies were necessary to bring down inflation.

Because inflation distorts our economic statistics, it is useful to consider the **real rate of interest**—the market rate of interest minus the rate of inflation. To illustrate, the 21.5 percent interest rate in 1981 was not as bad as it seemed when you consider that the inflation rate was 10.5 percent. Subtracting the

STANDARD & POOR'S INFOBYTE

The Prime Rate The prime rate is a loan rate charged by banks to their best or "prime" customers. The rate is determined by general trends in interest rates. As rates decline, the prime rate will also move lower. However, it does not typically move on a day-by-day basis. Prime-rate changes are usually led by major money center banks. Normally, the prime rate will move in steps and then remain constant until a major rate change has been made. This usually happens when the Federal Reserve makes major changes in monetary policy.

inflation rate from the interest rate results in an 11.0 percent real rate of interest for that year.

Other Monetary Policy Issues

When the Fed conducts monetary policy, it has several other issues to consider. The first issue involves the timing and burden of monetary policy.

Timing and Burden

Sometimes a tight money policy will show results in six months. At other times, the impact might not be felt for two years. The same happens when the Fed follows an easy money policy. Such variations in timing make it difficult to use monetary policy to fine-tune the economy.

A second problem is that monetary policy has an uneven impact on the economy. If the Fed follows a tight money policy to control inflation, interest rates go up. This increase hurts some industries like homebuilding and auto manufacturing more than others because of higher borrowing costs. If the Fed follows an easy monetary policy, interest rates may go down–thereby benefiting homebuilding and auto making more than other industries.

Present vs. Future Allocation

The Fed also realizes that interest rates and inflation affect the allocation of scarce resources between present and future uses. When interest rates are low, people find it easier to finance the purchase of a car, house, or college education right away. When people spend more today, however, they end up saving less–and therefore they consume less in the future.

High interest rates have the opposite effect. When rates are high, some purchases are delayed until rates come down or until people have saved enough to buy the products they desire. As a result, people have more money to spend in the future, and so the use of some resources shifts from the present to the future.

Inflation also makes a difference in investment decisions. For example, if people expect prices to go up, they may try to make certain purchases right away, before prices get even higher. Or, if they feel that prices are likely to remain stable or go down, they may put off some spending until later. Either way, expectations about inflation affect the allocation of resources between present and future uses.

Defining Money

With so many financial institutions offering different ways for people to deposit or hold their money, the Fed has had to develop some new definitions to keep track of it.

Figure 15.9 lists a number of components of the money supply, or ways that people have chosen to keep money. The Fed groups these together according to function and gives them names. The first is **M1,** which represents the transactional components of the money supply, or the components of the money supply that most closely match money's role as a medium of exchange. This definition of money includes traveler's checks, coins, currency, demand

Careers

Actuary

Actuaries design insurance and pension plans.

The Work

Actuaries gather and analyze statistics on death, sickness, injury, disability, unemployment, retirement, and property loss. This information is then used to establish how much the insured loss will be. Actuaries calculate premium rates, ensuring that the price of the insurance is high enough to cover any claims and expenses the company might have to pay.

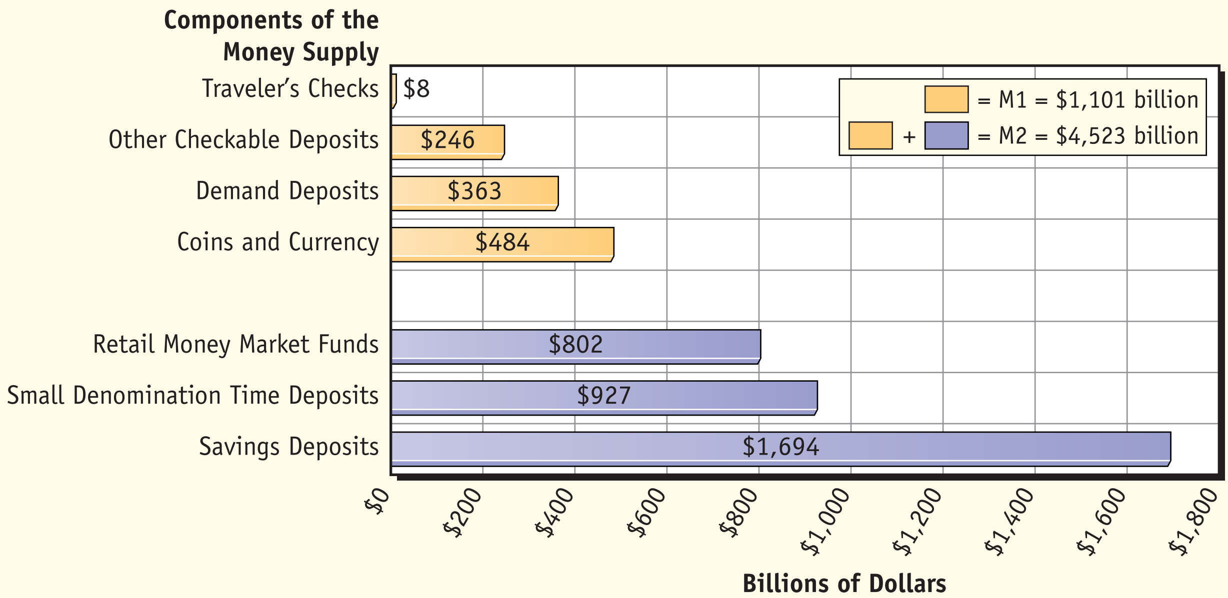
Qualifications

Actuaries must be knowledgeable in subjects that can affect insurance practices, including general economic, social, health, and legislation trends. Many actuaries hold a degree in mathematics or statistics and they must pass actuarial examinations.

ECONOMICS AT A GLANCE

Figure 15.9

Major Components of the Money Supply



Source: The Federal Reserve System *Statistical Release H.6*, 1999

Using Graphs **This figure shows the different components of the money supply that comprise M1 and the money supply components that have to be added to MI to get M2. What component makes up the largest part of the money supply?**

deposits, and other checkable deposits such as NOW accounts and credit union share drafts.

The simple M1 definition includes only items directly and immediately useable as a medium of exchange. A second and broader definition of money is M2. **M2** is a measure of money that includes those components most closely conforming to money's role as a store of value. M2 includes M1, small denomination time deposits, savings deposits, and money market funds.

The Politics of Interest Rates

Because the Fed is privately owned by its member banks, and because the members of the Board of Governors have 14-year terms of office, the Fed is widely regarded as being an independent monetary authority. Even so, the Fed often comes under political pressure because it has the ability to move interest rates one way or the other.

The president or members of Congress up for reelection may call for low interest rates to stimulate the economy. Incumbent politicians know that their reelection chances are better if voters are happy—and voters normally prefer lower interest rates to higher ones.

The president and Congress can gain some influence over monetary policy by appointing new members to the Board of Governors as existing terms expire. After new appointments are made, however, the Board of Governors usually conducts monetary policy as it sees fit.

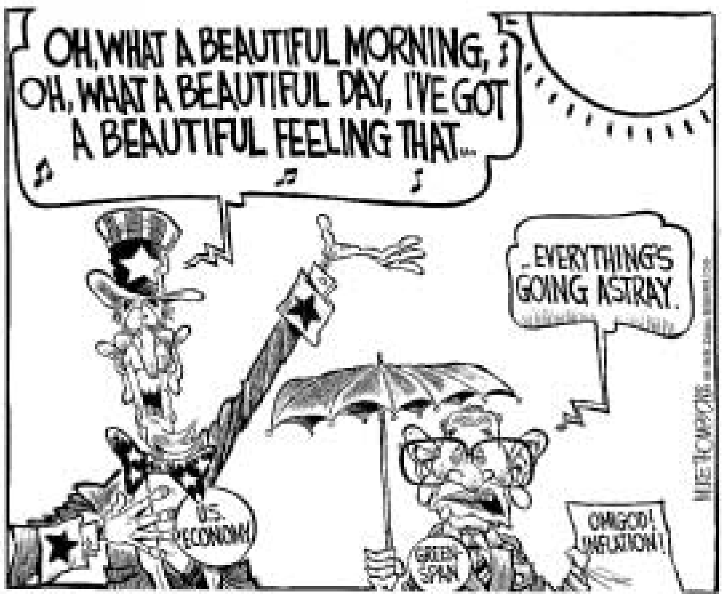
Sometimes, political leaders have tried to influence monetary policy by criticizing the Fed or by threatening to introduce legislation to make the

Fed less independent. Fortunately, no such laws have been passed.

The Fed is usually reluctant to accommodate demands for lower interest rates in the short term because of the long-run fear of inflation. Unlike many politicians, who frequently focus on interest rates and thereby take a short-term view of monetary policy, the Fed is more concerned about the long-run health of the economy.

People tend to use the interest rate, like the unemployment rate, as a measure of the overall health of the economy. In particular, they think the economy is healthy when interest rates are low, and unhealthy when rates are high. This makes it more difficult for the Fed to raise interest rates, especially during election years when incumbents want voters to think that they are doing a good job with the economy. As a result, the Fed is always conscious of its unique role in the economy and often goes to great lengths to avoid political confrontations that could threaten its independence.

The Fed



Political Pressure While the president and Congress largely control taxation and spending, they have little control over the Fed. ***How can the president and Congress influence monetary policy?***

Section 3 Assessment

Checking for Understanding

1. **Main Idea** How do changes in the money supply affect the cost of credit?
2. **Key Terms** Define prime rate, quantity theory of money, monetizing the debt, real rate of interest, M1, M2.
3. **Describe** the short-run impact of monetary policy.
4. **Explain** the long-run impact of monetary policy.
5. **Describe** the two definitions of money.
6. **Describe** the political nature of interest rates.

Applying Economic Concepts

7. **Money** Our money supply, as well as the different forms or ways to hold it, has changed considerably over the years. Describe one or two ways you think United States money might change even more in the future.

Critical Thinking

8. **Making Generalizations** Historically, expansions in money supply have set off inflation. Something similar might have happened to you. Identify a period in your life when you had a little more money than usual. How did you spend the extra cash? Were prices as important to you then as they were at times when you did not have as much to spend? Why do prices tend to increase faster when more money is available?

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

CRITICAL THINKING Skill

Making Generalizations

Generalizations are judgments that are usually true, based on the facts at hand. If you say, "We have a great soccer team," you are making a generalization. If you also say that your team is undefeated, you are providing evidence to support your generalization.

Learning the Skill

To make a valid generalization, you must first collect factual information relevant to the topic. Follow these steps:

- Identify the subject matter.
- Gather related facts and examples.
- Identify similarities among these facts.
- Use these similarities to form some general ideas about the subject.

The Fed has a strong say in how banks do business.

Practicing the Skill

Read the excerpt below, then complete the activity that follows.

Federal Reserve actions that are intended to stabilize the economic system make up what is called monetary policy. The Fed uses open market operations most frequently to carry out monetary policy. For example, if the Fed wanted banks to have more money to lend, it would buy government securities. This would add more money to the expansion process and increase the ability of banks to make loans.

Over the past 50 years, the Fed has had different objectives for its monetary policy. In World War II it tried to keep interest rates low to help the government pay for the war. In the mid-1960s it tried to reduce the amount of money banks had available in order to fight inflation. In the early 1980s, Federal Reserve actions helped force interest rates to very high levels. These high interest rates contributed to the recession of 1981–82, but eventually helped to reduce the high rate of inflation.

Some politicians and economists feel the Fed has made many mistakes. Others feel that it has done a good job most of the time. It is clear at least that the Federal Reserve is an important power in our economic system.

Based on the information presented above, identify whether each of the generalizations stated below is valid.

1. Raising interest rates is the Fed's most important goal.
2. There is disagreement over the proper role of the Federal Reserve System.
3. Monetary policy is intended to help keep our economic system from going into a recession or from having inflation.
4. The largest part of spending in this country is done with checks.

Application Activity

For one week, read the editorials in your local newspaper. Then write a list of generalizations about the newspaper's position on issues such as unemployment or the environment.

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

Chapter 15 Summary

Section 1

The Federal Reserve System

(pages 407–413)

- The Federal Reserve System was established as the nation's central bank in 1913.
- The Fed is unique in that it is owned by private **member banks** rather than by the government.
- Today, the Fed regulates financial institutions, maintains the payments system, enforces consumer protection laws, provides services to the government, and conducts monetary policy.
- The Fed supervises its state member banks, and it has broad authority over **bank holding companies,** the international operations of all commercial banks, some mergers, check clearing, consumer truth-in-lending laws, and the maintenance of the nation's **currency.**

Section 2

Monetary Policy (pages 415–424)

- Modern banks operate on a **fractional reserve system.** Under this system **excess reserves** can be loaned out to other customers.
- Commercial banks charge interest on their loans and use the income to pay expenses, keeping the remainder as profit.
- The size of the money supply is determined by the **reserve requirement** and the reserves in the system. An increase in the reserve requirement will shrink the money supply. A decrease in the requirement will expand the money supply.
- **Monetary policy** affects the size of the money supply, and therefore the level of interest rates.
- The tools of monetary policy include: a change in the reserve requirement; **open market operations,** which involves the buying and selling of government bonds; and a change in the **discount rate.**
- Two lesser tools include **moral suasion** and **selective credit controls** such as **margin requirements.**

Section 3

Monetary Policy, Banking, and the Economy (pages 426–431)

- Monetary policy affects interest rates in the short run and inflation in the long run–forcing the Fed into a trade-off between lower interest rates today and more inflation later on.
- The impact of monetary policy varies, sometimes affecting the economy sooner, and sometimes later. Monetary policy also affects some sectors of the economy differently than others.

- The interest rate affects the allocation of resources between present and future uses. Expectations of inflation also affect the allocation of resources between present and future uses.
- The interest rate is one of the most visible and politically sensitive prices in the economy. For political reasons, the Fed is often pressured to keep interest rates low, even at the expense of future inflation.

Chapter 15 Assessment and Activities

ECONOMICS Online

Self-Check Quiz Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 15—Self-Check Quizzes*** to prepare for the chapter test.

CLICK HERE

Identifying Key Terms

Write the key term that best completes the following sentences.

a. balance sheet
b. Board of Governors
c. certificate of deposit
d. Regulation Z
e. easy money policy
f. excess reserves
g. FOMC
h. holding company
i. legal reserves
j. M1
k. M2
l. monetary policy
m. monetizing the debt
n. moral suasion
o. open market operations
p. selective credit controls

1. The main governing body of the Fed is the _____ .
2. A(n) _____ would expand the money supply and tend to lower interest rates.
3. _____ are the funds that banks use to satisfy the reserve requirement.
4. If a bank has _____ , it is able to make additional loans to customers.
5. The most popular and effective tool of monetary policy is that of _____ .
6. When the Fed increases the money supply to offset the effects of government borrowing, it is _____ .
7. The transactional component of the money supply is _____ .
8. One of the most important responsibilities of the Fed is _____ .
9. The part of the Fed that buys and sells government bonds as part of monetary policy is the _____ .

Reviewing the Facts

Section 1 (pages 407–413)

1. **Describe** the ownership of the Fed.
2. **Identify** the membership of the Board of Governors and the FOMC.
3. **Identify** the most important regulatory responsibilities of the Fed.

Section 2 (pages 415–424)

4. **Explain** how banks operate under a fractional reserve system.
5. **Identify** the conditions that enable a bank to make new loans.
6. **Describe** the three major tools of monetary policy.

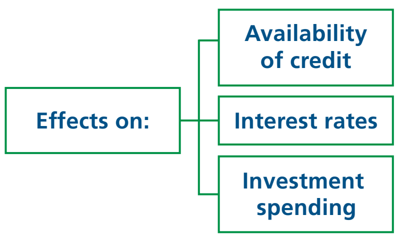
Section 3 (pages 426–431)

7. **Identify** the major short-run impact of monetary policy.
8. **Explain** how the long-run impact of monetary policy differs from its short-run impact.
9. **Explain** how M1 differs from M2.
10. **Explain** why the level of interest rates is politically sensitive.

Thinking Critically

1. **Understanding Cause and Effect** What are the effects of the Federal Reserve instituting an easy money policy? Complete a graphic organizer similar to the one below to answer to the question.

Easy Money Policy



Chapter 15 Assessment and Activities

2. **Drawing Conclusions** Defend or refute the following statement: The independence of the Federal Reserve System is essential to the health of the economy.

Applying Economic Concepts

1. **Money** Ask your parents how they keep their money (CDs, traveler's checks, savings accounts, time deposits, banks, etc.). How many categories mentioned in this chapter do they use?
2. **Balance Sheet** Make a list of all your assets and all your liabilities. Then, prepare a balance sheet that shows your assets, liabilities, and net worth.

Math Practice

Assume that total reserves in the banking system amount to $1,000 and that the fractional reserve requirement is 15 percent. If all banks are fully loaned out, and if the Fed sells an additional $100 of bonds to investors, how large will the money supply be?

Thinking Like an Economist

If the Fed were to expand the money supply, it would face a trade-off between lower interest rates today and higher inflation later on. Explain how an economist would use cost-benefit analysis to examine the implications of these outcomes.

Technology Skill

Using a Database For one week, analyze the currency that comes into your possession. In your journal, keep track of the features that appear on the front and back of each bill, noting the similarities and differences among the various currencies.

Create a database for foreign visitors that describes the specific features and purposes of each United States bill and coin. Create fields such as the following: portrait, paper/coin, value, Federal Reserve Bank seal, and so on. Arrange the fields and text in an appealing way, including clip art, decorative fonts, and color. Use words that will easily be understood by someone with limited knowledge of the English language, or translate the database into another language if possible. Distribute a copy of your databank to your local visitor's center or Chamber of Commerce.

Building Skills

Making Generalizations Read the following passage and answer the questions.

Although there are effective checks and balances on powers held by the Congress and the president, there are few checks on the monetary power of the Federal Reserve System's Board of Governors. Under current law, the Board is free to act within broad limits established by Congress and the president.

Actions taken by the Fed are important to the success of government economic policy, yet there is no guarantee that members of the Board of Governors will cooperate with Congress and the president in implementing economic plans. Some political leaders have suggested that the powers of the Fed's Board of Governors should be limited, or that the Board should be made responsible to the president.

Supporters of controlling the Fed believe such a policy would assure the country of a unified economic policy. Some argue that it is wrong for people with so much power not to be elected by the people.

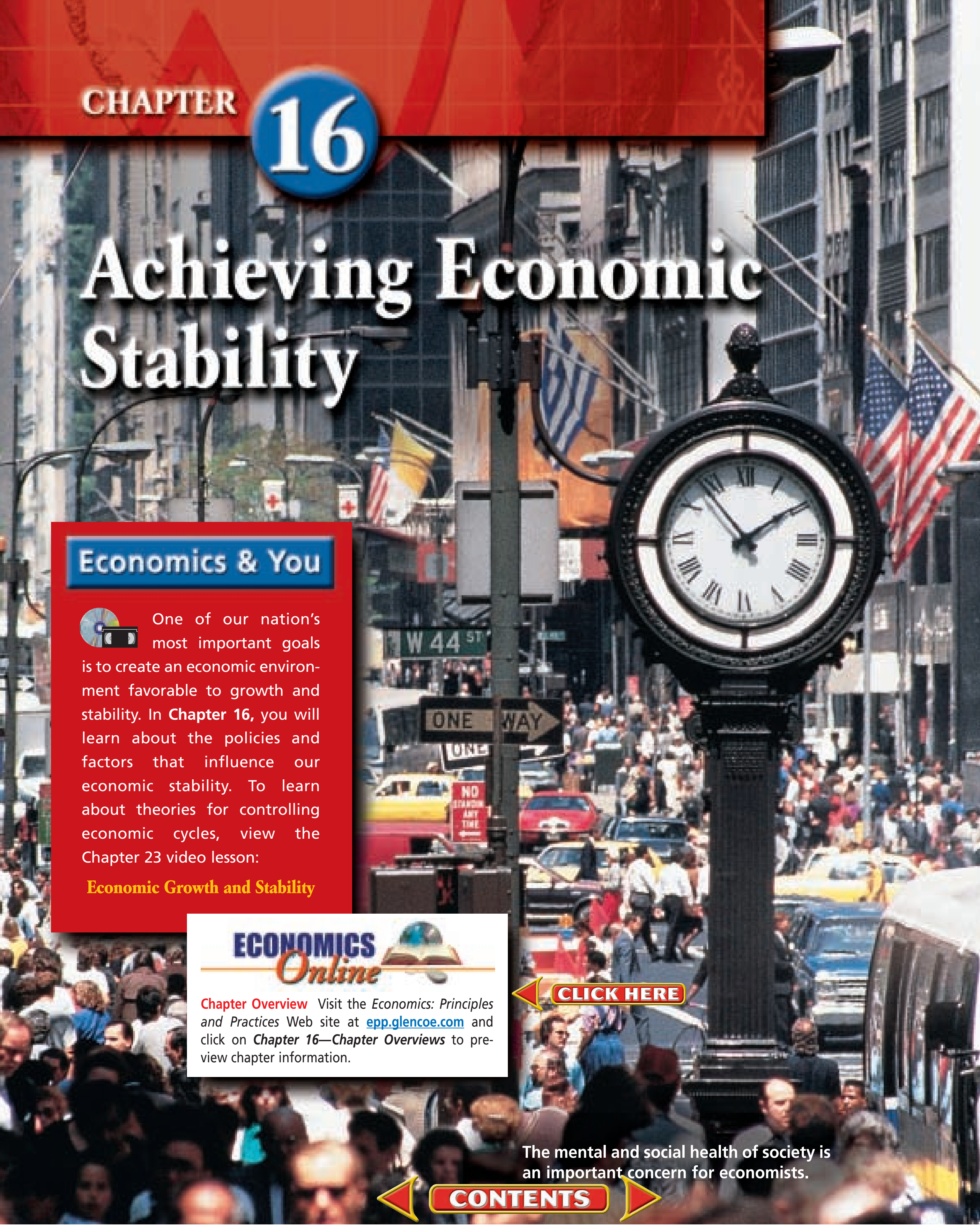
Identify each generalization below as valid or invalid based on the information presented.

1. Politicians are too slow to act, and therefore monetary power should remain with the Federal Reserve System.
2. Some people criticize the Fed because it holds a great deal of power without having to answer to the voters.
3. The powers of the Fed should be limited.

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

CHAPTER 16

Achieving Economic Stability



Economics & You

One of our nation's most important goals is to create an economic environment favorable to growth and stability. In **Chapter 16,** you will learn about the policies and factors that influence our economic stability. To learn about theories for controlling economic cycles, view the Chapter 23 video lesson:

Economic Growth and Stability

ECONOMICS Online

Chapter Overview Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 16—Chapter Overviews*** to preview chapter information.

CLICK HERE

The mental and social health of society is an important concern for economists.

CONTENTS

The Cost of Economic Instability

Study Guide

Main Idea
Economic instability leads to social as well as economic problems.

Reading Strategy
Graphic Organizer As you read the section, use a graphic organizer similar to the one below to describe the GDP gap.

GDP Gap
↓
What causes the GDP gap to fluctuate?

Key Terms
stagflation, GDP gap, misery (discomfort) index

Objectives
After studying this section, you will be able to:
1. **Explain** the economic costs of instability.
2. **Describe** the social costs of instability.

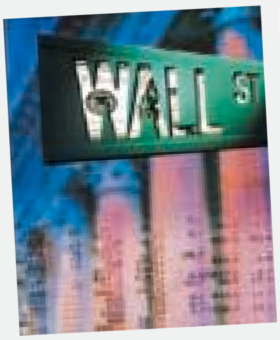
Applying Economic Concepts
Misery Index Do you know someone who has suffered from the problems associated with unemployment and inflation at the same time? Many people do, which is why economists have invented a measure called the *misery index.* Read to find out how the misery index got its name.

Cover Story

Inflation Fears Punish Dow

NEW YORK (CNNfn)—U.S. stocks opened with a tumble Friday after one of the market's worst fears materialized—inflation at the consumer level posted its biggest increase in more than eight years in April.

At around 10 A.M. the Dow-Jones Industrial Average lost 128.58, or 1.1 percent, to 10,987.61 as investors exited the market in droves amid surging bond yields and intensifying speculation that official interest rates could soon head higher as well.



Instability can affect the stock market.

Losers overwhelmed gainers on the New York Stock Exchange, with 2,035 stocks falling and 435 rising. . . .

—*CNNfn*, May 14, 1999

Recession, high unemployment, and inflation are forms of economic instability that hinder long-term economic growth. Sometimes the economy experiences these problems separately, and sometimes they occur at the same time. In the early 1970s, for example, the economy experienced **stagflation**—a period of stagnant growth combined with inflation.

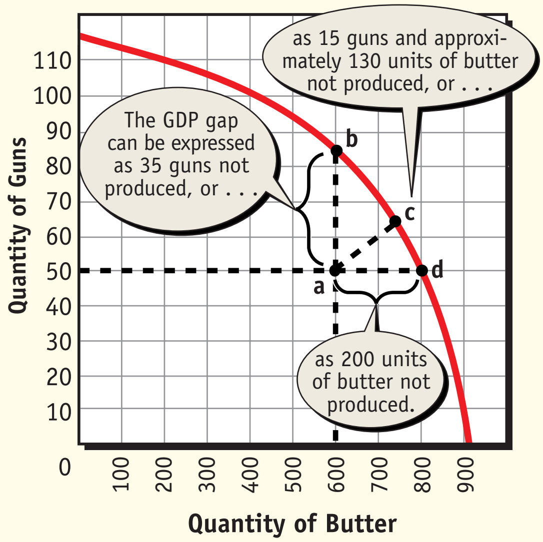
Even when the economy is relatively healthy, or when there is a hint of problems on the horizon, as you just saw in the cover story, we still worry about inflation—and even our worries have real consequences. These fears are not unfounded, because economic instability carries an enormous cost—one that can be measured in human as well as economic terms.

The Economic Costs

On one level, unemployment and inflation are simply numbers that are collected, reported in the press, or plotted on a graph. At another level, they represent enormous economic failures that waste the resources of the nation and its people.

ECONOMICS AT A GLANCE Figure 16.1

The GDP Gap and the Production Possibilities Frontier



Using Graphs The GDP gap is the difference between the actual production at point a and the potential production as indicated by points b, c, or d. **What happens to production when some resources are idle or are not employed efficiently?**

The GDP Gap

One measure of the cost of stagnation is the **GDP gap**—the difference between the actual GDP and the potential GDP that could be produced if all resources were fully employed. In other words, the gap is a type of opportunity cost—a measure of output not produced because of unemployed resources.

The GDP gap, illustrated in **Figure 16.1,** shows the production possibilities curve in the classic guns-versus-butter example. Note that the output not produced because of resources that lie idle can be measured in either guns, butter, or a combination of the two items.

In a more dynamic sense, business cycles or fluctuations cause the size of this gap to vary over time. The scale of GDP is such that if GDP declines even a fraction of a percentage point, the amount of lost production and income can be enormous.

In 1999, for example, the GDP of the United States economy was approximately \$9 trillion. If a \$9 trillion economy declines just one-fourth of one percentage point, *\$22.5 billion* of production would be lost. This amount is more than the federal government spent on agriculture or general science, space, and technology during the entire 1999 fiscal budget year.

Described in other terms, this amount would be equal to 750,000 workers losing jobs that paid \$30,000 each for an entire year. In practice, the effects of a decline in GDP generally are spread out over a large area rather than being concentrated in just one spot, but they are still enormous by any measure.

The Misery Index

The **misery index,** sometimes called the **discomfort index,** is the sum of the monthly inflation and unemployment rates. **Figure 16.2** shows the misery index for a period beginning in 1965.

Although it is not an official government statistic, the misery index is a comprehensive measure of consumer suffering during periods of high inflation and unemployment. The index is relevant only over long periods because of the wide month-to-month swings in some of the numbers.

Uncertainty

When the economy is unstable, a great deal of uncertainty exists. A worker may not buy something because of concern over his or her job. This uncertainty translates into purchases that are not made, causing some unemployment to rise and jobs to be lost.

The worker is not the only one the uncertainty affects. For example, the owner of a business producing at capacity may decide against an expansion although new orders are arriving daily. Instead, the producer may try to raise prices, which increases inflation.

The Social Costs

The cost of instability can be measured in dollars rather easily, but it is harder to measure in terms of human suffering. In human terms, the costs are almost beyond comprehension. Because of these social costs, everyone agrees that stability must be achieved. Economists are interested not only in society's production, but in its mental and social health as well.

Wasted Resources

Human suffering during periods of instability goes beyond not having more goods and services that raise the standard of living. The labor resource is wasted, with people wanting work but not being able to find it. When this happens, the economy fails to satisfy the basic human need to be a useful and productive member of society. This labor situation is particularly acute in inner cities where unemployment rates run high among minority groups.

Wasted resources are not limited to just human resources. Idle factories waiting to be utilized are another wasted resource. Natural resources may also lie unused or go to waste.

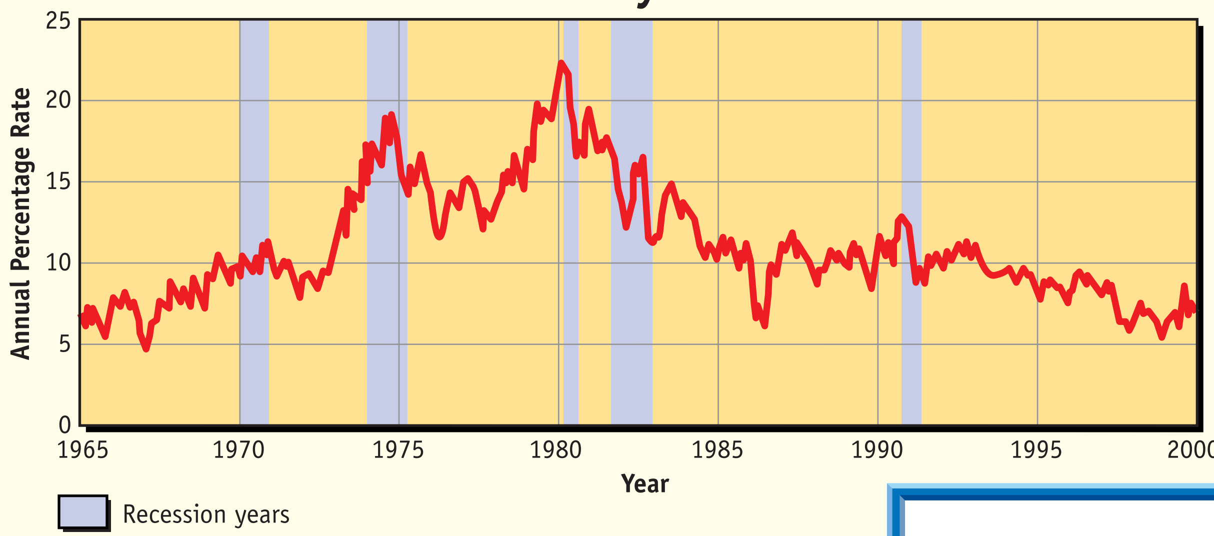
Political Instability

Politicians also suffer from the consequences of economic instability. When times are hard, voters are dissatisfied, and incumbents are often thrown out of office. For example, most experts agree that Bill Clinton's victory over President George Bush in 1992 was due in part to the 1991 recession.

ECONOMICS AT A GLANCE

Figure 16.2

The Misery Index



Source: Bureau of Economic Analysis, United States Department of Commerce

Using Graphs The misery index is the sum of the monthly inflation and unemployment rates. **When did the misery index reach its highest point?**

CLICK HERE

ECONOMICS Online

Visit epp.glencoe.com and click on *Textbook Updates—Chapter 16* for an update of the data.

If too much economic instability exists, as during the Great Depression of the 1930s, voters are often willing to vote for radical change. As a result, economic stability adds to the political stability of our nation.

Crime and Family Values

High crime rates, too few economic and social opportunities for minorities, the loss of individual freedoms, and the lack of economic stability for many Americans are all grounds for concern. Many people believe that some of these social ills cannot be cured without the help of a strong and stable economy.

When the economy is healthy, the citizens of a society can more easily deal with its social problems. People have jobs and can provide for themselves and their families. Communities can take advantage of higher tax collections, which can be used to increase police protection and other municipal services. Companies are more willing to hire disadvantaged persons and provide on-the-job training.

A healthy economy means that people will be more certain of their ability to provide for themselves and their families. When people can do this, they are more positive about the future in general.

Economics and Society

Family Values A vibrant economy means that people will be more certain of their ability to provide for themselves and their families. ***What are some benefits of a healthy economy?***

Section 1 Assessment

Checking for Understanding

1. **Main Idea** Using your notes from the graphic organizer activity on page 437, explain what the GDP gap measures.
2. **Key Terms** Define stagflation, GDP gap, misery (discomfort) index.
3. **Explain** how economists measure the economic cost of instability.
4. **Describe** the social cost of instability.

Applying Economic Concepts

5. **Misery Index** How might the psychological strains that many people feel in difficult economic times help prolong an economic downturn? Provide at least one example with your answer.

Critical Thinking

6. **Making Generalizations** If the GDP gap in a given year rose dramatically, what do you think would happen to unemployment and inflation?
7. **Making Comparisons** How does stagflation differ from the traditional business cycle?

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

STUDY AND WRITING
Skill

Applying the Writing Process

Researching and writing allows you to organize your ideas in a logical manner. The writing process involves using skills you have already learned, such as taking notes, outlining, and synthesizing information.

Learning the Skill

Use the following guidelines to help you apply the writing process.

- Select an interesting topic. As you identify possible topics, focus on resources that would be available. Do preliminary research to determine whether your topic is too broad or too narrow.
- Write a thesis statement that defines what you want to prove, discover, or illustrate in your writing. This will be the focus of your entire paper.
- Prepare and do research on your topic. First formulate a list of main idea questions; then do research to answer those questions. Prepare note cards on each main-idea question, listing the source information.
- Organize your information by building an outline or another kind of organizer. Then follow your outline or organizer in writing a rough draft of your report.
- A report should have three main parts: the introduction, the body, and the conclusion. The introduction briefly presents the topic and gives your topic statement. In the body, follow your outline to develop the important ideas in your argument. The conclusion summarizes and restates your findings.
- Each paragraph should express one main idea in a topic sentence. Additional sentences support or explain the main idea by using details and facts.
- Revise the draft into a final report. Wait for a day, then reread and revise it.

Practicing the Skill

Suppose you are writing a report on the role political turmoil plays in economic instability. Answer the following questions about the writing process.

1. How could you narrow this topic?
2. Write a thesis statement.
3. What are three main ideas?
4. What are three possible sources of information?

A systematic approach facilitates the writing process.

Application Activity

Use research resources in your library to find information on political instability during the Great Depression. Write a short report on the topic.

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

SECTION 2

Macroeconomic Equilibrium

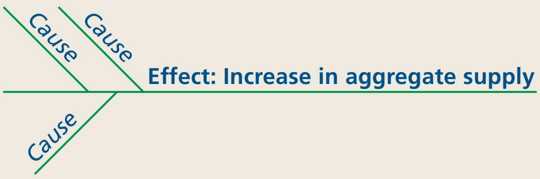
Study Guide

Main Idea

Aggregate *supply* is the total quantity of goods and services produced at different price levels. Aggregate *demand* is the total quantity purchased at different price levels.

Reading Strategy

Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by listing at least three factors that could lower production costs leading to an increase in aggregate supply.



Key Terms

aggregate supply, aggregate supply curve, aggregate demand, aggregate demand curve, macroeconomic equilibrium

Objectives

After studying this section, you will be able to:

1. **Explain** the concept of aggregate supply.
2. **Describe** the importance of aggregate demand.
3. **Examine** the nature of macroeconomic equilibrium.

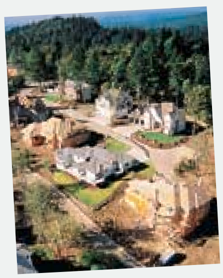
Applying Economic Concepts

Equilibrium Have you ever experienced one of those rare moments when you feel completely satisfied and do not want to change anything that you are doing? This is called a state of *equilibrium*. Read to find out how the economy, too, reaches a state of equilibrium occasionally.

Cover Story

It Keeps Going and Growing . . .

It just keeps going and growing. Strong economic growth, stable prices for goods and services, and record-low unemployment and stable lending rates have made the U.S. economy look remarkably similar to the Energizer Bunny on steroids. Absolutely nothing seems able to stop it.



Economy continues growth

The Dow-Jones Industrial Average is now within spitting distance of the dizzying 11,000 mark. The economy is chugging along at an impressive 4.5 percent pace, . . . inflation is practically non-existent . . . and unemployment rests at 4.2 percent, a 29-year low, while demand for labor remains more robust than ever. . . .

So what gives? How can the economy keep going at this dizzying pace without, at some point, slowing down?

—*CNNfn*, April 30, 1999

From a historical perspective, the state of affairs described in the cover story is relatively rare. We would like to see these conditions prevail more often, but something always seems to happen to prevent it. As a result, economists study markets in an attempt to find out how they work, and how they can be made to work even better.

Aggregate Supply

When we study markets, we often use the tools of supply and demand to show how the equilibrium price and quantity of output are determined. When we study the economy as a whole, we can use the concepts of supply and demand in much the same way.

One approach is to study **aggregate supply,** the total value of goods and services that all firms would produce in a specific period of time at various price levels. If the period was exactly one year, and if production took place within a country's borders, then aggregate supply would be the same as GDP.

The Aggregate Supply Curve

The concept of aggregate supply assumes that the money supply is fixed and that a given price level prevails. However, if prices should change, then individual firms would adjust their profit-maximizing quantities of output, producing a slightly different level of GDP. If it were somehow possible to keep adjusting the price level to see how total output changed, we could then construct an **aggregate supply curve,** which shows the amount of real GDP that could be produced at various price levels.

Figure 16.3 shows how an aggregate supply curve, **AS,** for the whole economy might look. It is shown as upward sloping, but with a horizontal as well as vertical range. The horizontal range represents various levels of output that coexist with large amounts of unemployed resources. If the economy is producing at point **a,** for example, output could be expanded to point **b** by putting some unemployed resources to work, without causing any change in the general price level.

However, any expansion of real GDP beyond point **b,** which has an output of Q_1, is not possible without some increase in the price level. By the time the economy has reached point **c,** the price level has risen to P_1 because firms have been competing for increasingly scarce resources. Q_2 is the level of output where all resources are fully employed, because firms merely drive up prices if they try to expand production beyond point **c.**

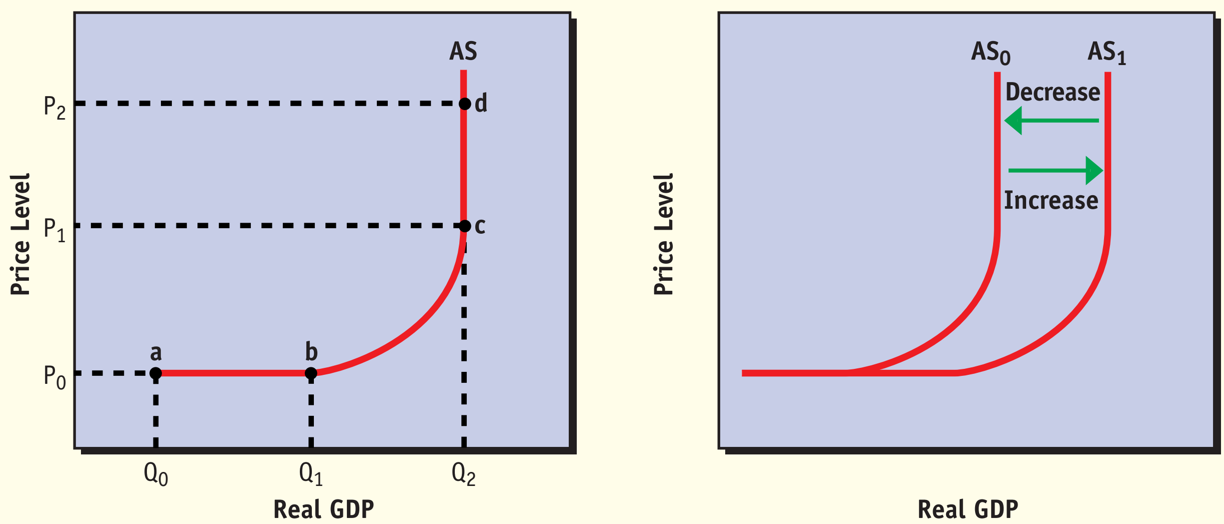
The aggregate supply curve, like the supply curve of the individual firm, can increase or decrease. Most of the increases in aggregate supply are tied to the cost of production for the individual firm. If the cost goes down for some or all firms, aggregate supply increases, which shows as a shift to the right.

Factors that tend to increase the cost of production for an individual firm tend to decrease aggregate supply. These factors include higher prices for foreign oil, higher interest rates, and lower labor productivity. Any increase in cost that causes firms to offer fewer goods and services for

ECONOMICS AT A GLANCE

Figure 16.3

The Aggregate Supply Curve



Using Graphs The aggregate supply curve shows the amount of real GDP that could be produced at various price levels. An increase in aggregate supply comes about when production costs for all the individual producers fall. **What causes a decrease in aggregate supply?**

sale at each and every price would shift the aggregate supply curve to the left.

Aggregate Demand

Aggregate demand is the total quantity of goods and services demanded at different price levels. It is like aggregate supply in that it is a summary measure of all demand in the economy; it can be represented in the form of a graph; and it can either increase or decrease over time.

The Aggregate Demand Curve

Figure 16.4 illustrates the **aggregate demand curve,** a graph showing the quantity of real GDP that would be purchased at each possible price level in the economy. This curve, labeled **AD,** represents the sum of consumer, business, and government demands at various price levels. It slopes downward and to the right like the demand curve for individuals, but for entirely different reasons.

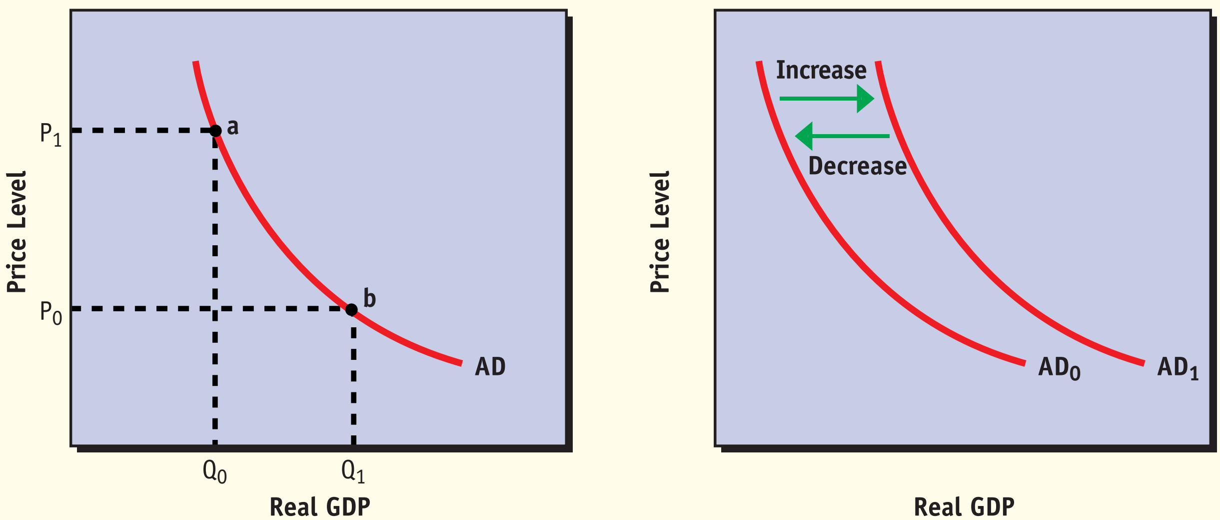
The primary reason for the negative slope is the underlying assumption that the economy can have only one money supply at a time. The size of this supply is fixed and has a different purchasing power at every possible price level. When prices are very high, a given money supply will purchase a limited amount of output, such as that represented by point **a.** When prices are much lower, everyone will be able to buy relatively more GDP, putting output purchased at point **b.** If the price level dropped further, even more GDP could be purchased, which is why the curve tends to slope downward and to the right.

The aggregate demand curve, like the aggregate supply curve, can increase or decrease depending on certain conditions. One factor that affects the aggregate demand curve is a change in the amount of money that people save. If consumers collectively save less and spend more, the increase in consumer spending would increase aggregate demand, shifting the aggregate demand curve to the right.

ECONOMICS AT A GLANCE

Figure 16.4

The Aggregate Demand Curve



Using Graphs The aggregate demand curve shows the amount of real GDP the economy would demand at all possible price levels. **What causes the aggregate demand curve to shift?**

A decrease in aggregate demand can be caused by the same factors behaving in an opposite fashion. For example, an increase in saving—leaving consumers less money to spend—will cause the aggregate demand curve to shift to the left.

Higher taxes and lower transfer payments could also reduce aggregate spending. Such decisions shift the aggregate demand curve to the left because all sectors of the economy collectively buy less GDP at all price levels.

Macroeconomic Equilibrium

Macroeconomic equilibrium is the level of real GDP consistent with a given price level, as determined by the intersection of the aggregate supply and demand curves. This equilibrium is shown in **Figure 16.5** where **Q** is the level of real GDP that is consistent with the price level **P.** This is a static equilibrium because it represents a situation at a particular point in time.

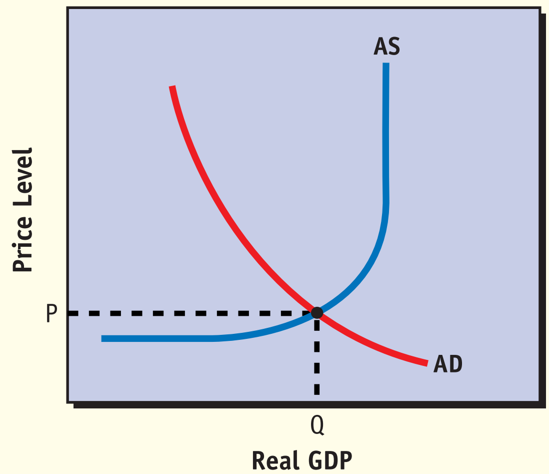
If the economy is growing, the price level may or may not change, depending on changes in productivity and the money supply. This is one of the dilemmas facing economic policy makers—how to make real GDP grow without unduly increasing the price level and thereby the rate of inflation.

Aggregate supply and demand curves are useful concepts, providing a framework for analyzing equilibrium, economic growth, and price stability. They can be used to give an idea of the way and direction that things will change, but they do not yield exact predictions. Even so, they are becoming increasingly important when analyzing macroeconomic issues.

ECONOMICS AT A GLANCE

Figure 16.5

Macroeconomic Equilibrium



Using Graphs The economy is at equilibrium when the quantity of real GDP demanded is equal to the real GDP supplied at a given price level. **What happens to the price level when output increases?**

Section 2 Assessment

Checking for Understanding

1. **Main Idea** What factors might cause aggregate demand to increase?
2. **Key Terms** Define aggregate supply, aggregate supply curve, aggregate demand, aggregate demand curve, macroeconomic equilibrium.
3. **Describe** the concept of aggregate supply.
4. **Explain** the importance of aggregate demand.
5. **Describe** the nature of macroeconomic equilibrium.

Applying Economic Concepts

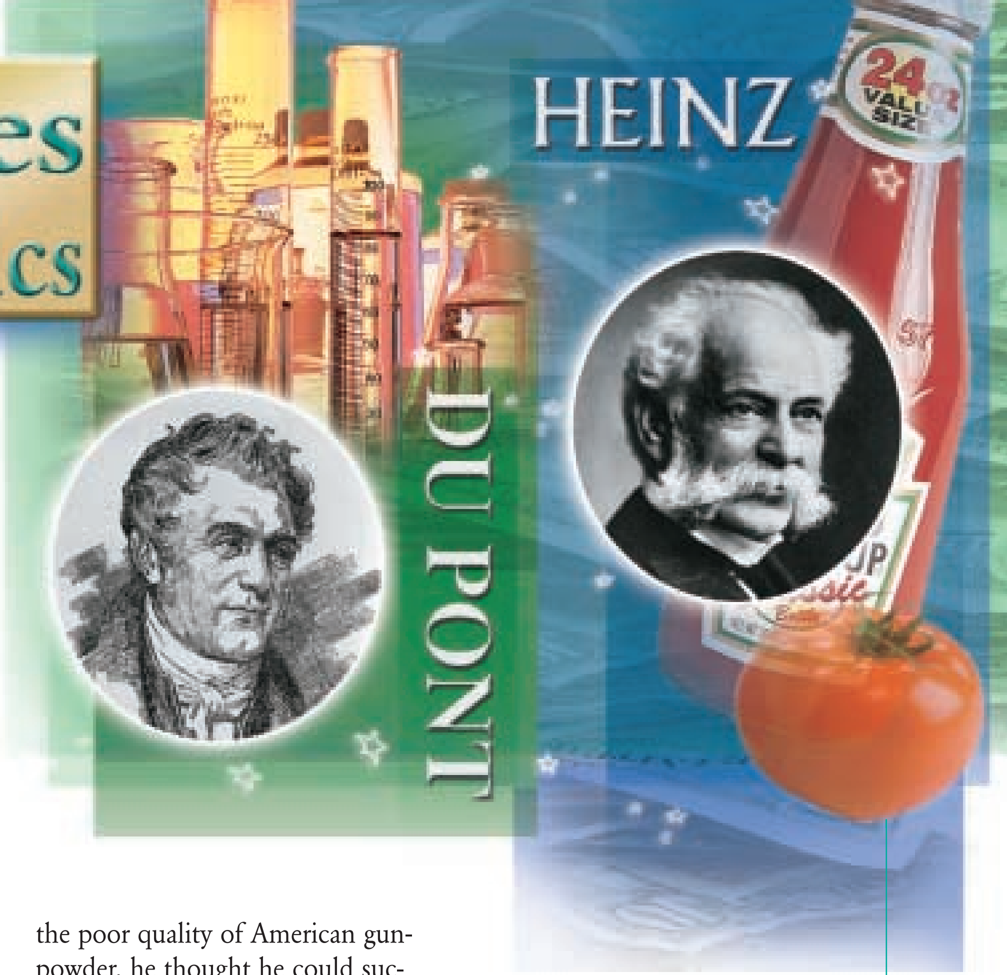
6. **Equilibrium** Define macroeconomic equilibrium, then discuss how a decrease in business investments would affect the macroeconomic equilibrium.

Critical Thinking

7. **Analyzing Information** What kind of effect would higher taxes have on aggregate supply? Explain your reasoning.

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

Profiles in Economics



From Rags to Riches

Rags to riches. The expression is cliché, but it captures the imaginations of millions of Americans who dream of success in the country's free market economy. They find inspiration in the stories of individuals who started what would some day become giant global corporations–individuals, perhaps, not unlike themselves.

E.I. DU PONT

The DuPont Company is a multi-*billion* dollar enterprise, one of the largest corporations in the world. It has about 125 plants in the United States and elsewhere, manufacturing more than 40,000 distinct products. Most are chemical products–anything from polyester to pesticides to camera film. In addition, DuPont controls many subsidiaries, including Conoco, the petroleum giant.

DuPont's official name is E.I. DuPont de Numours & Company, a tribute to Èleuthère Irénée du Pont (1771–1834), its founder. At 17, du Pont was a worker at the French royal gunpowder works. At 19, he and his family were forced by the revolution to come to the United States. Noting the poor quality of American gunpowder, he thought he could succeed by making one of higher quality. In 1802, he constructed a small powder works on Brandywine Creek near Wilmington, Delaware. From these humble beginnings, the DuPont giant grew.

HENRY JOHN HEINZ

The J. Heinz Company markets 5,000 varieties of food in 200 countries. The company is named for its founder, Henry John Heinz. Heinz was born in Pittsburgh in 1844. He started his selling career at age 12, hawking produce from his family's garden. At 25, he sold his mother's grated horseradish. He called it "pure and superior," and sold it in clear glass jars to prove his claim. The company went bankrupt after a few years, but Heinz persevered. He started a food company, selling ketchup, pickles, jams, jellies and condiments. Clever marketing ("It's not so much what you say," said Heinz, "but how, when and where.") and aggressive sales were key to company growth. By 1896, when Heinz was 52, his company had made him a millionaire. Its growth since then has been even more impressive.

Examining the Profile

1. **Making Comparisons** How are the individuals profiled alike? How are they different?
2. **Synthesizing Information** Explain why you think the companies du Pont and Heinz founded are typical or atypical.

Stabilization Policies

Study Guide

Main Idea
Government can promote economic growth through demand-side and supply-side policies.

Reading Strategy
Graphic Organizer As you read the section, complete graphic organizers similar to the ones below by describing the role of government under demand-side and supply-side policies.

Demand-side policies	Supply-side policies
↓	↓
Role of government	Role of government

Key Terms
fiscal policy, Keynesian economics, multiplier, accelerator, automatic stabilizer, unemployment insurance, supply-side economics, Laffer curve, monetarism, wage-price controls

Objectives
After studying this section, you will be able to:
1. **Explain** the operations and impact of fiscal policy.
2. **Distinguish** between supply-side economics and fiscal policy.
3. **State** the basic assumptions of monetary policy.

Applying Economic Concepts
Automatic Stabilizers You may know someone who collects unemployment insurance, Social Security, or medicare. Read to find out why these programs are some of the key fiscal policy measures used today.

Cover Story

Hard to Find the Funny Side of Gridlock

Even by the high standards of acrimony common in Washington, the legislative agenda has fallen prey to particularly bitter wrangling over the government's big budget surpluses—projected at $3,000 billion over the next 10 years.

Both Republican and Democratic leaders are under pressure from rank-and-file members to avoid compromises this year.


Congress in session

Many candidates for Congress and the presidency would prefer to run on party-defining issues, unclouded by messy compromises or cross-over votes. As a result, Democrats and Republicans have been unable—or are unwilling—to reach agreement on many routine bills.

—*The Financial Times*, August 6, 1999

Economic growth, full employment, and price stability are three of the seven major economic goals of the American people. In order to reach these goals, sound economic policies must be designed and implemented.

Economic stability can be achieved in several ways. Some people favor policies that stimulate aggregate demand, while others favor ones that stimulate aggregate supply. While these two approaches have their supporters, Congressional gridlock, as we just saw in the cover story, makes them increasingly more difficult to implement. As a result, a third approach that favors monetary policy has filled the void.

Demand-Side Policies

Demand-side policies are federal policies designed to increase or decrease total demand in the economy by shifting the aggregate demand curve to the right or to the left. One approach is known as **fiscal policy**—the federal government's attempt to stabilize the economy through taxing and government spending.

Keynesian Economics

The Role of Government According to Keynesian economics, economic activity will be stimulated if the federal government invests in projects such as hydroelectric plants. ***What is the role of government deficits according to Keynesian theory?***

Fiscal policies are derived from **Keynesian economics,** a set of actions designed to lower unemployment by stimulating aggregate demand. John Maynard Keynes put forth these theories in 1936 and they dominated the thinking of economists until the 1970s.

The Keynesian Framework

Keynes provided the basic framework with the output-expenditure model, GDP = C + I + G + F. According to this model, any change in GDP on the left side of the equation could be traced to changes on the right side of the equation. The question was, which of the four components caused the instability?

According to Keynes, the net impact of the foreign sector (F) was so small that it could be ignored. The government sector (G) was not the problem either, because its expenditures were normally stable over time. Spending by the consumer sector (C), stated Keynes, was the most stable of all. Ruling out F, G, and C, it then appeared that the business, or investment, sector (I) was to blame for the instability.

In Keynes's theory, investment sector spending was not only unstable, but had a magnified effect on other spending. If investment spending declined by $50 billion, for example, many workers would lose their jobs. These workers in turn would spend less and pay fewer taxes. Soon, the amount of spending by all sectors in the economy would be down by more than the initial decline in investment. This effect is called the **multiplier,** and it says that a change in investment spending will have a magnified effect on total spending. The multiplier is believed to be about 2 in today's economy, so if investment spending goes down by $50 billion, the decline in overall spending could reach $100 billion.

Conditions are likely to be made even worse by the **accelerator**—the change in investment spending caused by a change in total spending. After a decline in overall spending begins, it causes investment spending to be reduced even further. Before long, the economy is trapped in a downward spiral. The combined multiplier-accelerator effect is important because it contributes to the instability of GDP.

The Role of Government

Keynes argued that only the government was big enough to step in and offset changes in investment-sector spending. The government could take a direct role and undertake its own spending to offset the decline in spending by businesses. Or, it could play an indirect role by lowering taxes and enacting other measures to encourage businesses and consumers to spend more.

Suppose the government wanted to take direct steps quickly to offset a $50 billion decline in business spending. To do this, it could spend $10 billion to build a dam, give $20 billion in grants to cities to fix up poor neighborhoods, and spend another $20 billion in other ways. Thus, the $50 billion that business does not spend would be replaced by the $50 billion the government spends. Thus, the overall sum of C + I + G + F would remain unchanged.

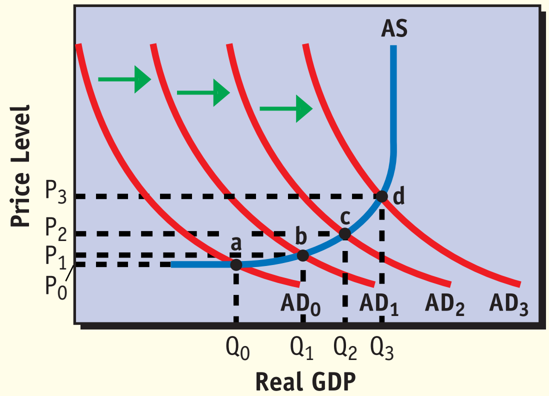
Or, instead of spending the $50 billion, the government could reduce tax rates by that amount and give investors and consumers more purchasing power. If the $50 billion not collected in taxes were spent, the initial decline in investment spending would be offset, and the sum for C + I + G + F again would remain the same.

Either way, the government would run the risk of a growing federal deficit. In Keynes's view, the deficit was unfortunate, but necessary to stop further declines in economic activity. When the economy recovered, tax collections would rise, the government would run a surplus, and the debt could be paid back. The justification for *temporary* federal deficits was one of the lasting contributions of Keynesian economics, and a major departure from the economic thinking of the time.

ECONOMICS AT A GLANCE

Figure 16.6

Fiscal Policy and the Aggregate Demand Curve



Using Graphs Fiscal policies are designed to increase aggregate demand. Successive increases in aggregate demand—or moving the economy from a to d—put increasing pressure on the price level as the unemployed resources in the economy find employment. **Which point on the graph represents the lowest aggregate demand?**

Automatic Stabilizers

Another key component of fiscal policy is the role of **automatic stabilizers,** programs that automatically trigger benefits if changes in the economy threaten income. Three important stabilizers are unemployment insurance, federal entitlement programs, and the progressive income tax.

Unemployment insurance is insurance that workers who lose their jobs through no fault of their own can collect for a limited amount of time. Unemployment insurance cannot be collected by people who are fired because of misconduct or who quit their jobs without good reason.

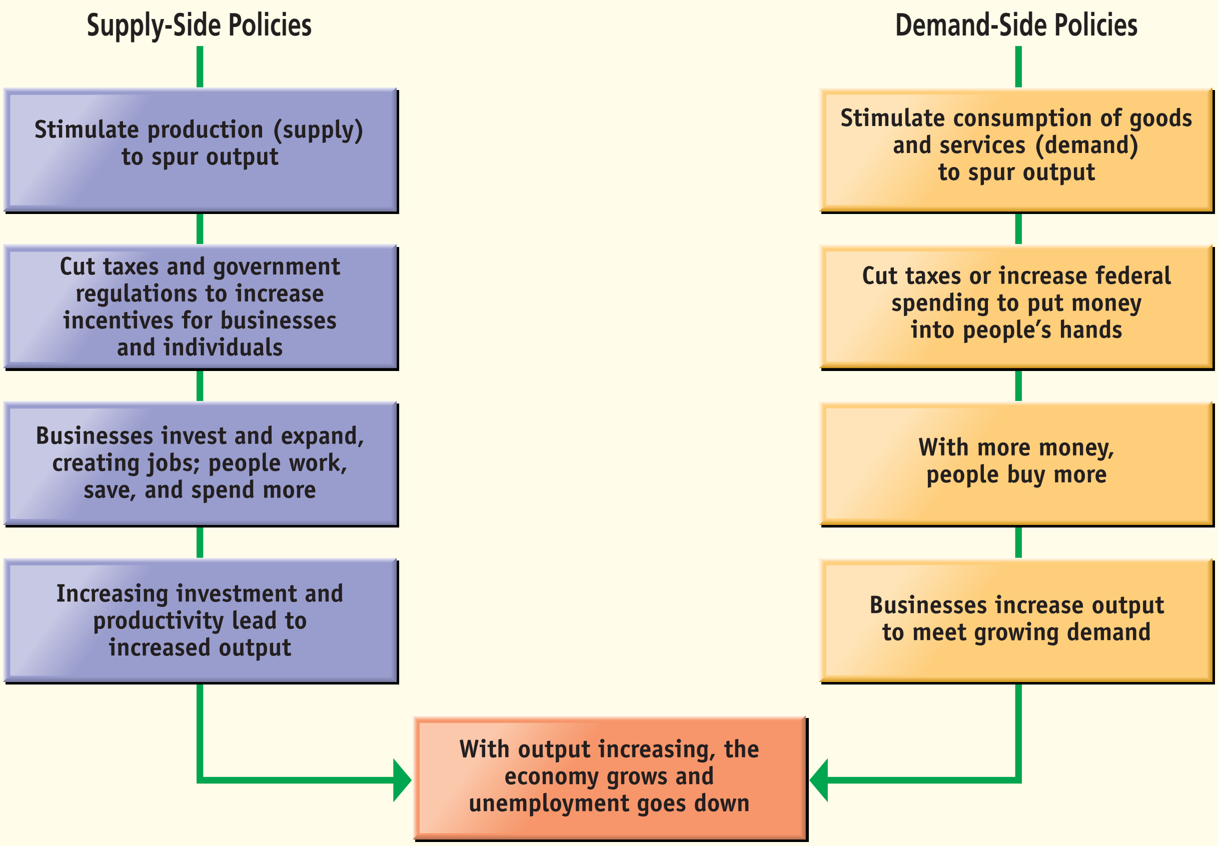
Federal entitlement programs and many social welfare programs designed to provide minimum health, nutritional, and income levels for selected groups of people also work as automatic stabilizers. They include federal programs such as welfare, government pensions, medicare, medicaid, and Social Security. The availability of these programs is a guarantee that economic instability or some other factor will not cause demand to fall below a certain level for selected individuals.

STANDARD & POOR'S INFOBYTE

The Employment Report The Employment Report, released monthly by the Bureau of Labor Statistics, provides the unemployment rate, number of nonfarm payrolls, average workweek, and average hourly earnings figures. It is the broadest and most timely indicator of economic activity.

ECONOMICS AT A GLANCE Figure 16.7

Supply-Side and Demand-Side Economics



Making Comparisons Supply-side policies and demand-side policies have the same goal: continuous and stable economic growth without price inflation. **How does the role of government differ under supply-side and demand-side policies?**

The progressive income tax is the third automatic stabilizer. For example, if someone loses his or her job, or ends up working fewer hours because of cutbacks, that person will earn less. If the reduction in income is significant, that person is likely to fall into a lower tax bracket, which cushions the decline in income.

Fiscal Policy and Aggregate Demand

The impact of fiscal policies can be illustrated with the aggregate demand curve **AD.** **Figure 16.6** shows a single aggregate supply curve and several aggregate demand curves. When aggregate demand is very low, as during the Great Depression or other periods of severe economic downturn, the economy would be at point **a,** where $\mathbf{AD_0}$ intersects **AS.** Increases in government spending—public works projects, transfer payments, or even tax reductions—could be used to increase aggregate demand to $\mathbf{AD_1}$**.** Because many resources are not employed, the movement of the economy from **a** to **b** causes very little price inflation.

Further attempts to increase aggregate demand to AD_2 and AD_3 produce successively less output with increasingly higher price levels. Eventually, all attempts the government sector makes to increase aggregate demand only increase the price level without increasing the production of real GDP.

Limitations of Fiscal Policy

Keynes envisioned the role of government spending as a counterbalance to changes in investment spending. Ideally, the government would increase its spending to offset declines in business spending, and conversely government would decrease spending whenever business spending recovered. In practice, however, the federal government has been generally unable to bring its spending under control, even when it ran enormous budget deficits in the 1980s.

As a result, the most effective counter-cyclical fiscal policies used today are the automatic stabilizers. The advantage of the stabilizers is that spending approval or tax reduction is not needed when the economy enters a recession, or when people lose jobs and need unemployment insurance coverage.

Supply-Side Policies

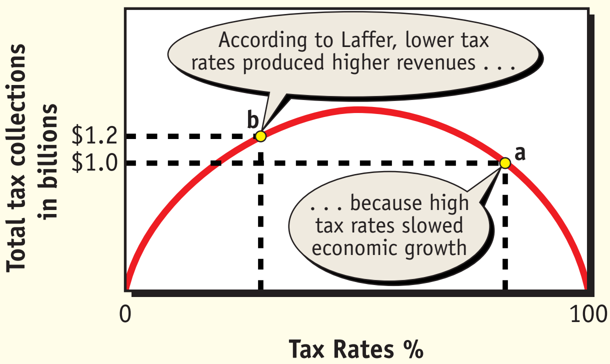
Supply-side economics are policies designed to stimulate output and lower unemployment by increasing production rather than demand. The supply-side view gained support in the late 1970s because demand-side policies did not seem to be controlling the nation's growing unemployment and inflation. In the 1980s, supply-side policies became the hallmark of President Reagan's administration.

The differences between supply-side economics and demand-side economics are smaller than most people realize. Both policies, which are summarized in **Figure 16.7,** have the same goal—that of increasing production and decreasing unemployment without increasing inflation.

ECONOMICS AT A GLANCE — **Figure 16.8**

The Laffer Curve

A The Laffer Curve



B Tax Receipts

	Real Individual Tax Receipts	Real Corporate Tax Receipts
1981	$362,379	$77,487
1982	355,303	58,720
1983	331,351	42,456
1984	327,929	62,520
1985	354,376	64,969
1986	360,123	65,163
1987	392,557	83,926
1988	386,122	90,961
1989	410,774	95,199

Sequencing Information Proponents used the Laffer curve to argue that lower tax rates would generate higher economic growth as well as higher tax collections. In retrospect, lower tax rates generated lower tax receipts. After adjusting for inflation, federal tax revenues declined after taxes were reduced in 1981. **What happened to tax revenues after taxes were raised in 1986?**

Smaller Role for Government

A key issue for supply-siders is that of reducing government's role in the economy. One way to do this is to reduce the number of federal agencies. Another way to make government's role smaller is through deregulation—removing established regulations with which industries must comply.

Deregulation is a major objective of supply-siders and is favored by some demand-siders as well. Under the administration of President Jimmy Carter, major steps were taken to deregulate the energy, airline, and trucking industries. The Reagan administration continued deregulation efforts in the savings and loan industry, hoping to bring about more competition.

Lower Federal Taxes

Another target of supply-siders is the federal tax burden on individuals and businesses. They believe that if taxes are too high, people will not want to work, and businesses will produce less. Lower tax rates, they argue, allow individuals and businesses to keep more of the money they earn, which encourages them to work harder. This would give workers more money to spend in the long run. Government would also gain as total tax collections go up because of the extra activity.

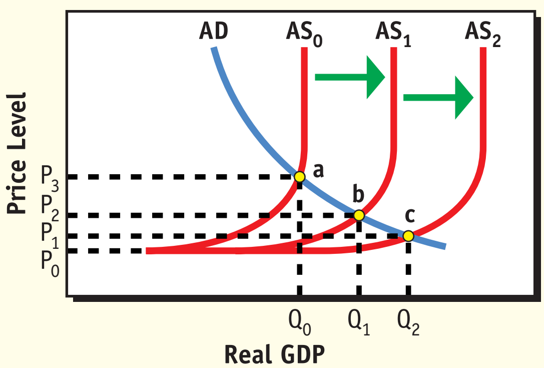
In the 1980s, somewhat optimistic supply-siders even argued that lower tax rates would stimulate the economy so much that eventually even more taxes could be collected than before. This was formalized in the **Laffer curve**—a hypothetical relationship between federal tax rates and tax revenues—shown in **Panel A** of **Figure 16.8.** This proposition was the basis for President Reagan's 1981 tax cut, which reduced income taxes 25 percent over a three-year period.

As it turned out, either the interpretation or the assumptions of the Laffer curve were invalid, as the increased revenue collections never materialized. As **Panel B** in **Figure 16.8** shows, after adjusting for inflation, both individual income tax receipts and corporate tax receipts were lower in 1986 than they were in 1981. Because tax collections never went up, the federal budget showed a deficit instead. In fact, real tax collections did not surpass their 1981 levels until after the 1986 tax revisions took effect in 1987.

ECONOMICS AT A GLANCE

Figure 16.9

Supply-Side Policies and the Aggregate Supply Curve



Analyzing Graphs Supply-side policies are designed to increase aggregate supply. **What happens to the price level when the aggregate supply curve shifts to the right?**

Supply-Side Policies and Aggregate Supply

The impact of supply-side policies can be illustrated in terms of the aggregate supply and demand curves shown in **Figure 16.9.** When aggregate supply is very low, the economy would be at point **a,** where $\mathbf{AS_0}$ intersects **AD.** If supply-side policies were successfully instituted, the aggregate supply curve would shift to $\mathbf{AS_1}$**,** moving the point of macroeconomic equilibrium to **b.** Without any corresponding change in aggregate demand, real output would grow, and the price level would come down.

Further attempts to increase aggregate supply to move the economy to **c** has even less impact on the price level. If the aggregate supply curve does have a horizontal range then the price level could never be reduced below $\mathbf{P_0}$**.**

THE GLOBAL ECONOMY

Stabilizing Efforts in Africa

Beginning in the 1970s, droughts, growing populations, lack of capital, and falling world prices for their exports weakened many African economies.

Relying on foreign help to remedy these problems, African countries south of the Sahara took on $130 billion worth of debt by the 1980s. African leaders increasingly realized that they would have to find answers to Africa's problems without much outside help. To break their reliance on foreign countries, some African nations formed regional associations to promote trade and economic cooperation. Governments that had once adopted socialist policies increasingly encouraged free enterprise.

Critical Thinking

1. **Analyzing Information** What policies helped create the large debt?
2. **Analyzing Information** Why did many African nations form regional associations?

Limitations of Supply-Side Policies

One limitation of supply-side policies is a lack of enough experience with them to know how they affect the economy. Even the concepts of aggregate supply and aggregate demand are largely conceptual, making it difficult to predict, based on the shapes of the two curves, the exact consequence of any particular supply-side policy.

In the case of the Laffer curve, total tax collections, when adjusted for inflation, actually declined after the 1981 tax reductions were implemented. The result was that one of the main foundations of the supply-side school was found to be invalid. Even so, policies that promote productivity, reduce unnecessary paperwork, or otherwise allow the economy to grow to its maximum potential are certainly worthwhile. Almost everyone, including demand-siders, favors these policies.

Finally, supply-side economic policies are designed more to promote economic growth rather than to remedy economic instability. No matter how fast or slow the economy grows, it seems to have a tendency to fluctuate around its trend line. Supply-side policies during the Reagan presidency tended to weaken the automatic stabilizers by making the federal tax structure less progressive and by reducing many of the "safety net" programs.

Monetary Policies

Both demand-side economics and supply-side economics are concerned with stimulating production and employment. Neither policy assigns much importance to the money supply. A doctrine called **monetarism,** however, places primary importance on the role of money and its growth.

Monetarists believe that fluctuations in the money supply can be a destabilizing element that leads to unemployment and inflation. Because of this, they favor policies that lead to stable, long-term monetary growth at levels low enough to control inflation.

Interest Rates and Inflation

In the short run, expansionist monetary policy can lower interest rates. This action would reduce the cost of consumer and business borrowing and shift the aggregate supply curve to the right. Real GDP would tend to increase, but so would the possibility of future inflation. The money supply can grow over time, but how fast should the money supply be allowed to grow?

Most monetarists believe that inflation can be controlled if the money supply is allowed to grow at a slow but steady rate. The rates of growth of real GDP and productivity would determine the rate at which the money supply grows. For example, if the rate of growth of real GDP were 3 percent, and that of productivity 1 percent, the money supply would grow at about 4 percent without causing inflation. At this rate, there would be just enough extra money each year to buy the additional goods and services the economy produces.

This approach to inflation control is in sharp contrast to those tried earlier. In the early 1970s, for example, President Richard Nixon tried to stop inflation by imposing **wage-price controls**—regulations that make it illegal for businesses to give workers raises—or to raise prices without the explicit permission of the government. Most monetarists at the time said the controls would not work. The economy ultimately proved the economists correct: the controls did little to stop inflation.

Monetary Policy and Unemployment

Monetarists argue that attempts to cut unemployment by expanding the money supply provide only temporary relief. They argue that excessive rates of monetary growth eventually drive up prices and interest rates.

When rates eventually do go up, the cost of borrowing for businesses increases, which shifts the aggregate supply curve to the left. The larger money supply also shifts the aggregate demand curve to the right. The result is that real GDP would fall back to its original level—but at a different and much higher price level. The final result would appear as if the aggregate supply and demand curves shifted up together.

An overly expansionist monetary policy, then, will only cause long-term inflation. Monetary policy is not a long-term cure for unemployment.

CYBERNOMICS SPOTLIGHT

Deregulation and New Growth

The deregulation of the telecommunications industry and the breakup of AT&T have helped turn the telephone into an important component of the economy. The telephone is responsible for helping Sioux Falls, South Dakota, and Omaha, Nebraska, become major centers for the credit-card processing and telemarketing industries.

Section 3 Assessment

Checking for Understanding

1. **Main Idea** Compare the views of supply-side economists and demand-side economists regarding the role of government in the economy.
2. **Key Terms** Define fiscal policy, Keynesian economics, multiplier, accelerator, automatic stabilizer, unemployment insurance, supply-side economics, Laffer curve, monetarism, wage-price controls.
3. **Describe** the objectives of demand-side policies.
4. **Identify** the main assumptions of supply-side policies.
5. **Explain** how monetary policy could be destabilizing.

Applying Economic Concepts

6. **Automatic Stabilizers** Fiscal policy is one of the tools designed to stabilize the economy. First, define fiscal policy in your own words. Then, explain its role in shifting the aggregate demand curve.

Critical Thinking

7. **Making Comparisons** How do demand-side policies and supply-side policies differ from one another?
8. **Analyzing Information** According to monetarists, how do fluctuations in the money supply affect the economy?

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

BusinessWeek

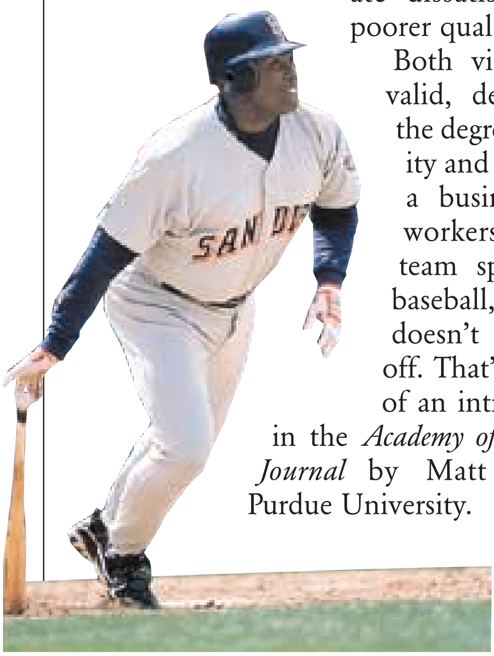
MARCH 29, 1999

Newsclip

Wages are determined basically the same way other prices are—by demand and supply. People work and earn money. The amount they earn usually depends on the value of their labor. Those who possess a unique skill or ability may receive very high wages.

Unequal Pay Strikes Out

Economists and psychologists who have studied the impact of pay differentials on corporate performance seem to be of two minds on the subject. Some experts argue that unequal pay is beneficial–inspiring greater individual effort and productivity. Others claim that large pay differences often generate dissatisfaction and poorer quality work.



Both views may be valid, depending on the degree of inequality and the nature of a business and its workers. But in a team sport such as baseball, unequal pay doesn't seem to pay off. That's the finding of an intriguing study in the *Academy of Management Journal* by Matt Bloom of Purdue University.

Using two measures of pay dispersion, Bloom analyzed how they affected both individual player performance and final team standings for 29 teams from 1985 to 1993. Adjusting for such factors as past performance, age, experience, and pay levels, he found that unequal pay distributions translated into poorer stats for lower-paid players on a number of performance measures–and into lower standings for their teams.

The proof of the pudding: Bloom notes that three of [1998's] division winners, the New York Yankees, the San Diego Padres, and the Cleveland Indians, each had one of the smallest pay spreads in their respective leagues.

Successful teams like the San Diego Padres and Cleveland Indians tend to have relatively smaller pay spreads.

Examining the Newsclip

1. **Synthesizing Information** What are the two theories presented in the article regarding large pay differentials?
2. **Finding the Main Idea** Which theory does the Bloom theory support?
3. **Drawing Conclusions** In your opinion, are the study's findings valid? Explain your reasoning.

Economics and Politics

Study Guide

Main Idea
Monetary policy is becoming more important because discretionary fiscal policy is difficult to implement.

Reading Strategy
Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by identifying and describing the different kinds of fiscal policy.

Key Term
Council of Economic Advisers

Objectives
After studying this section, you will be able to:
1. **Explain** why monetary policy sometimes conflicts with other economic policies.
2. **Recognize** that economists have differing views.
3. **Understand** the way that politics and economics interact.

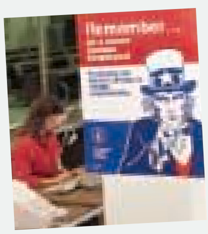
Applying Economic Concepts
Diversity of Opinion Well-meaning friends often disagree over how something should be done. Read to find out why the same thing happens to economists.

Cover Story

Charades on the Hill

Congress is playing charades with the American people, and the way the game has been rigged guarantees even greater public distrust of government.

The tax cut bill . . . [promises] a $792 billion reduction in federal levies . . . [but] . . . the "projected" budget surplus that is supposed to pay for these tax cuts rests on the assumption that the spending caps . . . in the 1997 budget deal will remain in effect for the next ten years.


Census worker compiles data

But [politicians] are playing games with the budget by classifying spending that busts the caps as "emergency appropriations," which are exempt from those agreed-upon overall limits . . . calling the cost of the 2000 Census an "emergency," despite the fact that the Constitution requires a Census every 10 years and this one has been in the planning stage ever since 1990.

—*The Washington Post*, August 4, 1999

As we look at the economic history of the United States, it is clear that times are better now than at any time in our past. Inflation is largely under control and unemployment, while it still goes up and down, is less painful than ever. Business cycles have turned into fluctuations, and the decade of the 1990s contained the longest period of economic expansion in history.

If anything, the task before us is to manage prosperity in a way that is fair to everyone, and in a way that lays the foundation for improved economic health. Fortunately, economic literacy has never been higher among Americans than it is today—despite occasional indications to the contrary such as the one discussed in the cover story.

The Changing Nature of Economic Policy

As you know, fiscal policy is the federal government's attempt to stabilize the economy through taxing and government spending. Fiscal policy involves planning a budget that has either surpluses or deficits that are intended to maintain a steady level of total spending in the economy.

CONTENTS

Fiscal policy can be either *discretionary, passive,* or *structural.* Discretionary fiscal policy is policy that someone must *choose* to implement. It requires an action by either the Congress and the president, or by an agency of government, to take effect. Passive fiscal policy does not require new or special action to go into effect. It reacts automatically when the economy changes. Structural fiscal policy includes plans and programs put in operation to strengthen the economy in the long run.

The Decline of Discretionary Fiscal Policy

Discretionary fiscal policy is used less today for several reasons. The first is the "recognition lag." This lag is the time between the beginning of a recession or a period of inflation and the awareness that it is actually happening. Most people do not believe that a recession is imminent until it actually occurs. Meanwhile, the economic problem may grow more severe than it would have if the situation had been recognized and dealt with sooner. This recognition lag is often followed by an "implementation lag," which is the amount of time it takes to do something once the problem is identified.

In November of 1973, for example, the American economy entered a severe recession that was to last for 16 months. At the time, it was considered the worst recession since the 1930s. To stimulate the economy, Congress approved a $100 income tax refund. However, the refunds were not mailed until the second quarter of 1975–shortly after the recession *ended.*

A third reason contributing to the decline of discretionary fiscal policy is the relatively short duration of recessions–about 11 months on average. To illustrate, when the 1990 recession began, political leaders waited for it to end rather than enact any programs to stimulate the GDP. The Fed used monetary policy to help move the economy out of the recession, but recovery was weak.

The fourth reason contributing to the decline of fiscal policy is the gridlock that has characterized our government since the 1990s. In both 1995 and 1996, Congress shut the federal government down when the parties could not agree on the federal budget. When Republicans and Democrats deadlocked in 1999 over a $792 billion tax cut proposal, the federal government could not use fiscal policy to shape the economy.

Fifth, Congress imposed budget caps designed to limit federal government spending. The caps gave Congress little leeway to pursue discretionary policies. As a result, some spending for agriculture, military operations in Kosovo, and even routine expenditures such as those required to carry out the 2000 census, were classified as "emergency expenditures" to get around the budget caps.

The Importance of Passive Fiscal Policies

Despite the declining use of discretionary fiscal policies, several passive fiscal programs contribute to the stability of the American economy.

All of the automatic stabilizers–unemployment insurance, social security, and other programs discussed on page 449–protect consumers and the economy if economic conditions worsen. Other programs, such as the progressive individual income tax, discussed on page 450, provide the same relief.

Careers

Credit Manager

Credit managers decide whether to extend credit to clients—either companies or individuals.

The Work

Credit managers' duties include analyzing financial reports submitted by client companies and reviewing credit agency reports on their promptness in paying bills. Credit managers also draw up credit policies to be met by individuals applying for credit. They set up office procedures and oversee other employees in the credit department.

Qualifications

To succeed in their work, credit managers must be able to analyze detailed information, draw conclusions, and speak and write effectively. A degree in business administration is a must.

For example, if the economy slows down, workers earn less and drop into lower tax brackets, which helps offset their lost income. On the other hand, if the economy accelerates, as it did in the late 1990s, workers earn more and move into higher tax brackets. The higher tax brackets help put a break on overexpansion, and generate substantial tax revenues in the process. These surpluses can then be used to repay money that was previously borrowed—as the Democrats suggested in 1999. Or, they can be returned to the American people in the form of lower taxes—as the Republicans preferred to do.

Structural Fiscal Policies

Structural fiscal policies are policies designed to strengthen the economy in the long run. They are not designed to deal with temporary problems such as recession and unemployment.

One example of a structural program is the national health-care program President Clinton proposed in the early 1990s. Another is the $792 billion tax cut proposed by Republicans in 1999, or any of the flat-tax income tax proposals of the 1990s. The 1996 welfare overhaul that replaced the Aid to Families with Dependent Children (AFDC) with the Temporary Aid to Needy Families (TANF) would also be classified as a structural change in the way the economy operates.

The sponsors of these new structural fiscal policies believed that their proposals would strengthen the American economy. Their proposals were designed to have long-term effects, and most represented a dramatic change in the way things are done. Because many people are often reluctant to change, however, many proposals remain just that—plans rather than courses of action.

The Dominance of Monetary Policy

The declining use of discretionary fiscal policy left a void filled by the Federal Reserve System (Fed), which conducts monetary policy. The abandonment of discretionary fiscal policy also means that monetary and fiscal policies are less likely to clash—although monetary policy is still subject to criticism by political leaders.

Such a situation occurred during the 1992 presidential election campaign. Because of the threat of inflation, the Fed was pursuing a tighter monetary policy than President Bush wanted. The high interest rates caused by the Fed's policy also contributed to the length of the 1991 recession. Eventually, the high interest rates and the recession during the election year—along with President Bush's broken promise not to raise taxes—paved the way for Bill Clinton's narrow election victory.

For this and other reasons, the Fed frequently comes under attack by politicians. Steve Forbes, Jack Kemp, and former Vice President Dan Quayle—all candidates at one time for the 2000 Republican presidential nomination—sharply criticized the Fed during their campaigns. So far, however, Congress has not been willing to make the Fed less independent. Most members of Congress continue to believe that the power to create money should remain with an independent agency rather than with elected officials.

Did you know?

Private Property Early Americans believed so strongly in the right to private property that they incorporated this right into law. The first Congress proposed the Fifth Amendment, which was ratified in 1791. The amendment states that private property shall not be taken for public use without just compensation. The Fourteenth Amendment prevents any state from depriving people of their property without due process of law.

Why Economists Differ

Choosing which economic policies will work best is difficult. The proposals economists offer often seem contradictory, which adds to the difficulty. These differences, however, are smaller than most people realize.

Different Criteria

Economists who choose one policy over another normally do so because they think that some problems are more critical than others. For example, one economist might think that unemployment is the crucial issue, while another believes that inflation is. If you were to survey all economists on the best way to deal with a specific problem, their recommendations would be much more consistent.

Different Eras

Another reason economists differ is that most economic explanations and theories are a product of the problems of the times. The unemployment and other problems that occurred during the Great Depression of the 1930s, for example, influenced demand-side economists. Because the government sector was so small at the time, supply-side policies designed to make government's role even smaller probably would not have helped much.

The Monetarist Point of View

The monetarist point of view emerged in the 1960s and 1970s when inflation soared. Because demand-side economic policies were not designed to deal with inflation, new solutions were needed. The problem with the monetarist view, however, was that it offered long-term solutions but little short-term relief.

Supply-Side Policies

Supply-side policies eventually grew out of frustration with stagflation and the failure of demand-siders and monetarists to address this issue. Again, changing times led to changing problems, and so something new and different seemed to be needed.

For the most part, economists do not normally define their positions as being purely demand-side, supply-side, or monetarist. Many demand-siders are monetarists when it comes to controlling inflation. Many monetarists are supply-siders when it comes to agreeing on the potential burden of the tax structure. Most economists take a middle road that incorporates many points of view.

As long as society keeps changing, new problems will continue to arise. From each new set of problems, new theories—and advocates for those theories—are bound to emerge.

Economic Policy

Difference of Opinion Although economists do not come to blows like the ones in this cartoon, they often do not agree on economic policies. ***Why do economists differ in their policies?***

Economic Politics

In the 1800s, the science of economics was known as "political economics." After a while, economists broke away from the political theorists and tried to establish economics as a science in its own right.

In recent years, the two fields have merged again. This time, however, they have done so in a way best described as "economic politics." Today, politicians are concerned with the economic consequences of what they do. Most of the major debates in Congress, for example, are over spending, taxes, or other budgetary matters.

Council of Economic Advisers

Generally, economists and politicians work together fairly closely. The president relies on a

Council of Economic Advisers, a three-member group that reports on economic developments and proposes strategies. The economists basically are the advisers, while the politicians direct or implement the policies. In its role as "the president's intelligence arm in the war against the business cycle," the council gathers information and makes recommendations.

The president listens to the economists' advice, but may not be willing or able to follow it. To illustrate, if the president advocates a balanced budget, the economic advisers may recommend raising taxes to achieve this goal. If one of the president's campaign pledges was not to raise taxes, however, the president might reject the advisers' suggestion.

Increased Understanding and Awareness

Despite disagreeing on some points, economists have had considerable success in the description, analysis, and explanation of economic activity. They have developed many statistical measures of the economy's performance. Economists also have constructed models that are helpful in the tasks of economic analysis and explanation.

In the process, economists have helped the American people become more aware of the workings of the economy. This awareness has benefited everyone, from the student just starting out to the politician who must answer to the voters.

Today, economists know enough about the economy to prevent a depression like the one in the 1930s. It is doubtful that economists know enough—or can persuade others that they know enough—to avoid minor recessions. They can, however, devise policies to stimulate growth, help disadvantaged groups when unemployment rises or inflation strikes, and generally make the American economy more successful.

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ECONOMICS *Online*

Student Web Activity Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 16—Student Web Activities*** for an activity on the Council of Economic Advisers.

Section 4 Assessment

Checking for Understanding

1. **Main Idea** Using your notes from the graphic organizer activity on page 456, explain the difference between automatic and discretionary fiscal policy. List examples of each in your answer.
2. **Key Term** Define Council of Economic Advisers.
3. **Describe** monetary policy and its goals. Then explain how monetary policy can sometimes conflict with economic policy.
4. **List** several reasons economists differ over policies and issues.
5. **Explain** what "economic politics" means in your own words.

Applying Economic Concepts

6. **Diversity of Opinion** Why do monetary and fiscal policies often operate at cross-purposes? What impact does this conflict have on the economy?

Critical Thinking

7. **Making Inferences** Suppose that, in an election year, Congress passes a massive tax cut even though inflation is at 9 percent. What actions might the Fed take in response during such economic times?
8. **Analyzing Information** Why might monetary and fiscal policy be at odds during an election year?

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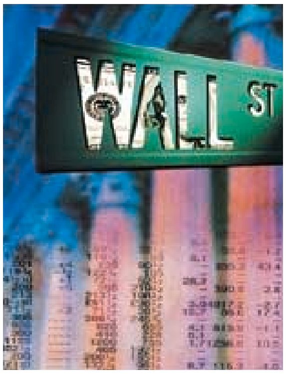
Chapter 16 Summary

Section 1

The Cost of Economic Instability

(pages 437–440)



- Low economic growth and economic instability in the form of inflation and high unemployment rates have both economic and social costs.
- The economic costs can be measured with the **misery index** or the **GDP gap.**
- The social costs include unemployment, wasted resources, potential political instability, increased crime, and damage to family financial security.
- Strong economic growth is more than an economic ideal. It is one of the foundations of a healthy society.

Section 2

Macroeconomic Equilibrium

(pages 442–445)

- **Macroeconomic equilibrium** is similar to equilibrium in individual markets. It can be analyzed with the help of **aggregate supply curves** and **aggregate demand curves.**
- Most of the factors that influence the individual supply and demand curves also affect the aggregate curves. They shift to the right to represent an increase, and to the left to represent a decrease.
- The intersection of aggregate supply and aggregate demand determines **macroeconomic equilibrium.** This equilibrium is defined in terms of a certain amount of real GDP being produced at a specific price level.

Section 3

Stabilization Policies (pages 447–454)

- Demand-side policies, or **fiscal policies,** are policies designed to affect the aggregate demand curve through federal spending and taxing decisions. Fiscal policies are derived from **Keynesian economics,** which assigns the government a key role in offsetting fluctuating spending by the business sector.
- **Automatic stabilizers** are an important part of demand-side economics.
- Supply-side economics recommends a smaller role for governments and a lower federal tax structure.
- The outcome of monetary policy is a change in the size of the money supply that, in turn, affects the cost and availability of credit.
- The short-run impact of monetary policy is on interest rates. The long-run impact is on the rate of inflation.

Section 4

Economics and Politics (pages 456–460)

- Discretionary policy is increasingly difficult to execute due to recognition lags, implementation lags, Congressional gridlock, the brevity of recessions, and conservative budget caps.
- Passive fiscal policy in the form of automatic stabilizers still provides much stability, but monetary policy has filled the void and has become dominant.
- The fields of economics and politics are closely intertwined. The president has a **Council of Economic Advisers** but, for political reasons, may not always be able to follow the Council's advice.

Chapter 16 Assessment and Activities

ECONOMICS Online

Self-Check Quiz Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 16—Self-Check Quizzes*** to prepare for the chapter test.

CLICK HERE

Identifying Key Terms

Classify each of the terms below into one of the following categories:

- **supply-side policies**
- **demand-side policies**
- **monetary policies**

1. aggregate demand curve
2. aggregate supply curve
3. automatic stabilizer
4. multiplier
5. deregulation
6. entitlements
7. fiscal policy
8. Keynesian economics
9. Laffer curve
10. wage-price controls

Reviewing the Facts

Section 1 (pages 437–440)

1. **List** two measures used to describe the problems of growth and economic instability.
2. **Name** some of the social costs of instability.

Section 2 (pages 442–445)

3. **Describe** the difference between the supply curve of a firm and the aggregate supply curve.
4. **Identify** the factors that would cause the aggregate demand curve to increase.
5. **Discuss** what is meant by macroeconomic equilibrium.

Section 3 (pages 447–454)

6. **Identify** the major tools of fiscal policy.
7. **List** the main assumptions of supply-siders.
8. **Describe** the short-term and long-term impacts of monetary policy.

Section 4 (pages 456–460)

9. **Explain** why discretionary fiscal policy is so difficult to use.
10. **Explain** why new problems will arise in the economy, even as old ones are solved.
11. **State** an example of how politics sometimes overrides sound economic policies.

Thinking Critically

1. **Drawing Conclusions** Why is the misery index a more personal measure of the social costs of instability than other concepts, such as the GDP gap?
2. **Making Comparisons** How do aggregate supply and demand differ from simple supply and demand? Use a chart similar to the one below to answer the question.

	Description
Demand	
Aggregate Demand	
Supply	
Aggregate Supply	

3. **Making Comparisons** Analyze the use of discretionary fiscal policy and monetary policy to offset the effects of a short recession. Which policy would you choose? Include reasons to support your choice.

Applying Economic Concepts

1. **Automatic Stabilizers** What automatic stabilizers have benefited you or your family in the recent past? Could you have managed without them?
2. **Multiplier** Provide an example of how a $100,000 expenditure in your community would have a magnified effect as described by the multiplier.
3. **Diversity of Opinion** Some economists favor policies that stimulate demand, while others favor those that stimulate the supply of goods and services. Still other economists prefer policies based on the growth of the money supply. With which group of economists do you agree? Provide reasons to support your choice.
4. **Monetary Policy** The Federal Reserve System conducts monetary policy. At one time or another, most presidents have complained about the independence of the Fed. Do you think this independence should be maintained, or that elected officials should have more control over monetary policy? Support your answer.

Math Practice

According to Keynesian economics, what action should government take if business investment fell by $20 billion? Show your findings using the output-expenditure model:

$$GDP = C + I + G + F$$

Thinking Like an Economist

Both demand-side and supply-side policies are designed to ensure stable economic growth. The approaches differ, however, on what should be done to achieve this goal. Assume that real GDP growth was negative during the last quarter. Make a two-column chart. In the left column, list the policies that demand-side economists would follow to help the economy. Place the supply-side solution in the right column. How do they differ?

Technology Skill

Using the Internet Log on to the Internet. Then, using a search engine, type in the following key words:

- John Maynard Keynes
- Unemployment
- Stabilization policies
- Inflation
- Fiscal policy

Print out (or download) any articles or reports on these topics. Using the information you retrieved, prepare a two-paragraph report on each topic listed above—defining the terms and summarizing their significance to economic security. Add a list of Web sites and bibliography entries at the end of your report.

Building Skills

Applying the Writing Process Go to a library to look up advertisements for airfares from 19 years ago. Find out what the current airfares are when traveling to the same locations. Write an essay that explains the effect these price changes may have had on consumers. What might they have to do with the deregulation of the airline industry?

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UNIT 5

International and Global Economics

CHAPTER 17
International Trade

CHAPTER 18
Comparative Economic Systems

CHAPTER 19
Developing Countries

CHAPTER 20
Global Economic Challenges

Why It's Important

As you read this unit, learn how the study of economics helps answer the following questions:

- **Why do imported goods sometimes cost more than domestically produced goods?**
- **Why did capitalism triumph over communism?**
- **How do population growth rates on the other side of the world affect you?**

International trade—both the importing and exporting of goods—is essential to the U.S. economy.

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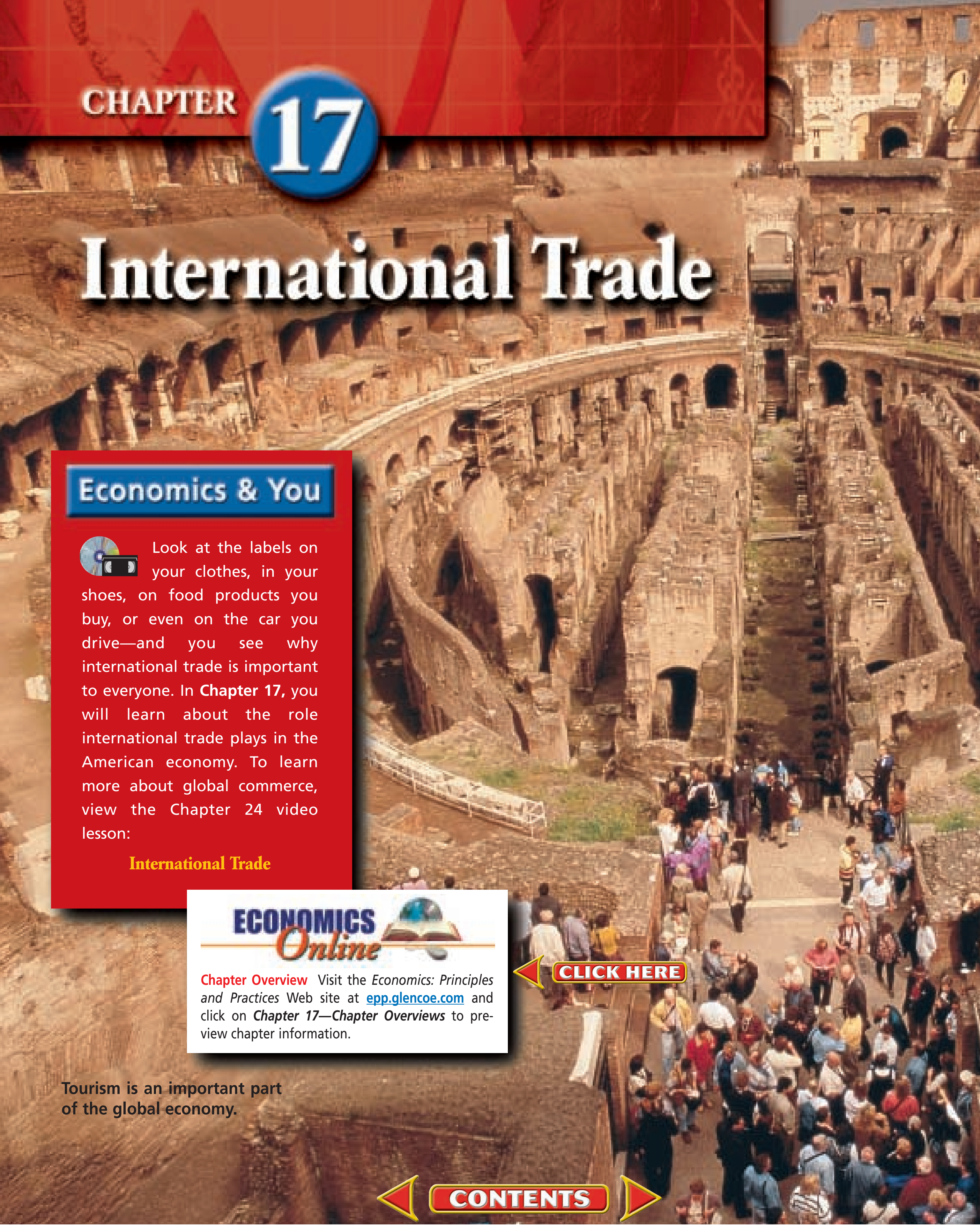
ECONOMICS Online

To learn more about global economics through information, activities, and links to other sites, visit the *Economics: Principles and Practices* Web site at epp.glencoe.com

CHAPTER 17

International Trade



Economics & You

Look at the labels on your clothes, in your shoes, on food products you buy, or even on the car you drive—and you see why international trade is important to everyone. In **Chapter 17,** you will learn about the role international trade plays in the American economy. To learn more about global commerce, view the Chapter 24 video lesson:

International Trade

ECONOMICS Online

Chapter Overview Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 17—Chapter Overviews*** to preview chapter information.

CLICK HERE

Tourism is an important part of the global economy.

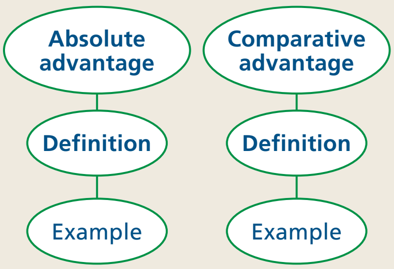
CONTENTS

Absolute and Comparative Advantage

Study Guide

Main Idea
Nations trade according to the theory of comparative advantage.

Reading Strategy
Graphic Organizer As you read the section, complete graphic organizers similar to the ones below by defining each term and providing an example of each.



Key Terms
exports, imports, absolute advantage, comparative advantage

Objectives
After studying this section, you will be able to:
1. **Explain** the importance of international trade in today's economy.
2. **Describe** the basis for international trade.
3. **Explain** why total world output increases when countries specialize to engage in trade.

Applying Economic Concepts
Comparative Advantage When you do the chores around the house, you are probably better at some than others. Read to find out how the concept of comparative advantage helps everyone become more productive.

Cover Story

Study: U.S. Still Biggest Arms Provider


U.S. warship at sea

WASHINGTON—Worldwide demand is slumping, but that hasn't kept the USA out of the arms business, a congressional study finds. In 1998, the USA led in new arms deals, with $7.1 billion—up from $5.7 billion the year before. Germany ranked second, with $5.5 billion in new sales, and France third, with $3 billion. The value of all new arms sales worldwide was $23 billion, up from $21.4 billion the year before. However, the report said that the trend in terms of arms sales has generally been downward, particularly among developing nations, which are the biggest buyers of weapons.

—*USA Today*, August 6, 1999

The key to trade—whether among people, states, or countries—is specialization. Some people specialize in cutting hair. Others specialize in fixing computers. These people exchange their services for money, which they then use to buy the specialized goods and services they need from others.

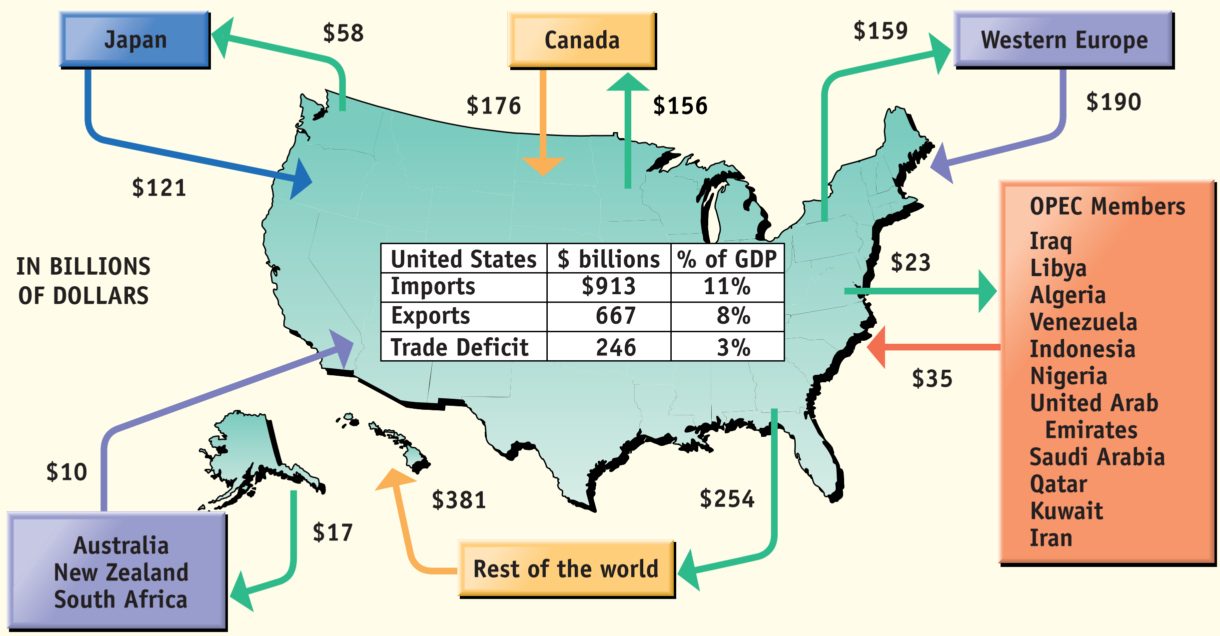
Different regions of a country specialize in certain economic activities in much the same way. New York, for example, is a center of the U.S. financial industry, and Detroit specializes in automobiles. The Midwest and High Plains areas are known for wheat farming. Texas is recognized for oil and cattle, while Florida and California are famous for citrus fruit. All of these states trade with one another so that people in one area can consume the goods and services that workers in other areas offer.

If you want to find out what a country specializes in, look at its **exports**—the goods and services that it produces and then sells to other nations.

ECONOMICS AT A GLANCE

Figure 17.1

United States Merchandise Trade by Area



United States	$ billions	% of GDP
Imports	$913	11%
Exports	667	8%
Trade Deficit	246	3%

Source: *Economic Report of the President,* 1999

Using Charts The United States exports merchandise (goods) all over the world. The biggest trade imbalance is with Japan, followed by Western Europe and by OPEC members. **Which single area of the world trades the most with the United States?**

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ECONOMICS Online

Visit epp.glencoe.com and click on *Textbook Updates—Chapter 17* for an update of the data.

The U.S. and International Trade

International trade is important to all nations, even a country as large as the United States. Most of the products exchanged are goods, although services, such as insurance and banking, are being bought and sold in increasing numbers.

In 1999, **imports**–goods and services that one country buys from other countries–amounted to about $1,150 billion. This number corresponds to nearly $4,200 for every person in the country, and it has grown steadily over the years.

Figure 17.1 shows the merchandise trade patterns for the United States and the rest of the world. As large as these numbers are, they would be even bigger if we counted the value of services in addition to the merchandise, or goods, shown in the figure. The sheer volume of trade between nations of such different geographic, political, and religious characteristics is proof that trade is beneficial.

In fact, nations trade for the same reasons that individuals do–they trade because they believe that the products they receive are worth more than the products they give up.

Without international trade, many products would not be available on the world market. Bananas, for example, would not leave Honduras, nor would coffee beans leave Colombia or Brazil. Some people may think of international trade as a way to obtain exotic products and fancy consumer

CONTENTS

goods, but trade is much more than that. Many imports are necessities, such as crude oil, clothing, and shoes. In the United States, many minerals, metals, and raw materials that are not available must be imported.

The Basis for Trade

In many cases, it may be cheaper for a country to import a product than to manufacture it. This becomes clear when we examine the difference between absolute and comparative advantage.

Absolute Advantage

A country has an **absolute advantage** when it is able to produce more of a given product than another country can. Consider, for example, the hypothetical case of two countries—Alpha and Beta—which are the same size in terms of area, population, and capital stock. Only their climate and soil fertilities differ. In each country, only two crops can be grown—coffee and cashew nuts.

Figure 17.2 shows the production possibilities frontiers for Alpha and Beta. Note that if both countries devote all of their efforts to producing coffee, Alpha could produce 40 million pounds and Beta six million—giving Alpha an absolute advantage in the coffee production. However, if both countries devote all their efforts to the production of cashew nuts, Alpha could produce eight million pounds and Beta six million. Alpha, then, also has an absolute advantage in the production of cashew nuts because it can produce more than Beta.

For years, people thought that absolute advantage was the basis for trade because it enabled a country to produce enough of a good to consume domestically while leaving some for export. However, the concept of absolute advantage did not explain how a country with a large output like Alpha could trade with a country having a smaller output like Beta—and yet have both countries benefit from the exchange.

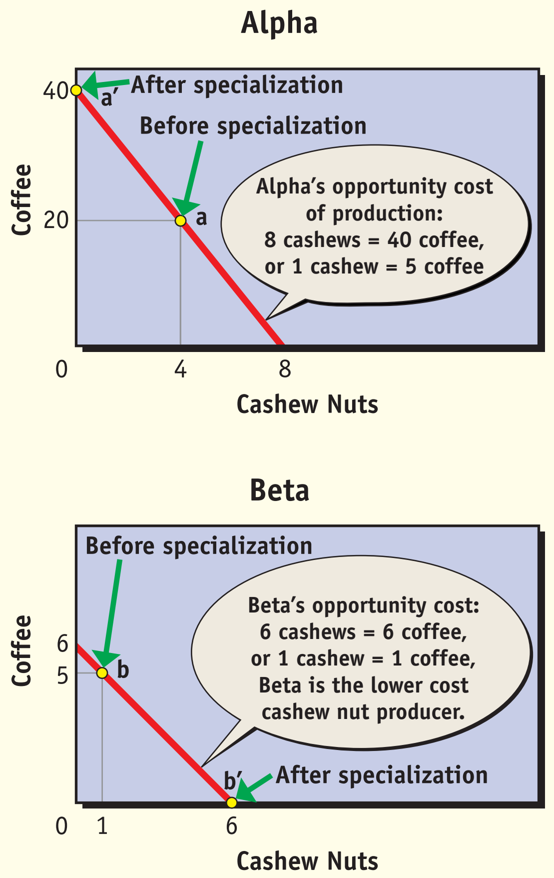
Comparative Advantage

Even when one country enjoys an absolute advantage in the production of all goods—as in the case of Alpha above—trade between it and another

ECONOMICS AT A GLANCE

Figure 17.2

The Gains From Trade



Total Output Before Specializing						Total Output After Specializing					
	Alpha		Beta				Alpha		Beta		
Coffee	20	+	5	=	**25**	Coffee	40	+	0	=	**40**
Cashews	4	+	1	=	**5**	Cashews	0	+	6	=	**6**

(Coffee and nuts measured in pounds)

Using Graphs If Alpha and Beta each specializes in the product it can produce relatively more efficiently, total output for both countries goes up. After specialization, each country would trade its surplus production with its neighbor. **Does Alpha or Beta have a comparative advantage in the production of coffee?**

country is still beneficial. This happens whenever a country has a **comparative advantage**—the ability to produce a product *relatively* more efficiently, or at a lower opportunity cost.

To illustrate, because Alpha can produce either 40 pounds of coffee or 8 pounds of cashew nuts, the opportunity cost of producing 1 pound of cashew nuts is 5 pounds of coffee (40 pounds of coffee divided by 8). At the same time, Beta's opportunity cost of producing 1 pound of cashew nuts is 1 pound of coffee (6 pounds of coffee divided by 6). Clearly, Beta is the lower-cost producer of cashew nuts because its opportunity cost of producing 1 pound of nuts is 1 pound of coffee—whereas Alpha would have to give up 5 pounds of coffee to produce the same amount of cashews.

If Beta has a comparative advantage in producing cashews, then Alpha must have a comparative advantage in coffee production. Indeed, if we try to find each country's opportunity cost of producing coffee, we would find that Alpha's opportunity cost of producing 1 pound of coffee is $^1/_5$ of a pound of cashews (8 pounds of cashews divided by 40). Using the same computations, Beta's opportunity cost is 1 pound of cashews (6 pounds of cashews divided by 6). Alpha, then, has a comparative advantage in coffee production, because its opportunity cost of production is lower than Beta's.

The Gains From Trade

The concept of comparative advantage is based on the assumption that everyone will be better off producing the products they produce relatively best. This applies to individuals, companies, states, and regions as well as to nations. The final result is that specialization and trade increases total world output, just as in the case of Alpha and Beta.

This explains the nature of trade between the United States and a country such as Colombia. The United States has excellent supplies of iron and coal. It also has the capital and the labor that are needed to produce tractors and farm machinery efficiently. Colombia, in contrast, does not have as much capital or skilled labor. It does, however, have the land, labor, and climate to produce coffee efficiently. Because the United States has a comparative advantage in the production of farm machinery, it will trade these products for Colombian coffee. Because Colombia has a comparative advantage in the production of coffee, it will export coffee and import farm equipment.

For similar reasons, a country like Saudi Arabia produces more crude oil than it can consume—enabling it to export the surplus. The United States, in turn, produces more military aircraft than it consumes—allowing it to sell aircraft to Saudi Arabia in exchange for oil.

Section 1 Assessment

Checking for Understanding

1. **Main Idea** What does the theory of comparative advantage offer as a guideline to countries?
2. **Key Terms** Define exports, imports, absolute advantage, comparative advantage.
3. **Explain** why international trade is important in today's economy.
4. **Compare** the concepts of absolute advantage and comparative advantage.
5. **Explain** why total world output increases as countries specialize to engage in trade.

Applying Economic Concepts

6. **Comparative Advantage** If you were to open a business with two of your best friends, how would you divide the work to be done? Would your decisions regarding who does what reflect comparative advantage? Explain.

Critical Thinking

7. **Making Generalizations** Do you know of a product for which your state has a comparative advantage? Explain how this might affect trade with another state.

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Profiles in Economics

Marketing Savvy: Bill Gates

(1955–)

One unavoidable fact about Bill Gates, cofounder of Microsoft, is that with a net worth of billions of dollars, he is one of the richest men in the world.

Gates is matter-of-fact about the reason for his wealth. "Our success," he says, "is based on only one thing: good products. It's not very complicated." To his many critics, however, the story is not so simple.

A TEENAGE WIZARD

While in high school, Gates designed a class scheduling program so that he could take courses with the prettiest girls in his school. He also started Traf-O-Data, a computer traffic analysis company.

At age 19, Gates dropped out of Harvard University to pursue his interest in computers. He and his friend Paul Allen developed a condensed operating-system language, which they licensed to a computer manufacturer. Based on this success, Gates and Allen established Microsoft Corporation in 1975.

INTO THE BIG LEAGUES

In 1980 computer industry giant IBM asked Gates to develop an operating system for its new personal computer. Gates bought an operating system from a small company, revamped it, and licensed it to IBM. The system was called MS-DOS, for Microsoft Disk Operating System. The key fact is that Gates licensed MS-DOS to IBM—he didn't sell it to them. Because he retained ownership of MS-DOS, he was able to market it to other companies. In 1981 IBM unveiled its PC, setting off the personal computer boom. MS-DOS became the dominant operating system in the market, and propelled Gates to wealth.

When Microsoft went public in 1986, Gates, who owned 45 percent of the company, became a millionaire several hundred times over.

CONTROVERSIAL SUCCESS

By 1993 Microsoft operating systems ran nearly 90 percent of the world's PCs. Much of Gates's success came from his unique combination of technological expertise and an understanding of the computer needs of the average user. But not everyone attributes Gates's success to know-how and marketing. Many view Gates's Microsoft as an industry bully, forcing would-be competitors out of the market. In fact, the Justice Department and many states have pursued antitrust legislation against Microsoft.

Examining the Profile

1. **Predicting Consequences** How might the Microsoft story have been different if Gates had sold MS-DOS to IBM rather than licensing it?
2. **For Further Research** Report the current status of the lawsuits against Microsoft.

CONTENTS

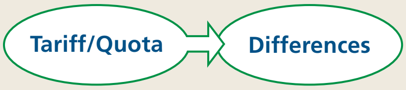
SECTION 2

Barriers to International Trade

Study Guide

Main Idea
Tariffs and quotas are two restrictions on international trade.

Reading Strategy
Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by describing the differences between a tariff and a quota.



Key Terms
tariff, quota, protective tariff, revenue tariff, dumping, protectionists, free traders, infant industries argument, balance of payments, most favored nation clause, World Trade Organization (WTO), North American Free Trade Agreement (NAFTA)

Objectives
After studying this section, you will be able to:
1. **Explain** how international trade can be restricted to protect special interests.
2. **Cite** the main argument used in support of protection.
3. **Relate** the history of the free trade movement.

Applying Economic Concepts
Quotas Do you think the prices of some goods are too high? Read to find out how international trade can help keep some prices low.

Cover Story

US Gets Go-Ahead for European Sanctions

French delicacies subject to U.S. duties

The World Trade Organization yesterday authorized the US to impose trade sanctions on European Union goods in retaliation for the EU's ban on hormone-treated beef.

From July 29, the US will impose punitive 100 percent duties on imports from the EU, including delicacies such as foie gras, truffles, and Roquefort cheese as well as beef, pork, canned tomatoes and mustard.

US officials said last week the sanctions, worth a total of $116.8 [million] would target goods from France, Germany, Italy and Denmark as these were the countries most influential in preserving the 10-year-old beef hormone ban.

—*The Financial Times*, July 27, 1999

Although international trade can bring many benefits, some people object to it because it can displace selected industries and groups of workers in the United States. The European ban on American hormone-treated beef discussed in the cover story is just one example of attempts to restrict trade.

Restricting International Trade

Historically, trade has been restricted in two major ways. One is through a **tariff**—a tax placed on imports to increase their price in the domestic market. The other is with a **quota**—a limit placed on the quantities of a product that can be imported.

Tariffs

Governments levy two kinds of tariffs—protective and revenue. A **protective tariff** is a tariff high enough to protect less-efficient domestic industries. Suppose, for example, that it costs $1 to produce a mechanical pencil in the United States. The exact

STANDARD & POOR'S INFOBYTE

The Trade Balance This term refers to the difference between exports and imports. In the United States, we continue to import more than we export and are therefore experiencing a trade deficit. Because international trade is significant to GDP forecasts, this Department of Commerce statistic is important. The standard release time is around the 22nd of each month.

same product, however, can be imported for 35 cents from another country. If a tariff of 95 cents is placed on each imported pencil, the cost climbs to $1.30—more than the cost of the American-made one. The result is that a domestic industry is protected from being undersold by a foreign one.

The **revenue tariff** is a tariff high enough to generate revenue for the government without actually prohibiting imports. If the tariff on imported mechanical pencils were 40 cents, the price of the imports would be 75 cents, or 25 cents less than the American-made ones. As long as the two products are identical, people would prefer the imported one because it was less expensive—so the tariff would raise revenue rather than protect domestic producers from foreign competition.

Traditionally, tariffs were used more for revenues than for protection. Before the Civil War, tariffs were the chief source of revenue for the federal government. From the Civil War to 1913, tariffs provided about one-half of the government's total revenue. In 1913 the federal income tax was passed, which gave the government a new and more lucrative source of revenue. Modern tariffs—also called customs duties—only account for a small portion of total government revenue, as shown in **Figure 9.4** on page 232.

Quotas

Foreign goods sometimes cost so little that even a high tariff on them may not protect the domestic market. In such cases, the government can use a quota to keep foreign goods out of the country. Quotas can even be set as low as zero to keep a product from ever entering the country. More typically, quotas are used to reduce the total supply of a product to keep prices high for domestic producers.

In 1981, for example, domestic automobile producers faced intense competition from lower-priced Japanese automobiles. Rather than lower their own prices, domestic manufacturers wanted President Ronald Reagan to establish import quotas on Japanese cars. The Reagan administration told the Japanese to voluntarily restrict auto exports, and they reluctantly agreed. As a result, Americans had fewer cars from which to choose, and the prices of all cars were higher than they would otherwise have been.

During the Bush administration, "voluntary" import quotas were imposed on steel. The quotas protected jobs in the domestic steel industry, but at the cost of higher steel prices for the rest of the

Protectionism

Jobs These citizens are protesting the loss of manufacturing jobs in the face of competition from other countries. ***What is the purpose of a protective tariff?***

country. A trade crisis emerged in mid-1997 when charges of **dumping,** or selling products abroad at less than it cost to produce them at home, were levied against Japan and Russia.

Other Barriers

Tariffs and quotas are not the only barriers to trade. Many imported foods are subject to health inspections far more rigorous than those given to domestic foods. For years this tactic was used to keep beef grown in Argentina out of the United States. Another tactic is to require a license to import. If the government is slow to grant the license, or if the license fees are too high, international trade is restricted.

The United States is not the only country to use health issues to restrict trade. Many Europeans are reluctant to consume corn, wheat, and other crops that have been genetically altered for superior yield, taste, and disease resistance. A more sensitive case is that of American beef raised on artificial hormones, a product that Europeans refuse to import. While most Americans feel that their food is safe, Europeans are not so sure. After all, they point out, an experiment by U.S. scientists demonstrated that Monarch butterflies died when they ate the pollen from genetically altered corn plants.

Nationalism and culture often play a role in these debates, with Europeans frequently claiming that they prefer regional and traditional foods to genetically altered ones. While these may or may not be legitimate arguments, they do restrict trade between nations.

Did you know?

A Safety Net To minimize the price changes caused by the Arab oil embargoes of the 1970s, the United States in 1977 created the Strategic Petroleum Reserve, to store millions of barrels of oil. The reserve can be used as an emergency supply of oil in case of a complete oil embargo. The reserve holds enough oil to provide a normal level of petroleum use in the United States for 60 days.

Arguments for Protection

Freer international trade has been a subject of debate for many years. Some people, known as **protectionists,** favor trade barriers that protect domestic industries. Others, known as **free traders,** favor fewer or even no trade restrictions. The debate between the two groups usually centers on the five arguments for protection discussed below.

National Defense

The first argument for trade barriers centers on national defense. Protectionists argue that without trade barriers, a country could become so specialized that it would end up becoming too dependent on other countries.

During wartime, protectionists argue, a country might not be able to get critical supplies such as oil and weapons. As a result, even some smaller countries such as Israel and South Africa have developed large armaments industries for such crises. They want to be sure they will have a domestic supply if hostilities break out or other countries impose economic boycotts.

Free traders admit that national security is a compelling argument for trade barriers. They believe, however, that the advantages of having a reliable source of domestic supply must be weighed against the disadvantages that the supply will be smaller and possibly less efficient than it would be with free trade. The political problem of deciding which industries are critical to national defense and which are not must also be considered. At one time, the steel, auto, ceramic, and electronics industries all have argued that they are critical to national defense and so should receive protection.

Promoting Infant Industries

The **infant industries argument**—the belief that new or emerging industries should be protected from foreign competition—is also used to justify trade barriers. Protectionists claim that these industries need to gain strength and experience before they can compete against developed industries in other countries. Trade barriers would give them the time they need to develop. If infant industries compete against foreign industries too soon, they argue, they might fail.

Many people are willing to accept the infant industries argument, but only if protection will eventually be removed so that the industry is forced to compete on its own. The problem is that industries used to having some protection are normally unwilling to give it up—making for difficult political decisions later on.

To illustrate, some Latin American countries have used tariffs to protect their own infant automobile industries, with tariffs as high as several hundred percent. In some cases, the tariff raised the price of used American-made cars to more than double the cost of new ones in the United States. In spite of this protection, no country in Latin America has been able to produce a competitive product on its own. To make matters worse, governments have come to rely on the revenue supplied by tariffs, so prices for automobiles remain high for their citizens.

International Trade

Expansion With the great expansion of trade, many U.S. companies set up operations in other countries. Protectionists favor trade barriers that protect domestic industries. ***What is the assumption behind the infant industries argument?***

Protecting Domestic Jobs

A third argument—and one used most often—is that tariffs and quotas protect domestic jobs from cheap foreign labor. Workers in the shoe industry, for example, have protested the import of lower-cost Italian, Spanish, and Brazilian shoes. Garment workers have opposed the import of lower-cost Korean, Chinese, and Indian clothing. Steelworkers have blocked foreign-made cars from company parking lots to show their displeasure with the foreign-made steel used in producing the cars.

In the short run, protectionist measures provide temporary protection for domestic jobs. This is especially attractive to people who want to work in the communities where they grew up. In the long run, however, industries that find it hard to compete today will find it even harder to compete in the future unless they change the way they are doing things. As a result, most free traders believe that it is best not to interfere, and thereby keep pressure on threatened industries to modernize and improve.

When inefficient industries are protected, the economy produces less and the standard of living goes down. Because of unnecessarily high prices, people buy less of everything, including those goods produced by protected industries. If prices get too high, substitute products will be found and protected jobs will still be lost. Free traders argue that the profit-and-loss system is one of the major features of the American economy. Profits reward the efficient and hard working, while losses eliminate the inefficient and weak.

Keeping the Money at Home

Another argument for trade barriers claims that limiting imports will keep American money in the United States instead of allowing it to go abroad. Free traders, however, point out that the American dollars that go abroad generally come back again.

THE GLOBAL ECONOMY

The Art of Communication

With the globalization of business, it is necessary to understand and to adjust to the communication style of other cultures.

Only in the Germanic countries will the people be as eager to get down to business as in the United States of America. Almost anywhere else in the world, but especially in Asian and Latin countries, it's important to first get to know the person with whom you're dealing to build a bond of trust. Three f's of business in Asian cultures are family, friends and favors. If you're not part of an extended Asian family or if you don't have close Asian chums from your school days, find the time to develop a friendship with a well-connected intermediary [agent]. Relationships, once formed, are long lasting bonds of loyalty that must be respected. . . .

Space is one of those seemingly inconsequential aspects of human interaction that can have major consequences elsewhere. The American personal bubble of space is much greater than that of an Arab or a Russian, but smaller than that of a Briton. Infringing upon another's personal space or inadvertently backing away when someone enters your bubble can send unintended negative messages. Touching someone—a hand on the forearm, an arm around the shoulder, or a pat on the back—is one of the easiest ways to violate personal space.

—*Etiquette International*

Critical Thinking

1. **Analyzing Information** What does the writer mean by "space"? Explain the concept in your own words.
2. **Summarizing Information** What does it mean to say that "the American bubble of space is much greater than that of an Arab or Russian"?
3. **Drawing Conclusions** Why is it important to understand the values of another culture when doing business?

The Japanese, for example, use the dollars they receive for their automobiles to buy American cotton, soybeans, and airplanes. These purchases benefit American workers in those industries.

The same is true of the dollars used to buy oil from the Middle East. The money comes back to the United States when oil-wealthy foreigners buy American-made oil technology. Keeping the money home also hurts those American industries that depend on exports for their jobs.

Helping the Balance of Payments

Another argument involves the **balance of payments**—the difference between the money a country pays out to, and receives from, other nations when it engages in international trade. Protectionists argue that restrictions on imports help the balance of payments by restricting the amount of imports.

What protectionists overlook, however, is that the dollars return to the United States to stimulate employment in other industries. As a result, most economists do not believe that interfering with free trade can be justified on the grounds of helping the balance of payments.

The Free Trade Movement

The use of trade barriers to protect domestic industries and jobs works only if other countries do not retaliate with their own trade barriers. If they do, all countries suffer because they have neither the benefits of efficient production nor access to less costly products and raw materials from other nations.

Tariffs During the Great Depression

In 1930 the United States passed the Smoot-Hawley Tariff, one of the most restrictive tariffs in history. It set import duties so high that the price of many imported goods rose nearly 70 percent. When other countries did the same, international trade nearly came to a halt.

Before long, most countries realized that high tariffs hurt more than they helped. As a result, in 1934 the United States passed the Reciprocal Trade Agreements Act, which allowed it to reduce tariffs up to 50 percent if other countries agreed to do the same. The act also contained a **most favored nation clause**—a provision allowing a country to receive the same tariff reduction that the United States negotiates with a third country.

Suppose, for example, that the United States and China have a trade agreement with a most favored nation clause. If the United States then negotiates a tariff reduction with a third country, the reduction would also apply to China. This clause is very important to China, because its goods will then sell at an even lower price in the American market.

The World Trade Organization

In 1947, 23 countries signed the General Agreement on Tariffs and Trade (GATT). The GATT extended tariff concessions and worked to do away with import quotas. Later, the Trade Expansion Act of 1962 gave the president of the United States the power to negotiate further tariff reductions. As a result of this legislation, more than 100 countries had agreed to reduce the average level of tariffs by the early 1990s.

More recently, the GATT was replaced by the **World Trade Organization (WTO)**—an international agency that administers previous GATT trade agreements, settles trade disputes between governments, organizes trade negotiations, and provides technical assistance and training for developing countries. As you read in the cover story, the WTO agreed that Europe was discriminating against the United States by banning hormone-treated beef. While the WTO normally opposes retaliatory measures, it approved the U.S. measures because the European Union ignored earlier WTO demands to drop American beef restrictions.

Because so many countries have been willing to reduce tariffs and quotas under GATT and the WTO, international trade is flourishing. Tariffs that once nearly doubled the price of many goods now increase prices by a small percentage, while other tariffs have been dropped altogether. As a result,

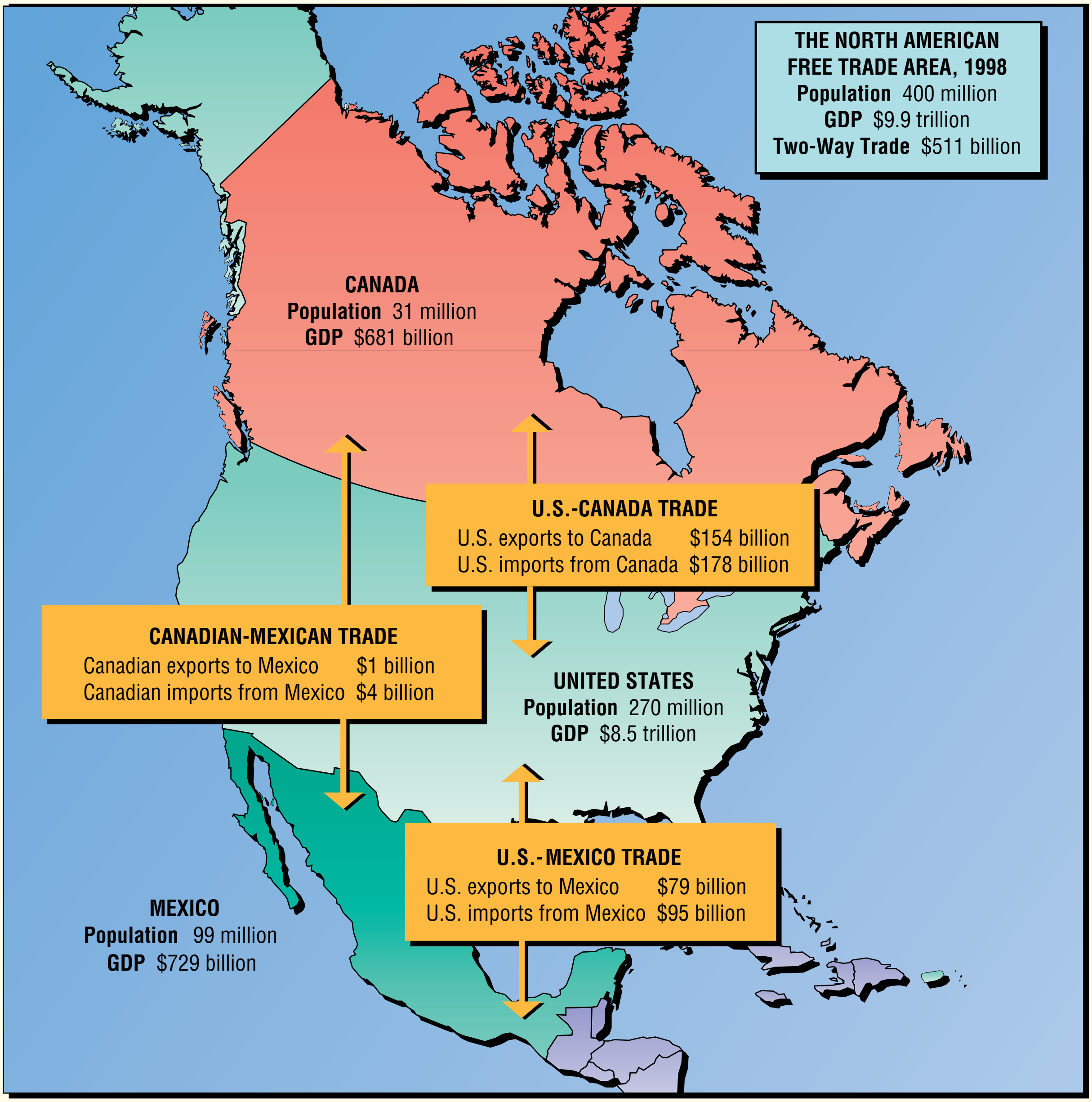
Trade

Protectionism vs. Free Trade Free traders argue that reducing tariffs and quotas allows consumers to choose from a variety of both domestic and foreign products. ***What arguments do protectionists use in support of trade restrictions?***

ECONOMICS AT A GLANCE

Figure 17.3

The North American Free Trade Agreement



Source: *CIA Fact Book*

Using Maps The North American Free Trade Agreement (NAFTA) makes up the second largest free-trade area in the world, after the European Union. After NAFTA was implemented, trade between the three nations began to grow by 10 to 15 percent annually. **Do imports or exports comprise the larger portion of Mexico's trade with Canada and the United States?**

ECONOMICS Online

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stores are able to offer a wide variety of industrial and consumer goods from all over the world.

NAFTA

The **North American Free Trade Agreement (NAFTA)** is an agreement to liberalize free trade by reducing tariffs among three major trading partners: Canada, Mexico, and the United States. It was proposed by the Bush administration and concluded by the Clinton administration in 1993.

Before NAFTA, United States goods entering Mexico faced an average tariff of 10 percent. At the same time, approximately half of the goods entering the United States from Mexico were duty-free, while the other half faced an average tax of only 4 percent. Exceptions did exist, however. A 32 percent tariff on brooms imported from Mexico protected approximately 3,000 broom makers in southern Illinois.

Free trade is good in general, but it is not painless. NAFTA was controversial specifically because some workers would be displaced when trade barriers were lowered. Opponents predicted that some high-paid American jobs would be lost to Mexico—including those held by broom makers who will find their protective tariff reduced to zero over a 15-year period. Proponents predicted that trade among all three nations would increase dramatically, stimulating growth and bringing a wider variety of lower-cost goods to everyone, protectionists and free traders alike.

The case for freer trade is a classic case of cost-benefit analysis. Some of the costs and benefits identified during the NAFTA debate actually occurred, but not to the extent originally predicted. Trade among the three countries has grown dramatically since NAFTA was created. In the end, freer trade allowed the NAFTA partners to capitalize on their comparative advantages for everyone's benefit.

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Student Web Activity Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 17—Student Web Activities*** for an activity on the World Trade Organization.

Section 2 Assessment

Checking for Understanding

1. **Main Idea** Explain why protectionists favor tariffs and quotas.
2. **Key Terms** Define tariff, quota, protective tariff, revenue tariff, dumping, protectionists, free traders, infant industries argument, balance of payments, most favored nation clause, World Trade Organization (WTO), North American Free Trade Agreement (NAFTA).
3. **Describe** three barriers to international trade.
4. **List** five arguments that are commonly used to support the protectionist argument.
5. **Identify** two attempts to facilitate the growth of international trade.

Applying Economic Concepts

6. **Quotas** Explain how a quota on a good or service produced in your community can protect the jobs in a particular industry. Then explain how the same quota might be harmful to consumers.

Critical Thinking

7. **Drawing Conclusions** If you were a member of Congress approached by a delegation of autoworkers seeking additional tariff or quota protection, how would you respond? Defend your response.
8. **Analyzing Information** Explain the infant industries argument.

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

BusinessWeek

JULY 27, 1998

Newsclip

The North American Free Trade Agreement (NAFTA), is a free trade pact. The trading area includes Canada, the United States, and Mexico. NAFTA has created one of the world's most productive economic blocs, rivaled only by the European Union and by Japan.

NAFTA and Change in Mexico

For the first time, Mexico this year overtook China as the No. 1 supplier of clothing and textiles to the U.S. . . .

Spurred by the North American Free Trade Agreement (NAFTA), the surge in apparel exports has touched off an investment boom. Not only are manufacturers expanding their low-wage plants, but they are building high-tech operations to spin fibers and weave fabrics. . . .

To encourage the growth of the industry, Mexico is trumpeting both its proximity to the U.S. and the benefits of NAFTA to potential investors. . . . Although Mexican garment workers start at about $6 a day—double their Chinese counterparts—manufacturers save on the three- to four-week shipping time from the Far East. Mexican garments are trucked to the U.S. border in two to three days—a crucial difference in the time-sensitive garment business. And NAFTA has eliminated U.S. import quotas on garments made from fabric produced in North America. . . .

Clothing factory, Aguascalientes, Mexico

Meanwhile, several U.S. producers are building new mills in Mexico rather than expand at home. Guilford Mills, Inc., a Greensboro (N.C.) manufacturer, is spending $100 million on a knitting, dyeing, and finishing plant in the Gulf Coast port of Altamira. . . .

As the foreign-owned companies rev up their export machines in Mexico, savvy local producers are making sure they win, too. Denim producer Compañía Industrial de Parras expects to boost its exports to $146 million this year, up 13 times since the start of NAFTA in 1994. It all signals a new era for the Mexican industry—and shows how NAFTA is reshaping North America's economy.

Examining the Newsclip

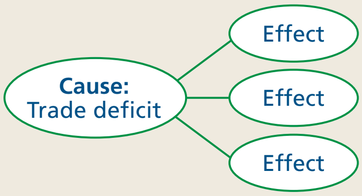
1. **Analyzing Information** What are manufacturers doing as a result of the increase in apparel exports?
2. **Understanding Cause and Effect** How has NAFTA helped the growth of the garment industry in Mexico?

Financing and Trade Deficits

Study Guide

Main Idea
A long-lasting trade deficit affects the value of a nation's currency and the price and volume of its exports and imports.

Reading Strategy
Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by describing the effects of a long-lasting trade deficit.



Key Terms
foreign exchange, foreign exchange rate, fixed exchange rate, flexible exchange rate, trade deficit, trade surplus, trade-weighted value of the dollar

Objectives
After studying this section, you will be able to:
1. **Explain** how foreign currency is used in trade.
2. **Describe** the problem of a trade deficit and the main solution to the problem.

Applying Economic Concepts
Foreign Exchange Do you have any souvenir foreign currency such as pesos, pounds, or yen? Read to find out how this foreign exchange is used to finance international trade.

Cover Story

Quaking Before the Fed


Boeing 747 flies over Kowloon peninsula

No place has more to fear from every twitch of U.S. monetary policy than Hong Kong. Its currency is rigidly pegged to the U.S. dollar, and when U.S. interest rates go up, Hong Kong's must follow. With the economy in its worst recession in half a century, Hong Kong can ill afford higher rates, although the Federal Reserve is now leaning in that direction. . . .

[In Hong Kong, the] grinding process of deflation continues. Property prices are down about 50% from their mid-1997 peak . . . the government expects consumer prices to fall 2.5% for all of 1999 . . . real interest rates [are] more than 8% . . . the benchmark Hang Seng stock index is . . . 26% below its August 1997, peak, and higher interest rates could knock [the current modest] recovery off track.

—*Business Week*, June 21, 1999

Trade between nations is similar to exchange between individuals. The major difference is that each country has its own monetary system, which makes the exchange more complicated. The value of some currencies, like the Hong Kong dollar in the cover story, is tied to the value of the U.S. dollar in the hope of simplifying international trade.

Financing International Trade

Scenarios like the following occur every day across the globe. A clothing firm in the United States wants to import business suits from a company in Great Britain. Because the British firm pays its bills in a currency called "pound sterling," it wants to receive payment in sterling. Therefore, the American firm must exchange its dollars for British pounds.

Foreign Exchange

In the field of international finance, **foreign exchange**—foreign currencies used to facilitate international trade—are bought and sold in the foreign exchange market. This market includes banks that help secure foreign currencies for importers, as well as banks that accept foreign currencies from exporters.

Suppose that one pound sterling, £1, is equal to $1.62. If the business suits are valued at £1,000 in London, the American importer can go to an American bank and buy a £1,000 check for $1,620 plus a small service charge. The American firm then pays the British merchant, and the suits are imported.

ECONOMICS AT A GLANCE

Figure 17.4

Foreign Exchange Rates

Exchange Rates
Thursday, August 10

Country	U.S. $ equiv.	Currency per U.S. $
Argentina (Peso)........	1.0010	0.9990
Australia (Dollar).......	0.6518	1.5342
Britain (Pound).........	1.6145	0.6194
Canada (Dollar).........	0.6680	1.4970
Chile (Peso).............	0.001952	512.25
China (Renminbi)......	0.1208	8.2771
Czech. Rep. (Koruna)		
Commercial rate.......	0.02956	33.825
Finland (Markka)........	0.1801	5.5511
France (Franc)...........	0.1633	6.1241
Germany (Mark).........	0.5476	1.8260
Israel (Shekel)...........	0.2372	4.2166
Japan (Yen).............	0.008705	114.87
Mexico (Peso)		
Floating rate...........	0.1051	9.5190
Russia (Ruble)...........	0.04073	24.550
South Korea (Won).....	0.000834	1199
Taiwan (Dollar)..........	0.03114	32.109

Reading the Financial Page Exchange rates are set according to the demand and supply of different types of money. **About how many Japanese yen equal one U.S. dollar?**

American exporters sometimes accept foreign currency or checks written on foreign banks for their goods. They deposit the payments in their own banks, which helps the American banking system build a supply of foreign currency. This currency then can be sold to American firms that want to import goods from other countries. As a result, both the importer and the exporter end up with the currency they need.

The **foreign exchange rate** is the price of one country's currency in terms of another country's currency. The rate can be quoted in terms of the United States dollar equivalent, as in $1.61 = £1, or in terms of foreign currency per United States dollar, as in £0.6194 = $1. The rate is reported both ways, as shown in the foreign currency listings in **Figure 17.4.**

Fixed Exchange Rates

Today, two major kinds of exchange rates exist—fixed and flexible. For most of the 1900s, the world depended on **fixed exchange rates**—a system under which the price of one currency is fixed in terms of another so that the rate does not change.

Fixed exchange rates were popular when the world was on a gold standard. Gold served as the common denominator that allowed comparisons of currencies, and it also kept exchange rates in line. For example, suppose that a country allowed its money supply to grow too fast and that some of the money was spent on imports. Under a gold standard, the countries receiving the currency had the right to demand that it be converted into gold. Because no country wanted to lose its gold, each country worked to keep its money supply from growing too fast.

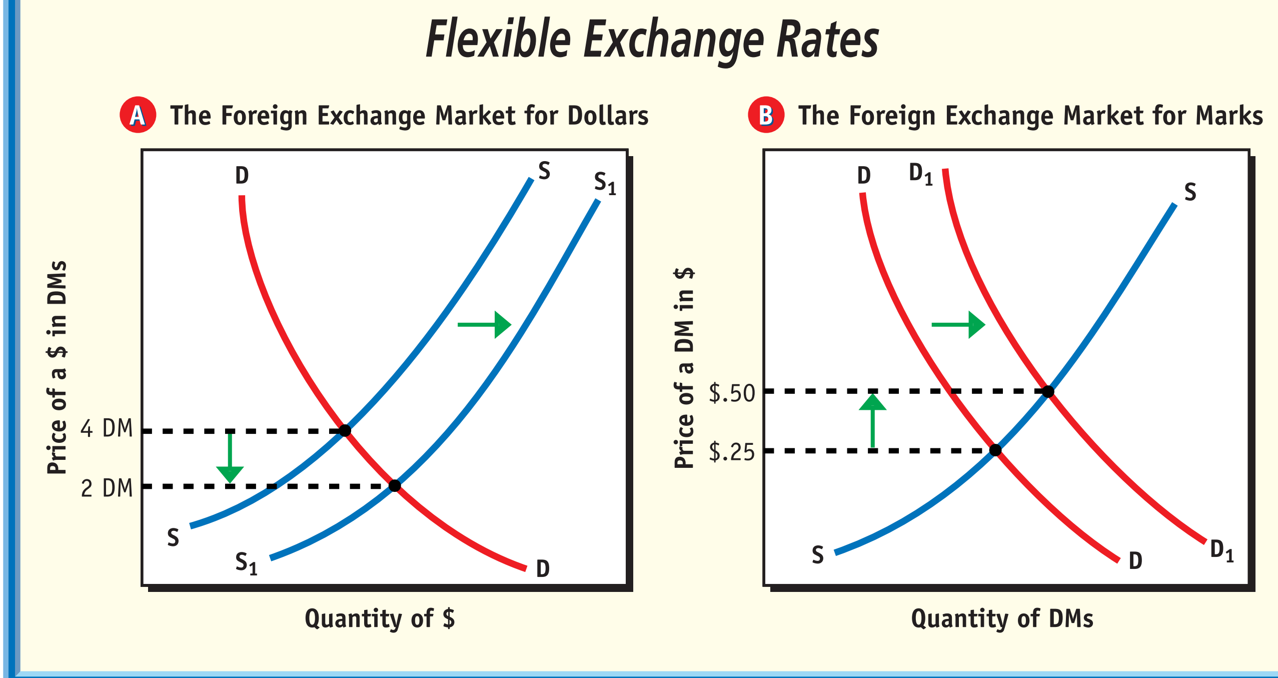
CYBERNOMICS SPOTLIGHT

Economic Espionage

Economic espionage is on the increase as trade grows between countries. Economic espionage is the stealing of technology secrets. In order to be competitive, many countries are tempted to steal the secrets of another to avoid paying the high costs of research and development. Fax machines, cellular phones, and the Internet make it easier than ever to commit economic espionage.

ECONOMICS AT A GLANCE

Figure 17.5



Using Graphs The value of foreign exchange, like the value of most other products, is determined by supply and demand. **When investors sell one currency to buy another, what happens to the value of the currency that is sold?**

This practice worked until the early 1960s when the United States developed a huge appetite for imports. During that time, it bought large quantities of foreign goods with dollars. At first, foreign countries willingly held dollars because they were acceptable as an international currency, so only a portion of these dollars came back when other countries bought American exports.

As dollars began to pile up in the rest of the world, many countries wondered if the United States could honor its promise that the dollar was "as good as gold." Eventually France and several other countries started redeeming their dollars, which drained U.S. gold reserves. As a result, President Richard Nixon announced that the United States would no longer redeem foreign-held dollars for gold in 1971. This action saved the gold stock, but it also angered many foreign governments that were planning to cash their American dollars into gold.

Flexible Exchange Rates

When the United States stopped redeeming foreign-held dollars for gold, the world monetary system went to a floating or flexible rate system. Under flexible exchange rates, also known as floating exchange rates, the forces of supply and demand establish the value of one country's currency in terms of another country's currency.

Figure 17.5 shows how flexible exchange rates work. In 1971, for example, the price of the dollar was four German marks (DM) as shown in **Panel A.** Alternatively, we could say that the price of one DM was $0.25 as shown in **Panel B.**

Suppose now that an American car dealer wanted to purchase Volkswagens that could be bought for 12,000 DMs in Germany. To obtain a single car, the American importer would have to sell $3,000 in the foreign exchange market to obtain the 12,000 DMs needed to buy the

Volkswagen. This would simultaneously increase the supply of dollars shown in **Panel A** and the demand for DM in **Panel B.** Eventually the continuing American demand for foreign products would push the value of the dollar down to 2 DM, and its reciprocal, the price of the DM, up to $0.50.

When the dollar reaches 2 DMs, the price of the Volkswagen is much less competitive. This is because the importer now has to pay $6,000 to obtain the 12,000 DMs needed to purchase the car. Excessive imports thus cause the value of the dollar to decline, making imports cost more.

This may be bad news for U.S. importers, but it is good news for exporters. A German firm that bought American soybeans at $6 a bushel before 1971, for example, would have paid 24 DMs for each bushel. After the value of the dollar fell, it had to pay only 12 DMs for each bushel. As a result, soybeans were cheaper, and more could be sold abroad.

The system of flexible exchange rates has worked relatively well. More importantly, the switch to flexible rates did not interrupt the growth in international trade as many people had feared. More countries trade with one another today than ever before.

Trade Deficits and Surpluses

A country has a **trade deficit** whenever the value of the products it imports exceeds the value of the products it exports. It has a **trade surplus** whenever the value of its exports exceeds the value of its imports. Each is dependent on the international value of its currency.

The International Value of the Dollar

Ever since floating rates became standard in 1971, the Federal Reserve System has kept a statistic that measures the international value of the dollar. Called the **trade-weighted value of the dollar,** it is an index showing the strength of the dollar against a group of foreign currencies. When the index falls, the dollar is weak in relation to other currencies. When the index rises, the dollar is strong.

When the dollar reached strong levels in 1985, foreign goods became less expensive, and American exports became more costly for the rest of the world. As a result, imports rose, exports fell, and the United States suffered record trade deficits in 1986 and 1987. The value of the dollar remained relatively stable throughout the early 1990s, and then rose late in the decade when the rest of the world, especially countries in Asia, experienced an economic downturn. The stronger dollar led to another record trade deficit in late 1999.

The Effect of a Trade Deficit

A persistent trade imbalance tends to reduce the value of a country's currency on foreign exchange markets. The devalued currency then causes a chain reaction that affects income and employment in that country's industries.

To illustrate, the large deficit in the United States balance of payments in the mid-1980s and late 1990s flooded the foreign exchange markets with dollars. An increase in the supply of dollars, as illustrated by the supply and demand curves in **Figure 17.5,** causes the dollar to lose some of its

Careers

Sociologist

Sociologists study the development, interaction, and behavior of organized groups as well as various social, religious, and business organizations.

The Work

Sociologists may work for the government, universities and colleges, and in private business. Duties include gathering firsthand information from people. They prepare reports to be used in comparative studies of similar programs in other communities. Sociologists derive conclusions about the effectiveness of programs that can lead to formulating policy.

Qualifications

Sociologists must be skilled in research and analysis and possess the ability to communicate ideas clearly. A master's degree in sociology is a requirement.

value. The weaker dollar causes unemployment to rise in import industries as imports become more expensive, and it causes unemployment to go down in export industries as their goods become more competitive.

Eventually the dollar will get strong again as foreigners sell their currency in order to buy dollars—thereby reversing the patterns of unemployment. As the dollar gets stronger, export industries will have a more difficult time and import industries will begin to recover. The economy may adjust slowly to changes in the value of the dollar, but the adjustments do take place.

As a result, the shift in employment between import and export industries is one of the biggest problems with a trade deficit. In the automobile industry, for example, Japanese cars once undercut the price of cars being produced in Detroit, causing severe unemployment for both domestic autoworkers and domestic car dealerships. As the Japanese yen rose against the dollar in the early 1990s, however, the price of Japanese cars increased, making domestic automobiles more attractive and restoring some of the employment in that industry.

Under flexible exchange rates, trade deficits tend to automatically correct themselves through the price system. A strong currency generally leads to a deficit in the balance of payments and a subsequent decline in the value of the currency. A weak currency tends to cause trade surpluses, which eventually pull up the value of the currency. As a result, the United States and many other countries no longer design economic policies just to improve their trade position.

The Global Economy

Value of Currency Exchange When the value of the dollar goes up, American exports go down and imports rise. ***What causes the value of the dollar to fluctuate?***

Section 3 Assessment

Checking for Understanding

1. **Main Idea** What is the relationship between the international value of the dollar and foreign trade?
2. **Key Terms** Define foreign exchange, foreign exchange rate, fixed exchange rate, flexible exchange rate, trade deficit, trade surplus, trade-weighted value of the dollar.
3. **Describe** how foreign exchange is used in trade.
4. **Explain** how trade deficits correct themselves under flexible exchange rates.

Applying Economic Concepts

5. **Foreign Exchange** How does a weak American dollar affect you as a consumer? How does a strong dollar affect you?

Critical Thinking

6. **Making Generalizations** How do exchange rates influence international trade?
7. **Making Comparisons** Explain the difference between a fixed exchange rate and a flexible exchange rate.

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

CRITICAL THINKING Skill

Drawing Inferences and Conclusions

To *infer* means to evaluate information and arrive at a conclusion. When you make inferences, you "read between the lines," or draw conclusions that are not stated directly in the text. You must use the available facts *and* your own knowledge and experience to form a judgment or opinion about the material.


International flags, airport display

Learning the Skill

Use the following steps to help draw inferences and make conclusions:

- Read carefully for stated facts and ideas.
- Summarize the information and list the important facts.
- Apply related information that you may already know to make inferences.
- Use your knowledge and insight to develop some conclusions about these facts.

Practicing the Skill

Read the passage below, then answer the questions that follow.

From its beginnings until the mid-1860s, the United States encouraged trade with other nations, protecting only a few industries from foreign competition. We encouraged the world to buy American agricultural products and traded for manufactured goods. Beginning in the 1860s, Northern industrial interests in control of the government passed high protective tariffs to prevent foreign competition from threatening our young industries. With some fluctuations, these tariffs remained high until the 1930s, when President Franklin Roosevelt tried to increase trade by lowering tariffs and encouraging our trading partners to do the same.

When World War II ended, the United States knew it would be necessary to help Europe rebuild its economy. The government did this through the Marshall Plan, which provided the resources needed to reconstruct European economies. Along with other nations, the United States set up a World Bank for Reconstruction and Development from which all nations could borrow. The United States also led the development of the International Monetary Fund, so that nations could borrow foreign currencies in short-term loans in order to trade. Finally, the United States helped organize the General Agreement on Tariffs and Trade (GATT). Under this agreement, nations meet regularly to discuss mutual tariff policies.

1. What events does the writer describe?
2. What facts are presented?
3. What can you infer about the effects of the Marshall Plan on relations between the United States and Europe today?
4. What conclusion can you make about U.S. trade policy?

Application Activity

Study the statistics in Figure 17.1 on page 468. From the data, what can you infer about U.S. trade with Canada? Why does this relationship exist?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

Chapter 17 Summary

Section 1

Absolute and Comparative Advantage (pages 467–470)

- The United States is extensively involved in international trade, with the average American spending more than $4,200 per year for **imports** in the form of goods and services.
- **Absolute advantage** means that a country can produce more of a good than another country can.
- The basis for trade today is **comparative advantage.** If people and countries specialize in the things they produce relatively more efficiently, and if they engage in trade to secure the things they do not produce, then total world output will increase.

Section 2

Barriers to International Trade

(pages 472–479)

- Barriers to trade include **tariffs, quotas,** licensing, health certifications, and voluntary quotas, all of which have been used to restrict the free flow of products.
- **Protectionists** support trade barriers on the grounds of national defense, **infant industries,** protecting domestic jobs, keeping the money at home, and helping the **balance of payments.**
- **Free traders** believe that all of these arguments are flawed, with the possible exception of the infant industries argument.
- High tariffs were one of the causes of the Great Depression, although the world has moved toward freer trade since then.
- The **most favored nation clause** is important to many countries because it gives them the same tariff reductions that the United States negotiates with other trading nations.
- The GATT was established in 1947 and has evolved into the **World Trade Organization (WTO),** which administers GATT agreements, promotes freer trade, and helps settle disputes between governments.

- The **North American Free Trade Agreement (NAFTA)** will eventually remove all trade barriers among Canada, Mexico, and the United States.

Section 3

Financing and Trade Deficits

(pages 481–485)

- **Foreign exchange** is the lifeblood of international trade; its value is determined in foreign exchange markets where currencies are bought and sold.
- Most countries use a system of **floating** or **flexible exchange rates,** meaning that supply and demand determine the currency's value.
- Some smaller countries also use a system of **fixed exchange rates,** which ties the value of their currency to a major currency like the U.S. dollar.
- The large **trade deficits** in the United States in the mid-1980s were partially caused by a strong dollar, resulting in unemployment in the export industries; the country would have had a **trade surplus** if the value of its exports had exceeded the value of its imports.
- Because deficits tend to be self-correcting, most nations no longer design economic policies just to improve the balance of payments.

Chapter 17 Assessment and Activities

ECONOMICS Online

Self-Check Quiz Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 17—Self-Check Quizzes*** to prepare for the chapter test.

CLICK HERE

Identifying Key Terms

For each of the pairs of terms below, write a sentence or short paragraph showing how the two are related.

1. **absolute advantage**
   comparative advantage
2. **balance of payments**
   trade deficit
3. **balance of payments**
   flexible exchange rates
4. **trade deficit**
   trade surplus
5. **foreign exchange**
   flexible exchange rates
6. **protectionist**
   infant industries
7. **protective tariff**
   revenue tariff
8. **tariff**
   quota
9. **trade deficit**
   trade-weighted value of the dollar

Reviewing the Facts

Section 1 (pages 467–470)

1. **Describe** the extent of United States involvement in world trade.
2. **Describe** a case in which the United States might have an absolute advantage over another country in the production of a good.
3. **Explain** how comparative advantage can make trade between countries of different sizes possible.

Section 2 (pages 472–479)

4. **Name** three barriers to international trade.
5. **Describe** five protectionist arguments.
6. **Describe** the role of the WTO in the free trade movement.

Section 3 (pages 481–485)

7. **Differentiate** between fixed and flexible exchange rates.
8. **Explain** how deficits can be self-correcting when currency values are flexible.

Thinking Critically

1. **Drawing Conclusions** Do you favor protection as a national trade policy? Why or why not?
2. **Making Comparisons** What is the difference between a protective tariff and a revenue tariff? Use a graphic organizer similar to the one below to help you organize your answer.

Tariffs	
Protective	Revenue

3. **Analyzing Information** Some people feel the United States should return to a system of fixed exchange rates. Defend or oppose this view. Cite examples to support your position.
4. **Understanding Cause and Effect** Does the protection of inefficient industries hurt an economy? Why or why not?
5. **Making Comparisons** How might the issue of protectionism differ for a worker and a consumer? Use examples to support your argument.

Chapter 17 Assessment and Activities

Applying Economic Concepts

1. **Comparative Advantage** Think of a project you recently completed with a friend. How could you have completed the project more efficiently, applying the principle of comparative advantage? Explain.
2. **Quotas** You have just started a business manufacturing toothbrushes. Would you favor a quota on imported toothbrushes? Why or why not?
3. **Foreign Exchange** Explain how doubling the $400 tax-free limit on goods brought in from abroad by American citizens would affect the balance of payments.
4. **Interdependence** How does the lack of certain raw materials force nations to become interdependent?

Math Practice

Suppose you are planning a trip to Russia and plan to bring $500 in spending money. If the exchange rates in **Figure 17.4** prevail at the time of your departure, how many rubles would you have after you exchanged your dollars for rubles? If you spent 5,000 rubles while you were there, and if you converted the rest of the rubles back to dollars when you came home, how many dollars would you have?

Thinking Like an Economist

Assume that the country is running a large trade deficit. What predictions would you make about future changes in the value of the dollar in the foreign exchange markets. Would these developments be a matter of concern?

Technology Skill

Using E-Mail During the course of one day, make a note of at least 10 manufactured items you handle, such as your clothing and the cafeteria trays used in your school. Find out where each item is produced, and make a log of the items, noting whether each is domestic or foreign made.

Next, write a persuasive argument explaining your opinion on international trade. In writing a persuasive argument, it is important to state the issue clearly and to give your position on it.

Use the evidence you gathered in your log notes to support your position and to refute any opposing position. Use other sources to identify evidence that will help you establish your claim. Conclude your argument by restating your position and summing up the evidence.

Finally, e-mail your argument to the editor of a newspaper or magazine. One day soon, you may see your argument in print!

Building Skills

Drawing Inferences and Conclusions Read the following passage about U.S. trade with other nations. Use the stated facts and your own knowledge to answer the questions that follow.

In the early 1980s, American producers found it increasingly difficult to sell their products to other countries. At least part of this problem was the result of the high value of the dollar. To buy American products, foreign nations must trade their currency for dollars. When the dollar's value is too high, foreign nations receive fewer dollars in exchange for their money. Beginning in the mid-1980s, the value of the dollar declined in relation to foreign currencies. That was like putting American products on sale to foreign buyers. U.S. exports increased sharply.

1. What is the main topic of the passage?
2. What facts are presented?
3. From this passage, what can you infer about fluctuations in U.S. trade?
4. What fact(s) or observations helped you make this inference?

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

CHAPTER 18

Comparative Economic Systems

Economics & You

The freedom to use your own tools and labor in pursuit of profits is one of the primary features of capitalism. In **Chapter 18,** you will learn that capitalism is more than an ideology. It is the way we live and the way the world is headed. To learn more about the different systems of economics, view the Chapter 25 video lesson:

Comparative Economic Systems

ECONOMICS Online

Chapter Overview Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 18—Chapter Overviews*** to preview chapter information.

CLICK HERE

This scene of the city of Jaipur in northwest India shows a blend of traditional and modern life.

SECTION 1

The Spectrum of Economic Systems

Study Guide

Main Idea
Capitalism, socialism, and communism are historically three popular economic systems.

Reading Strategy
Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by listing six advantages of capitalism and providing an example of each.

Capitalism

Advantages	Examples

Key Terms
capitalism, socialism, communism

Objectives
After studying this section, you will be able to:
1. **Explain** the advantages and disadvantages of capitalism.
2. **Describe** the differences among the doctrines of socialism, capitalism, and communism.
3. **Compare** the features of communism to other types of economic systems.

Applying Economic Concepts
Surplus Value Have you ever felt that the value of your work was much more than your wage? If so, you have something in common with Karl Marx, who founded communism and introduced the concept of surplus value that is extracted from labor.

Cover Story

Sweden Pays the Price of High Taxes


Stephan Carlquist

STOCKHOLM—Electrolux AB, the big Swedish appliance maker, scoured the globe for a person to set up a new data-processing division last year before finding Stephan Carlquist, a Swede and senior executive at ABB Asea Brown Boveri in the United States.

Persuading him to jump to Electrolux was no problem, but bringing him to Sweden, home of the industrialized world's highest tax rates, was another matter. Instead, Mr. Carlquist set up shop in London, where taxes are lighter. . . .

Over the next year, he plans to build a multinational team of as many as 50 people—few of them Swedes. . . . "It's very hard to attract skilled, international people to Sweden." Mr. Carlquist said.

—*International Herald Tribune*, March 16, 1999

Throughout most of the 1900s, the world's developed nations fell into three categories of economic systems—communism, socialism, and capitalism. Communist countries were closely associated with command economies, capitalist countries were most similar to market economies, and socialist countries had a combination of both command and market economies. Sweden is an example of a country with a strong socialist tradition, and—as you read in the cover story—the high taxes that go along with it.

The three basic types of economic systems are shown in **Figure 18.1.** At the far left is communism, in which a strong central government influences almost every economic decision. At the far right is capitalism, in which government has a limited role. As one moves from left to right along the spectrum, both the ownership of resources and the degree of government involvement in the operation of the economy change.

No lines separate communism, socialism, and capitalism. They appear on the spectrum as having a greater or lesser degree of government involvement and private ownership of resources.

Capitalism

Under **capitalism,** the means of production are privately owned. Supply and demand determine prices, and businesses are free to direct resources into activities that promise the greatest profits.

Advantages of Capitalism

One of the main advantages is efficiency. If there are many buyers and sellers, if resources are reasonably mobile, and if buyers and sellers are reasonably well informed, then resources will be directed to their most profitable and efficient use.

Another advantage is freedom, which gives consumers the opportunity to purchase the goods and services that best satisfy their preferences. Producers also have the freedom to direct productive resources into activities that consumers demand most. Producers have the incentive to do so because of the profit motive, and because private property rights allow them to keep the fruits of their efforts.

A third advantage is that capitalism is highly decentralized. Consumers and producers jointly answer the WHAT, HOW, and FOR WHOM questions all societies face. This is made possible because of the price system, which sends signals to both producers and consumers. The decentralized nature of decision making leads to the fourth advantage. Specifically, the role of government in the economy is much smaller.

The fifth advantage is the high degree of consumer satisfaction that comes from the variety of products that are produced to satisfy consumer demands. The sixth advantage is the flexibility to accommodate change. When consumer preferences change, or when the price of resources changes, signals are sent through the price system and everyone adjusts accordingly.

The most visible result of these advantages is the enormous amount of wealth that capitalist nations have accumulated. With few exceptions, the countries that have the highest living standards and per-capita incomes today are ones with market-based capitalist economies.

Disadvantages of Capitalism

Capitalism has its disadvantages. Although it is efficient in satisfying the demands of consumers, it does not always satisfy everyone's needs. At a collective level, capitalism ignores the production of many public goods such as roads, public schools, a system of justice, and national defense. Instead, the market produces private goods and services—items that can be withheld if people refuse to pay for them.

At an individual level, capitalism produces only for those who have demand, which means the ability and willingness to pay. A system of pure capitalism would ignore poor people, the unemployed, and less productive members of society like the elderly.

Socialism

Socialism is an economic system in which government owns and runs some of the basic productive resources in order to distribute output in ways deemed to be in the best interest of society. Most socialist societies are democracies in which elected officials direct the allocation of resources in key industries.

Advantages of Socialism

Socialism addresses the FOR WHOM question directly. Those who are not fortunate or productive enough to earn a competitive income still share in the benefits of society. Although the government owns the majority of productive resources in a socialist society, people use their electoral power to influence many of the WHAT, HOW, and FOR WHOM questions.

Disadvantages of Socialism

Socialism is normally less efficient than capitalism. If workers receive government guarantees of jobs, more workers will be hired than are necessary, driving up the cost of production. The

ECONOMICS AT A GLANCE

Figure 18.1

The Spectrum of Economic Systems

COMMUNISM	SOCIALISM	CAPITALISM
Directed by Command		Directed by the Free Market

Ownership of Resources

Communism	Socialism	Capitalism
All productive resources are government owned and operated.	Basic productive resources are government owned and operated; the rest are privately owned and operated.	Productive resources are privately owned and operated.

Allocation of Resources

Communism	Socialism	Capitalism
Centralized planning directs all resources.	Government plans ways to allocate resources in key industries.	Capital for production is obtained through the lure of profits in the market.

Role of Government

Communism	Socialism	Capitalism
Government makes all economic decisions.	Government directs the completion of its economic plans in key industries.	Government may promote competition and provide public goods.

Using Charts **The distinguishing feature of economic systems is the ownership of the factors of production and the role of government in deciding WHAT, HOW, and FOR WHOM to produce. How is capital for production acquired under capitalism?**

government also has an incentive to keep these workers employed—even if they are not all needed—to show that the government is providing jobs for everyone.

Because the government provides a broader range of services such as health care, education, and welfare, taxes are generally higher in socialist countries. This often causes the type of labor mobility problems discussed in the cover story—where workers may be reluctant to work in countries with such high taxes.

Communism

In its purest form, **communism** is a political and an economic framework where all property is collectively owned, labor is organized for the common advantage of the community, and everyone consumes according to their needs.

To date, no modern country has achieved the ideal of pure communism. Countries such as Cuba, North Korea, and the former Soviet Union instead developed rigid command-type economies where the state—usually represented by a single authoritarian party—claims the ideal of pure communism as its eventual goal.

Advantages of Communism

One of the main advantages of communism, from the typical worker's point of view, is that of equality. Because everyone is theoretically equal, the wages of workers from the assembly line in the factory to the surgeon in the hospital are nearly identical.

To make up for the lack of purchasing power, the state provides a broad range of public goods such as health care, transportation, education, and a military defense system. These services are normally supplied at little or no cost.

A third advantage is the lack of uncertainty concerning careers and job security. This is because the state directs workers into their jobs, and workers are not fired or dismissed as they could be in other societies.

A fourth advantage is that the centralized control allows the economy to shift directions in a relatively short period of time. In the case of the former Soviet Union, the entire economy changed from a relatively underdeveloped agrarian nation to an advanced industrial one in the course of a few short decades.

Disadvantages of Communism

One of the first disadvantages of communism is that individual freedom is lost. People have little or no say in their jobs, and economic planners determine even the choice of occupation.

Communism also lacks effective incentives that encourage people to work hard. Most people receive the same pay regardless of how hard they work.

Communism generally fails to meet the needs and wants of consumers, primarily because the WHAT to produce question is determined by central planners. Most communist states place a high priority on military preparedness, resulting in the neglect of consumer goods that are highly prized in other parts of the world.

One of the biggest drawbacks to communism is the inefficiency of centralized planning. The resources needed to execute the planning, and the overwhelming obstacles to effective execution, are serious problems that countries encounter after reaching a certain size. Finally, communist economies, like most command economies, lack the flexibility to deal with day-to-day changes.

Section 1 Assessment

Checking for Understanding

1. **Main Idea** Identify the three broad economic systems of the last century.
2. **Key Terms** Define capitalism, socialism, communism.
3. **List** the advantages and disadvantages of capitalism.
4. **Explain** how capitalism, socialism, and communism are different.
5. **Describe** how communism differs from other types of economic systems.

Applying Economic Concepts

6. **Surplus Value** According to Karl Marx, employers take advantage of their employees by paying them less than they are worth in order to make a larger profit. Do you think Marx's opinion is valid in the United States today? Why or why not?

Critical Thinking

7. **Making Comparisons** How does the role of the individual differ under capitalism, socialism, and communism? Explain your reasoning.
8. **Finding the Main Idea** What people does pure capitalism tend to ignore? Explain why this is the case.

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

TECHNOLOGY Skill

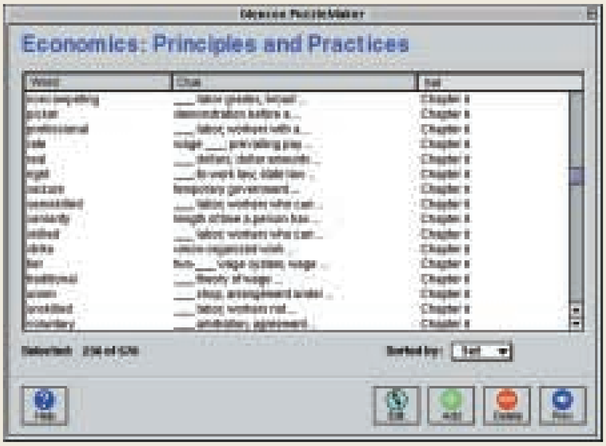
Using a Database

A computerized database program can help you organize and manage a large amount of information. After entering data in a database table, you can quickly locate the information according to key words.

Learning the Skill

An electronic database is a collection of facts that are stored in a file on the computer. The information is organized into categories called *fields*. For example, one field may be the names of your clients. Another field may be the street addresses of your clients. All the related fields make up a record. Together, all the records make up the database.

A database can be organized and reorganized in any way that is useful to you. By using a database management system (DBMS)–or special software developed for record keeping–you can easily add, delete, change, or update information. When you want to retrieve information, the computer searches the files, finds the information, and displays it on the screen.



Using a database can help organize population statistics, clients' names and addresses, and even baseball card collections.

Practicing the Skill

Follow these steps to build a database on economic reform in China.

1. Determine what facts you want to include in your database and research to collect that information.
2. Follow the instructions in the DBMS that you're using to set up fields. Then enter each item of data in its assigned field.
3. Determine how you want to organize the facts in the database–chronologically by the date, alphabetically, or by some other category.
4. Follow the instructions in your computer program to sort the information in order of importance.
5. Verify that all the information in your database is correct. If necessary, add, delete, or change information or fields.

Application Activity

Research and build a database that organizes information about U.S. trade with countries in Asia. Explain why the database is organized the way it is and how it might be used in this class.

SECTION 2

The Rise and Fall of Communism

Study Guide

Main Idea

Communism is an economic system that has both centralized control of the means of production and of the political system.

Reading Strategy

Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by explaining how the economic system in the former Soviet Union answered the basic economic questions.

Key Terms

Five-Year Plan, collectivization, Gosplan, state farm, collective farm, piecework, storming, perestroika

Objectives

After studying this section, you will be able to:

1. **Explain** the rise of the Soviet economy under Lenin and Stalin.
2. **Describe** the complexities of a centrally planned economy.
3. **Understand** the forces that brought about the collapse of communism as an economic system.

Applying Economic Concepts

Perestroika Have you ever thought that some aspects of the economy should be changed from top to bottom? If so, read to find out more about perestroika, which is the Russian term for "restructuring."

Cover Story

Kiev to Pay Russian Debts with Bombers

Blackjack bomber

Russia has agreed to accept bomber aircraft as payment for part of Ukraine's huge debt to Russia for natural gas . . . Ukraine owes Russia $1.8bn according to Russian figures and $1bn according to Ukrainian figures . . . Russia has agreed to take eight Tu-160 Blackjack bombers in payment from Ukraine.

Ukraine typically pays for gas in barter, with nominal prices set at around three times the market price for the goods . . . [but] Ukraine and Russia are constantly at loggerheads over gas debts.

Russia in the past has shut off gas supplies in Ukraine due to non-payment, but Ukraine has then simply stolen Russian gas bound for Europe instead. All of Russia's gas exports to Europe travel through Ukrainian pipelines.

—*The Financial Times*, August 9, 1999

In the absence of pure communism, the former Soviet Union is the most frequently cited example of a communist economic system. The early Soviet economy showed the main advantage of a command system—that it could mobilize resources and change direction in a short period of time. The sudden disintegration of the Soviet economy in the late 1980s, however, demonstrated the essential flaws of communism.

The Economy Under Lenin and Stalin

In 1917 a revolutionary named Vladimir Ilyich Ulyanov, or Lenin, overthrew the government of Russia. In its place, he set up a communist government. Lenin was a strong believer in theoretical communism, and he quickly took steps to develop a communist society. Large estates were taken from the rich, and the land was divided up and given to the peasants. Lenin also outlawed private property and turned the country's few factories over to the workers.

The workers, however, did not have the skills to manage the factories. Before long, production fell and the economy began to disintegrate. People lost faith in the money supply, and a system of barter emerged. The government sent armed forces to the farms to confiscate surplus food for the hungry city dwellers and industrial workers. The angry farmers retaliated by reducing their production so there would be no surplus crops.

By 1927, many changes had taken place. Russia had become the Soviet Union, and the country was under Communist Party control. Lenin had died, and Joseph Stalin was the new leader. Stalin wanted to transform the Soviet economy from agriculture to industry.

To accomplish this goal, he introduced the government's first **Five-Year Plan**—a comprehensive, centralized economic plan designed to achieve rapid industrialization.

Under Stalin's leadership, the process of **collectivization**—the forced common ownership of all agricultural, industrial, and trading enterprises—began. Not surprisingly, many people opposed the reforms. Peasants even destroyed their livestock and sabotaged their equipment rather than turn their property over to the collective farms.

Stalin's retaliation was brutal. Millions of people were killed or imprisoned. Ukrainian grain stores were seized in the winter of 1932, causing the starvation of more than five million peasants. The suffering in the cities was nearly as harsh. Workers were forced to work in heavy industry, and the standard of living deteriorated drastically.

Although the first Five-Year Plan did not achieve all of its goals, the government continued with more planning. The plans that followed concentrated heavily on defense industries, heavy manufacturing, and some consumer goods.

The Soviet Economy After Stalin

Stalin's brutal regime ended in 1953. By then the Soviet economy had successfully completed its transition from a backward agrarian economy to a major industrial power. The Soviet government and its comprehensive system of planning dominated the Soviet economy, but the real force was the ruling Communist Party.

Complexities of Central Planning

In the Soviet economy, the **Gosplan** was the central planning authority that devised the Five-Year Plans. As the Soviet economy grew, however, this process became increasingly complex.

Consider the difficulties in a single industry such as shoes. First, the planners have to decide how many shoes should be produced in any given year. This amount would depend on the population and the number of pairs that each person, on average, would need. The planners would then have to decide how many pairs to make of each style, including colors, sizes, and widths.

Next, the various sizes, grades, and amounts of leather, dye, metal eyelets, thread, glue, and other materials needed to produce the shoes had to be estimated. After the central planners developed this data, individual factories were given monthly and annual quotas. Even a factory that produced thread would be told how much thread of every diameter and color to produce for use in shoes.

Similar decisions had to be made for all industries, including clothing, farm implements, stationery, and military goods. The planners detailed everything that would be needed in the economy right down to nails and paper clips. Even these minor items required the planners to make estimates of iron ore, coal, coke, blast furnaces, mining equipment, trains, and ore cars.

To ensure the growth of the economy from one year to the next, all the planners had to do—or so they thought—was to increase the quotas given to the factories. In short, the central planners determined almost everything beforehand.

Difficulties With Agriculture

The situation was similar in agriculture, where food was raised on state, collective, and peasant farms. The **state farms** were large farms entirely owned and operated by the state. Workers on the state farms were paid for the number of items they produced. All output was turned over to the government at prices fixed by the government.

Peasant families worked **collective farms,** small private farms collected into large units for joint operation. The land, buildings, tools, livestock, and machines belonged to the government, which bought a certain amount of produce per acre. Peasant families were allowed to keep their homes and household goods, and a small plot of land.

Despite its efforts, the government was not able to make agriculture as efficient as that of many capitalist countries. In the mid-1980s, before the collapse of the Soviet Union, nearly 25 percent of the workforce was in agriculture. In the United States at the time, only 3 percent of the workforce was in agriculture.

The Soviet Economy Collapses

The Soviet Union made considerable progress with industrialization, but it never caught up to the United States. Despite its larger population and land area, the Soviet Union's GNP never exceeded two-thirds of that of the United States.

Careers

Customs Inspector

Do you like detailed work? Are you able to accept responsibility and deal with people in a firm but friendly manner?

The Work

Customs inspectors are part of the Treasury Department. Duties include examining baggage at airports or seaports to ensure that all merchandise is declared and that duties are paid. Commercial and noncommercial cargoes are inspected to determine admissibility and the amount of tax due.

Qualifications

Customs inspectors need training in laws governing imports and exports and in inspection procedures. A college degree is preferred. Passage of a civil service exam is required.

To offset low morale in the factories, a number of incentive programs were attempted. One involved the use of **piecework,** meaning that workers are paid for each piece of output they produce rather than for the number of hours they work.

Although this system may seem like a good idea, piecework quotas often were set at unrealistically high levels. This led to **storming,** the practice of rushing production at the end of the month to make up for the slower pace at the beginning of the month. The rush at the end often affected the quality of the products. Because of storming, knowledgeable Soviet shoppers often avoided buying goods made at the end of the month.

Other incentives included patriotic and emotional appeals. Workers who had outstanding records or did something special were awarded hero medals, such as the Order of Lenin and the Hero of Social Labor. Some of these medals brought rewards such as free public housing or vacations.

Production Quotas

As with incentives, quotas also failed at the factory level. During the 1950s, the Soviet economy had a reputation for producing some of the world's poorest consumer and industrial goods. Shoe factories, for example, were given quotas in terms of millions of pairs of shoes. Because small shoes could be made fastest, more were made than were needed. When the quotas were changed to measure production in the amount of shoe leather consumed, the result was shoes with some of the thickest soles in the world.

Production of Consumer Goods

Another major problem was the inadequate supply of consumer goods. After World War II, the Soviet people were asked to make sacrifices so their children might have a better life. Many willingly did so. In the 1970s and 1980s, those children were adults. When they were asked to make sacrifices so their children could have a better life, they were not as willing as their parents had been. The new generation had not suffered from the ravages of war and they were aware of the standards of living in other parts of the world. As a result, they were impatient for more consumer goods.

CONTENTS

Perestroika

When Mikhail Gorbachev assumed power in 1985, the Soviet economy was weaker than anyone imagined. The main cause was the burden imposed by centralized planning. The economy had become too complex and too large to be managed in the traditional manner.

Plant managers were under increasing pressure to meet or exceed quotas. Glitches in planning, however, were creating shortages and other problems. To facilitate the process, "fixers" called *tolkachi* were employed to resolve shortages or dispose of excess inventories. The *tolkachi* soon became indispensable to producers who wanted to fulfill their quotas. At the same time, they also caused problems for other plants whenever they rerouted a shipment or otherwise interrupted the master plan of the central planners.

To solve these problems, Gorbachev introduced a policy of **perestroika,** the fundamental restructuring of the economy and government. Under the restructuring, Five-Year Plans were retained, but the various ministries of production were to be converted to efficient, state-owned enterprises that would compete in a market economy. Plant managers were given more freedom to buy and sell in pursuit of profits, and small business was encouraged.

Perestroika represented a halfway point between a market economy and centralized planning. Gorbachev, however, did not remain in power long enough to see his plans realized. Those in industry who opposed Gorbachev's reforms allowed shortages and other problems to persist, and then used these problems as proof that the reforms were failing. Gorbachev's successor, Boris Yeltsin, faced similar opposition. Ultimately, the collapse of the economy, the collapse of the political leadership, and the stresses of ethnic diversity and unrest combined to cause the downfall and breakup of the Soviet Union.

Did you know?

Frozen Treasures Siberia covers 75 percent of Russia. It has the largest supply of mineral resources in the country, including gold, diamonds, and coal. Siberia remains mostly undeveloped because of its harsh climate and few transportation routes.

Section 2 Assessment

Checking for Understanding

1. **Main Idea** Using your notes from the graphic organizer activity on page 496, describe how the former Soviet Union's economic system functioned.
2. **Key Terms** Define Five-Year Plan, collectivization, Gosplan, state farm, collective farm, piecework, storming, perestroika.
3. **Explain** how the Soviet economy developed under Lenin and Stalin.
4. **Identify** several complexities of central planning.
5. **Describe** how central planning contributed to the breakdown of the economy of the Soviet Union.

Applying Economic Concepts

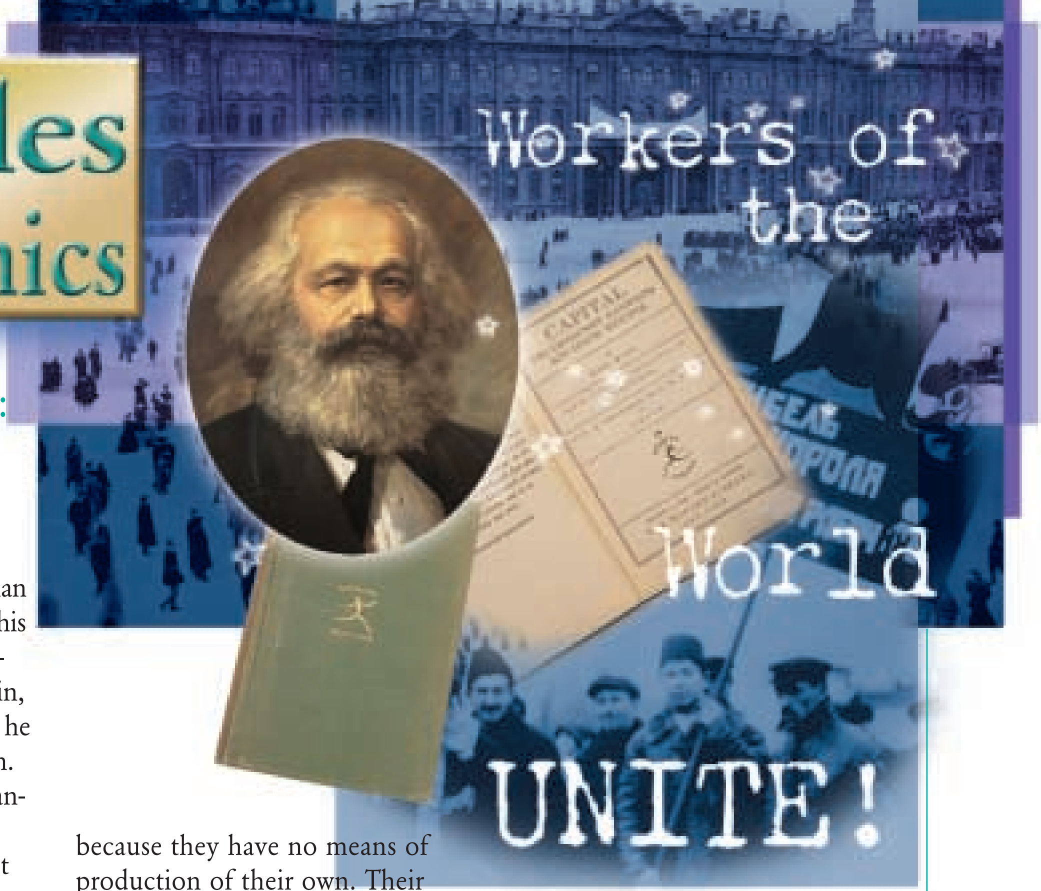
6. **Perestroika** Since the mid-1980s, the former Soviet Union has undergone tremendous changes, some of which led to hyperinflation. Why would this hyperinflation hinder the movement toward capitalism?

Critical Thinking

7. **Making Predictions** Based upon recent changes, is the former Soviet Union moving toward capitalism or away from capitalism? Give evidence to support your conclusions.
8. **Summarizing Information** What did Soviet planners think they had to do to ensure economic growth?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

Profiles in Economics



Reshaping the World: Karl Marx

(1818–1883)

Marx was an economic historian and a social scientist. He earned his doctorate in philosophy and history from the University of Berlin, but because of his radical views, he could not get a teaching position.

Throughout the 1840s, he wandered from Cologne to Paris to Brussels. He joined with socialist and radical groups. Persecuted by Prussian and Parisian authorities, Marx fled to London in 1849 where he began a life of exile and, eventually, died in poverty.

MARX'S WORKS

Marx is best known for *The Communist Manifesto*, published in 1848, and *Das Kapital*, the first volume of which was published in 1867. In these works, Marx argues that "the history of all hitherto existing society is the history of class struggles." In each era, one class was pitted against another: master against slave, lord against serf, capitalist against worker—the "oppressor and oppressed."

HIS IDEAS

Marx argued that the oppressed of his day was the proletariat—people who must work for others because they have no means of production of their own. Their oppressors? The capitalists or bourgeoisie—people who own the means of production.

Marx argued that labor was exploited in a capitalist society. He gave the name "surplus value" to the difference between the wage paid to the worker and the market value of the worker's output. He believed this value was unfairly kept by capitalists as profits.

Marx argued that each cycle of prosperity would add to the suffering of the proletariat and the wealth and power of the capitalists. Eventually, he said, oppressed workers would rise up in a violent revolution. "Let the ruling classes tremble at a communist revolution," he wrote. "The proletarians have nothing to lose but their chains. They have a world to win. Working men of all countries, unite!" During the transition, the proletariat would, Marx argued, have to depend on a strong government: a "Dictatorship of the Proletariat." Thus, authoritarian Communism as practiced in the Soviet Union and other countries was born.

Marx believed that eventually the dictatorship would be replaced by a "classless society," without government, in which people would produce to the best of their abilities and consume to the extent of their needs.

Examining the Profile

1. **Analyzing Information** According to Marx, through what stages must society go before it can reach the ideal state of communism?
2. **For Further Research** Annotate a world map to show the extent of Marxist economies in the world today.

The Transition to Capitalism

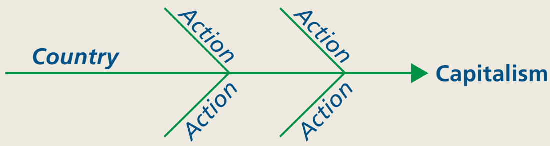
Study Guide

Main Idea

Reforms in the former Soviet Union, China, and many Latin American and eastern European nations have moved these economies toward more capitalistic, market-oriented systems.

Reading Strategy

Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by selecting a country and describing how it is making the transition to capitalism.



Key Terms

privatization, Solidarity, black market, Great Leap Forward

Objectives

After studying this section, you will be able to:

1. **List** four problems encountered when an economy makes the transition to capitalism.
2. **Recognize** the major countries and regions that are making the transition to capitalism.

Applying Economic Concepts

Privatization Do you value and take care of the things you own? Read to see why private ownership is essential if countries are to make the transition to capitalism.

Cover Story

Rubles From the Ruins: A Russian Success

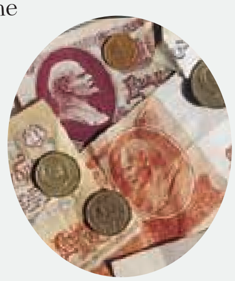
NIZHNY NOVGOROD, Russia—In general, the Russian economy is a mess: Industrial production is half what it was in 1991, the transition to a market economy has gone badly, the ruble has collapsed, and many giant enterprises are in desperate straits, unemployment and poverty are ubiquitous.

And yet, some Russian businesses are actually making money, some are thriving. . . .

Although criminals and corrupt government officials frustrate entrepreneurs all over the country, some manage to evade or ignore them. The experiences of the few who are succeeding provide some powerful lessons in why that hope remains so remote.

Consider the adventures of Andrei Mladentsev. . . .

—*International Herald Tribune*, July 20, 1999



Russian currency

Andrei Mladentsev, the Russian entrepreneur featured in the cover story, now runs one of the largest and most modern pharmaceutical companies in Russia. At age 26 he used the funds he accumulated trading stocks to engineer a takeover of the 75-year-old pharmaceutical factory in Nizhny Novgorod. He is, however, the exception rather than the norm—as the problems of transition are truly daunting.

Problems of Transition

Historically, communism and capitalism have been viewed as two opposing political and economic structures. The collapse of communism, however, does not mean that the transition to capitalism will be smooth, or that it will be made at all. An examination of the problems of transition will show why.

Privatization

A key feature of capitalism is private property—especially capital, which is sometimes referred to as the means of production. Because communist governments owned the means of production, **privatization,** or the conversion of state-owned factories and property to private ownership, has to be accomplished. Privatization is important because people tend to take better care of the property they actually own. Private property is also important for entrepreneurial activity, especially if the entrepreneurs are allowed to keep the fruits of their labor.

In Poland, Hungary, and the Czech Republic, this transition was accomplished using vouchers. Vouchers were certificates either given to people or sold at very low prices, depending on the country. As the vouchers were distributed, the government drew up a list of companies to be privatized and then organized the companies as corporations. The corporate shares were auctioned, and people would bid for the shares using their vouchers for payment. As people exchanged their vouchers for shares, ownership of the previously state-owned enterprises transferred to private hands.

In other cases, the transition governments simply sold state-owned companies to foreign corporations. The government then used the funds to pay other bills or make other purchases. These transactions bypassed the citizens and transferred ownership to foreign investors.

Loss of Political Power

Under communism, the Communist party was the ruling class. The transition to capitalism stripped the Communist party of its political power and transferred it to the new class of entrepreneurs and capitalists.

In countries where the Communists were literally thrown out—as in Poland, Czechoslovakia, and Hungary—the Communist leaders lost their power before industry was privatized. In these countries, the voucher system worked reasonably well.

In other countries, former Communist leaders grabbed a large share of vouchers, and thus a large portion of ownership in many privatized companies. In the most blatant cases, some of which occurred in Russia following the collapse of the Soviet Union, the ownership of companies was simply transferred to politicians who were influential during the transition period. Former political

THE GLOBAL ECONOMY

The World's Largest Cities by 2015

Most of the world's population lives in urban areas. Projections show that this trend will continue. Today's five largest cities are more populous than most countries. Cities are rapidly becoming the key economic units of global market analysis.

Rank	City, Country	Projected Population (in millions)
1	Tokyo, Japan	28.88
2	Bombay (Mumbai), India	26.22
3	Lagos, Nigeria	24.64
4	São Paulo, Brazil	20.32
5	Mexico City, Mexico	19.18
6	Shanghai, China	17.97
7	New York, New York USA	17.60
8	Calcutta, India	17.31
9	Delhi, India	16.86
10	Beijing, China	15.57

Source: *The Shape of Things to Come*, by Richard W. Oliver, McGraw-Hill, 1999

Critical Thinking

1. **Categorizing Information** How many cities are projected to surpass 20 million in population by the year 2015?
2. **Understanding Cause and Effect** What do you think are the economic reasons that the largest cities continue to grow?

leaders traded their political power for economic power in the form of resource ownership—so that the old ruling group simply became the new ruling group.

The Discipline of Capitalism

Many countries that desire a capitalist structure have focused on the benefits to be obtained, not the costs. However, the costs can hinder or even discourage a country from making the transition.

The disadvantages of capitalism made apparent during the Great Depression included instability, unemployment, and social unrest. At that time, the United States did not have the fiscal policies, the automatic stabilizers, and the social welfare nets needed to lessen the devastation of the Depression. Now that such assistance exists, most economists agree that another Great Depression will not occur in the United States.

The same cannot be said for the nations in transition. They have not yet developed the automatic stabilizers and the social welfare nets that cushion the instabilities of capitalism. During the transition phase, nations will most likely experience the instabilities of early capitalism—the unemployment, the inflation, and the lost production—long before they experience the benefits.

Responding to New Incentives

Finally, countries that make the transition to capitalism have to learn to live with a whole new set of incentives. For generations, the government in the former Soviet Union told its people what to do. Under capitalism, people must learn how to make decisions on their own. They must learn how to take the initiative, how to interpret prices, and how to fend for themselves because the government no longer guarantees their jobs, nor does it keep prices artificially low.

These adjustments will be enormous, perhaps even prohibitive, for some people. Many will even long for the past when life was simpler. These people may not want to go through the adjustments and submit to the discipline of capitalism. Impatience for the end result may be a major obstacle to the transition.

ECONOMICS AT A GLANCE — **Figure 18.2**

New and Emerging Stock Markets

Country	NUMBER OF LISTED COMPANIES	Country	NUMBER OF LISTED COMPANIES
Argentina	138	Morocco	48
Brazil	543	Nigeria	180
Chile	296	Pakistan	778
China	763	Peru	247
Colombia	163	Philippines	222
Egypt	668	Poland	159
Greece	231	Portugal	143
Honduras	111	Russia	222
Hungary	50	South Korea	776
India	5,853	Sri Lanka	240
Indonesia	287	Taiwan	408
Israel	648	Thailand	431
Jamaica	46	Turkey	262
Malaysia	722	Venezuela	91
Mexico	198	Zimbabwe	64

Source: *Emerging Stock Markets Factbook,* 1998

Using Charts New and emerging stock markets are now found all over the world, and more are still to come. **Why is the corporate form of organization a necessary component of capitalism?**

ECONOMICS Online

Visit epp.glencoe.com and click on ***Textbook Updates—Chapter 18*** for an update of the data.

CLICK HERE

Countries and Regions in Transition

Despite the transitional problems, the rise of capitalism is one of the most remarkable phenomena of the late twentieth century. Today, nations and regions all over the globe are making the transition.

Russia

Privatization in Russia is well underway, despite the continued resistance of hard-liners. Some privatization took place under Gorbachev, and President Boris Yeltsin accelerated the process when he signed a 1992 decree requiring that state-owned enterprises be converted to privately owned ones.

Many conversions took place when the government printed and distributed vouchers to its people. The people then used the vouchers to purchase shares of stock in the newly converted companies.

Smaller businesses were also being privatized at a rapid rate. Soon more than half of the restaurants and shops in the major cities were in private hands. Eventually Russia opened a stock market so that individuals could buy and sell shares. The widespread ownership of the means of production by individuals is now a reality in a country that once preached the evils of private ownership.

Eastern Europe

The nations of eastern Europe, especially those that were unwilling members of the Soviet bloc, are the newest nations to embrace capitalism. The struggle for freedom began in Poland with **Solidarity,** the independent and sometimes illegal union that Lech Walesa established in 1980. Solidarity was influential in securing a number of political freedoms in Poland. Eventually, the Communist party lost power, and interest in capitalism grew. Political reform slowed privatization plans at first, but capitalism finally appeared to be under way again in the face of progress by Poland's neighbors.

Hungary is another country well on the way to capitalism. Hungary was often regarded as the most

CYBERNOMICS SPOTLIGHT

An Emerging Latin American Market

Historically, the economies of most Latin American countries depended on agriculture. Beginning in the mid-nineteenth century, these Latin American economies began to change. Countries exported raw materials, such as oil, so that they could import machinery to build factories for manufacturing goods. As a result of the growth of the manufacturing sector, service industries such as banking and insurance took on new importance. An educated middle class emerged, consisting of lawyers, doctors, entrepreneurs, government employees, and skilled office and factory workers.

As Latin America moves into the twenty-first century, economies in the region are changing once again. Technology is affecting how business is done. Many groups in Latin America see e-commerce as a means to becoming more economically efficient and competitive.

Changes in Latin America's business

Internet Users in Latin America Consumers, businesses, and governments are beginning to see the value of Internet commerce. Online supermarkets and retail shopping are becoming more popular with consumers. Technology is being developed in Brazil to develop an online-only grocery store, where consumers will be able to purchase products such as soap and oatmeal using a catalog and a bar-code scanner. Businesses use the Internet to link their factories with suppliers to cut costs. They can track product shipments and check on the status of an invoice. The government is also beginning to post government contracts online so that public and private companies can bid on them. Companies can get information about competing bids and contest decisions using the Internet.

"western" of the Eastern bloc countries. It also had a flourishing **black market**—a market in which entrepreneurs and merchants sold goods illegally. Hungary's experience with these markets helped ease the transition to capitalism.

The Czech Republic is another country in transition. By early 1998, more than 60 percent of the economy was in private hands. Progress accelerated after the separation of the Czech and Slovak Republics, a separation based in part on the Slovakian concern about adopting the capitalist ways of the West. The Czechs, who were strongly influenced by the economic success of the former West Germany, are now more able to pursue reforms.

The Baltic states of Estonia, Latvia, and Lithuania are also making great strides toward capitalism. Latvia and Lithuania have their own stock markets to help facilitate the transition. Estonia has made so much progress that it—along with the Czech Republic, Hungary, and Poland—will be considered for membership in the European Union between 2002 and 2006.

Latin America

In the past, many Latin American countries followed a path of economic development that combined socialism and isolationism based on the infant industries argument. Mexico accelerated the move to capitalism and open markets in 1989 as it made plans to restructure its economy for the North American Free Trade Agreement (NAFTA). Under President Salinas de Gortari, the government sold thousands of state-owned companies and cut back on the government bureaucracy.

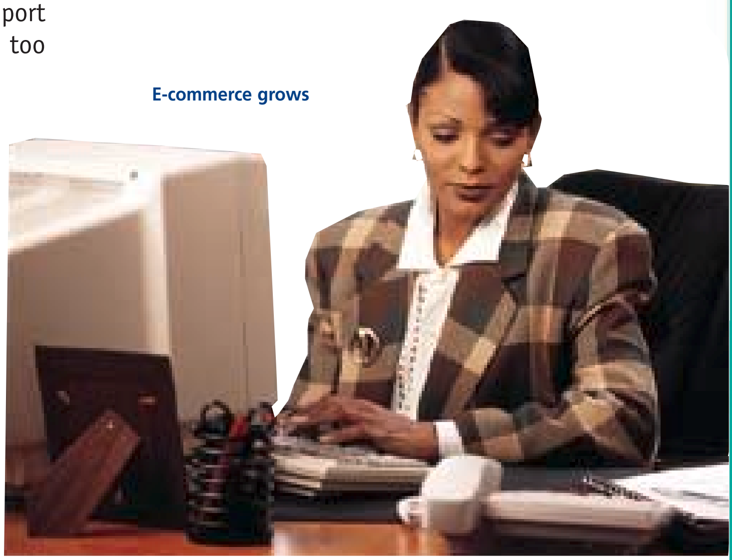
Did You Know?

On The Net Even though fewer people in Latin America have access to the Internet than in the United States, those who use it spend more time online. Latin American Internet users spend about 8.2 hours online a week, compared with 7.1 hours in the United States.

Getting Online Several problems are hindering the growth of e-commerce in Latin America. Only one in ten people have a phone line. Because the average gross domestic product per capita is less than $4,000, the ability to buy a personal computer and get online is out of reach for many people. Few people in Latin America use credit cards; many are reluctant to give out credit card numbers online. Custom regulations and import duties can delay the arrival of goods or make them too expensive to buy.

Industry experts agree that these problems will be less troublesome in the future. It is expected that within a period of five to seven years the number of phone lines will double, to two per 10 people. Personal computer prices are expected to fall as the number of sales increases. Smart cards are becoming more popular, giving consumers a better sense of security for buying online. Internet companies are beginning to inform shoppers at the time of purchase how much they will owe for duties and other taxes, and it is expected that tariffs will be removed as more countries form regional trading blocs.

E-commerce grows



Economic Change

Retreat From Socialism Once state-owned, many companies in Mexico are now under private ownership. ***How is Argentina reducing the role of government in the economy?***

Chile has also taken major steps to foster the growth of capitalism. It has privatized airlines, telephone services, and utilities. Chile even used the billions deposited in its pension funds to supply capital to new entrepreneurs. As a result, the country exports copper, lumber, fruit, and even software to the rest of the world. Chile's markets include the United States, which imports millions of popsicle sticks, and Japan, which imports chopsticks.

Argentina has similarly embarked on a crash program to remove government from the everyday business of running the economy. The country has sold oil fields, petrochemical plants, and a number of other formerly state-owned businesses.

China

The People's Republic of China became a communist economy in 1949. That year, the Chinese Communists, under the leadership of Mao Zedong, gained control of the country. Over the years, China modeled itself after the Soviet Union, adopting a series of Five-Year Plans to manage its growth.

In 1958 the **Great Leap Forward** was instituted. This was the second Five-Year Plan that tried to institute a system of pure communism along with an industrial and agricultural revolution almost overnight. Industrialization was pushed and, at the same time, collectivization of agriculture was intensified. Farmers were forced off their land and made to live and work on large, state-owned farms.

The Great Leap Forward was a disaster. The agricultural experiment failed, and the economy never came close to achieving the planned degree of industrialization. Even the gains made during the first Five-Year Plan were lost.

Other plans followed but, by the late 1970s, the government decided that the country no longer could follow the models of either the Soviet Union or other command-type economies. China and its population were too big for large-scale centralized planning. Industrializing the cities enough to provide jobs for nearly one-fourth of the world's population would be nearly impossible.

By the early 1980s, the influence of other successful market economies in Asia—Taiwan, South Korea, Hong Kong, and Singapore—was too much for China to ignore. One of China's provinces,

Privatization

Changes in Chile Chile has privatized telephone services and airlines. ***What is Chile hoping to accomplish through privatization?***

the Guangdong Province just north of Hong Kong, copied many of the free market practices of the region and was even allowed to officially experiment with capitalism. At one time Guangdong was an embarrassment to the official communist dogma, but it was later touted as an economic role model for the rest of the nation.

China was also influenced by the eventual reunification with Hong Kong, which took place in 1997. The city of Shanghai, in particular, embarked on a program of reforms and expansion in an attempt to become China's "first city" after the reunification.

Today China is no longer experimenting with capitalism. It is instead privatizing industries, introducing market reforms, and otherwise acting in a decidedly capitalistic manner. China still has a long way to go, and the government still directs most major economic activity. Its economy has evolved, however, into what former President Jiang Zemin once called "socialism with Chinese characteristics"—loosely translated as free market capitalism.

Reform and Expansion

Shanghai Reform has resulted in strong economic growth for China. ***Why did China stray from centralized planning?***

Section 3 Assessment

Checking for Understanding

1. **Main Idea** What is privatization? Describe two ways in which transition economies handled privatization.
2. **Key Terms** Define privatization, Solidarity, black market, Great Leap Forward.
3. **List** the problems a country is likely to encounter when converting to capitalism.
4. **Identify** two major countries that are making the transition to capitalism.
5. **Trace** the economic policy changes in China.

Applying Economic Concepts

6. **Privatization** Explain why capital stock and other property is expected to last longer when it is privatized rather than collectively owned.

Critical Thinking

7. **Finding the Main Idea** Suppose you are visiting one nation in eastern Europe adopting a market economy. What questions would you ask local officials to determine whether they are successfully moving toward capitalism?

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

BusinessWeek

AUGUST 2, 1999

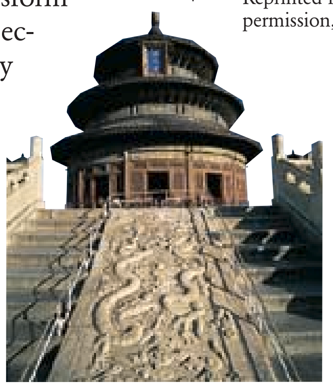
Newsclip

In 1949, communist forces won the civil war in China. The communists then established absolute control over the government and the economy. Today, however, technology is reshaping the communist state.

China's Web Masters

Anyone who assumes the Internet is still a novelty in China has been asleep at the mouse. The communist giant's state-owned factories and political system may seem frozen in another era. But when it comes to cyberindustry, China is moving at net speed. Driven by soaring computer sales, rapid expansion of China's telecom networks, and the encouragement of reformist leaders, Internet use is growing explosively. . . .

The impact will be revolutionary, both on China's economy and society. A new class of entrepreneur is emerging because the government is allowing the private sector wide latitude to develop Web business—remarkable for an industry Beijing regards as strategic. The rapid spread of e-commerce could transform China's stodgy retail and banking sectors. It may also boost efficiency of Chinese industry by allowing old-line factories to streamline supply chains. . . .



To encourage development of Chinese content, Beijing makes it surprisingly easy for foreign companies. While they cannot own equity in mainland telecom operators, they can own majority control of Net companies. And although Beijing guards its monopoly on traditional media, it lets entrepreneurs publish on the Web. . . .

. . . The government limits what Chinese Net users can see by telling them to block portals run by dissident and human-rights groups. Determined surfers can go through offshore services. But because Beijing prohibits imported encryption technology, state snoops can easily eavesdrop on traffic. . . .

The Net's success could breed its own problems. As it grows more lucrative, bureaucrats may not be able to keep their hands off. Beijing is usually happy to accept foreigners' investment dollars at first. Then it often changes the rules to the advantage of state-run rivals once a sector gets hot. The same could happen with the Internet.

Examining the Newsclip

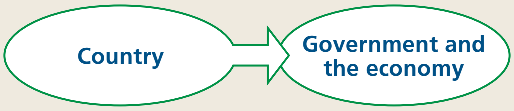
1. **Analyzing Information** How is technology changing China's economy and society?
2. **Making Predictions** What problems could arise as Internet use increases?

The Various Faces of Capitalism

Study Guide

Main Idea
Many countries have moved toward capitalism, although its exact form varies from country to country.

Reading Strategy
Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by selecting one of the nations discussed in the section and describing what role the government plays in its economy.



Key Terms
capital-intensive, keiretsu, infrastructure, collateral, transparency

Objectives
After studying this section, you will be able to:
1. **Explain** the factors that encouraged economic growth in Japan.
2. **Rank** the "Asian Tigers" according to per capita GNP.
3. **Describe** Sweden's retreat from socialism.

Applying Economic Concepts
Economic Growth Have you ever looked at the labels inside your clothes? If so, you may have noticed that many of them were made in Korea, Hong Kong, or Taiwan. Read to find out how different economies experienced economic growth.

Cover Story

Pressing Need for a Second 'Restoration'

In the center of Tokyo stands an elegant, wooded shrine to the Emperor Meiji who ruled Japan in the 19th century. It is a monument that now poses a critical challenge to his modern-day political successors.

Slightly over a century ago, Emperor Meiji gave his name to one of the most dramatic reformations that Japan has seen: in a few decades he transformed the country from a closed, feudal, and rigid society into a dynamic, entrepreneurial industrial power. The question now is whether Japan can surprise its critics by performing the same "modernizing" trick again—and implement a second major "restoration" to revive the country's flagging fortunes.


Meiji shrine in Tokyo

—*The Financial Times*, July 13, 1999

Capitalism is a force sweeping the world. It is also a force that has many different faces. The common element of capitalism is that the factors of production are privately owned and controlled; there are, however, many variations on this theme.

The sharp financial crisis that swept Asia in the fall of 1997 also demonstrates another feature of capitalism—that the welfare of most capitalist economies is increasingly entwined. The interdependence we often see at the local and national level is beginning to become a feature of the global economy. These are some of the forces that are causing capitalism in Japan, as you read in the cover story, to continue to evolve.

Japan

Japan, like the United States, has a capitalist economy based on markets, prices, and the private ownership of capital. Unlike the United States, however, Japan's government is very involved in the day-to-day activities of the private sector.

At the end of World War II, Japan was a devastated country. Today, it is the second largest industrial nation in the world, with a GNP about 79 percent of that of the United States. In the 1970s and 1980s, the Japanese economy was one of the fastest growing in the world. However, it stalled in the 1990s. Slower growth, a currency crisis in 1995, and a recession in 1998–99 added to the economy's woes—factors that convinced the Japanese that further restructuring was necessary.

Reasons for Success

One of the reasons for Japan's early success was the workers' intense loyalty to their employers. Many workers joined large companies for life. In return, the company supplied benefits such as wedding halls, private schools, and even vacation resorts.

Japanese workers traditionally take great pride in the quality of their work. It is not unusual for a company's entire workforce to arrive early to take part in group calisthenics and meditation exercises.

Japan's recent economic crisis has severely tested the historically close employee-employer relationship. Some firms have actually laid off workers, and some no longer guarantee lifetime employment. Whether or not these changes will become widespread depends in large part on the speed and strength of the Japanese recovery.

Another reason for Japan's success is the ability and willingness of the Japanese to develop new technology. Because of their relatively small population, they have worked to boost productivity by developing methods that are **capital-intensive**—techniques that use a large amount of capital for every person employed. Today, the Japanese are recognized as the world leader in the area of industrial robots. As a result, most factories require only a fraction of the workers that similar factories in other countries need.

Most large Japanese firms also belong to a **keiretsu** (ky • reht • soo). This is a tightly knit group of firms governed by an external board of directors from potential competitors. The role of the governing board is to ensure that competition does not get so fierce that individual firms are threatened. A similar agreement in the United States among competing firms would be illegal under our antitrust laws.

Japan

Worker Attitudes Japan's economic success is due in part to its workers' loyalty and pride in their products. ***What other factors have contributed to Japan's success?***

The Role of Government

Historically, Japan's public sector was relatively small. Spending on **infrastructure**—the highways, mass transit, communications, power, water, sewerage and other public goods needed to support a large population—was low. The government also had a modest military capability and was not burdened with welfare spending. As a result, taxes were low, which allowed people to save their money or spend it on consumer goods.

The Japanese government also worked closely with businesses to limit foreign competition in the domestic market. Even today the Japanese government is more closely allied with businesses than consumers, often aiding efforts to keep foreign goods out of the country in order to protect domestic producers.

Some of this has changed with the recent economic downturn. In order to stimulate economic growth, the government introduced a number of Keynesian-type spending packages in 1998 and 1999 to stimulate the economy. As a result, the government sector now spends more than ever.

A Closed Economy

Despite Japan's success in international trade, their economy is partially closed to the products of foreign producers. When foreign companies try to sell their goods in Japan, many encounter numerous obstacles ranging from delayed government permission to huge amounts of paperwork.

Until recently, Japan was even reluctant to import rice, a food staple, in order to protect domestic rice producers. As a result, the cost of rice to the Japanese consumer is several times higher than it would be if Japan imported rice from the world markets.

The High Cost of Living

Protectionism in Japan may help certain segments of the economy such as the rice farmers, but it does not help the consumer. Because foreign competitors supply so few goods, products are generally expensive. Citrus fruits cost four to six times more in Japan than they do in the United States. Clothing costs two to three times as much, and even cameras and electronics cost more in Japan than elsewhere.

For years, the Japanese have been making electronic consumer goods and selling them abroad. Recently, Japanese citizens discovered they could purchase their own goods cheaper in Hawaii than they can in their own country. As a result, Japanese cameras, radios, and other electronic equipment are among the most popular items Japanese visitors bring back from trips abroad.

CLICK HERE

ECONOMICS Online

Student Web Activity Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 18—Student Web Activities*** for an activity on the governments and economies of nations.

Reliance on Manufacturing and Trade

Japan must actively engage in international trade because it is an island nation with few natural resources. Consequently, it must import most of its oil as well as a number of other critical materials. For the most part, the Japanese paid for their imports with revenues from the sale of cars, cameras, and other consumer products.

Much of Japan's trade success has been attributed to the direction that provides its Ministry of International Trade and Industry (MITI). This is a government ministry that identifies promising export markets, and then subsidizes industries so that they can be competitive in this area.

Stagnation and Recession

Despite Japan's economic successes, it experienced stagnation and recession for most of the 1990s. Industrial production peaked in 1991 and then declined until 1994. It recovered to its 1991 level in 1997, but then went into its worst recession since World War II.

Part of the reason for the poor economic performance was the banking crisis in the 1990s. When Japan was growing exceptionally fast several years earlier, land values soared. Many borrowers pledged their land as **collateral**—property or other security used to guarantee repayment of a loan—against loans that ultimately went bad. Banks had so many bad loans—estimates ranged as high as one in four—that banks simply stopped lending in 1996 and 1997. To make matters worse, banks had been so secretive about their loans that

STANDARD & POOR'S INFOBYTE

International Bonds An international bond is a bond that is issued in one country on behalf of borrowers that live in another country. An example would be a Japanese-issued corporate bond being offered for sale on the New York bond market.

banking regulators did not even know who received the loans, making default by the borrowers relatively easy.

The banking situation made it difficult for qualified borrowers to get loans, and many industries, including construction, came to a halt. Unemployment rose; the government tried to stimulate the economy with a number of programs, including "employee adjustment grants" designed to subsidize employee wages. In 1999 alone, the government used ¥61.1 billion ($532 million) to pay two-thirds of the salaries of nearly 2.5 million workers in 300 industries. Despite these subsidies, Japan's unemployment reached record-high levels in late 1999.

Restructuring and Reform

Another problem facing Japan is that it can no longer rely exclusively on basic manufacturing because many of its neighbors can now produce the same products at a lower cost. Also, the cozy relationship between government and industry makes it difficult for incremental change to take place—one of the features of capitalism. This inflexibility is made more difficult by the keiretsu, whose purpose is to maintain relationships and to ensure that competition does not become detrimental to its members. Finally, there is the issue of **transparency**, or the need to make business dealings more visible to everyone, especially government regulators. Without more transparency, it will be difficult to prevent another crippling banking crisis.

According to its Ministry of International Trade and Industry, Japan needs to institute supply-side reforms. These reforms would redefine government's role in the economy and restructure the way firms produce and compete with one another. This is an ironic turn of events because the world looked to Japan as the very model of growth in the 1980s. Today, Japan looks to the United States for guidance on restructuring so that it can resume its previous growth.

The Asian Tigers

Three other Asian countries—Singapore, Taiwan, and South Korea—have made striking economic progress during the last 50 years. The British colony of Hong Kong also experienced explosive growth before it was reunified with China. Despite setbacks during the Asian financial crisis of 1997, the four are called the "Asian Tigers." Each has based its growth on capitalism, but each has taken a slightly different path.

Hong Kong

When Hong Kong was still a British colony, it was recognized as the most free market economy in the world, one with virtually no government interference. Entrepreneurs in Hong Kong developed a manufacturing-based economy that used technology other countries had already developed. Their major industrial products included textiles, clothing, electronic games, radios, telephones, watches, electronic components, and toys.

At the time of unification in 1997, Hong Kong's per capita GNP was nearly 90 percent of the United States's, and nearly 40 times that of China. Other factors, however, were beginning to change. Financial services and tourism had caught up with manufacturing, and the Asian crisis had thrust the economy into a deep recession. Furthermore, China's promise not to interfere with Hong Kong markets for a period of 50 years seemed to be in jeopardy. In mid-1999, Hong Kong's chief executive Tung Chee-hwa announced plans to pour billions of dollars into high-tech computer industries, marking a sharp departure from the laissez-faire capitalism that once characterized Hong Kong.

Singapore

The second Asian Tiger is Singapore, an island nation about 3.5 times larger than Washington, D.C., with a per capita GNP about 80 percent of that of the United States. More than 1,000 multinational firms have been attracted to Singapore with the lure of generous tax breaks, government subsidies, and government-sponsored training of employees. Unlike Hong Kong, Singapore made a determined effort to develop its own technologies through extensive spending on research and development.

The government of Singapore is trying to develop a few select industries, including telecommunications services, software, and biotechnology. The government has spent millions on laboratories, attracting top scientists from all over the world. The biotechnology industry has scored some original successes, one of which is the transfer of firefly genes to orchids to make them glow in the dark.

Taiwan

The Republic of China, also known as Taiwan, is an island about the size of West Virginia located off the coast of the People's Republic of China. Taiwan's population is about 22 million, and the per capita GNP is almost half that of the United States.

Planning was always a feature of the Taiwanese economy. The most recent plan identified 10 industries to receive government assistance—these include telecommunications, consumer electronics, semiconductors, precision machinery, aerospace, pharmaceuticals, and others.

Taiwan was one of the early economic powers in Asia, but some people wonder if the centralized planning process will hamper future economic growth. Another concern is the looming presence of the People's Republic of China, which regards Taiwan as a "renegade province" and vows eventual unification. Despite its early start, the per capita GNP in Taiwan has fallen far behind those of Hong Kong and Singapore.

South Korea

South Korea, a country slightly larger than Indiana, has the smallest per capita GNP of the Asian Tigers, at about 45 percent of the United States's. In the past, a group of technocrats governed Korea with the help of the military. The factors of production were privately owned, but a small number of powerful business families dominated the private economy through conglomerates.

South Korea was hit hard by the 1997 Asian financial crisis, but it was also one of the first nations to recover. Many reforms have been undertaken since, but South Korea's future economic growth still depends on whether the private economy can adapt to competition and rely less on its relationship with the political sector.

Sweden

Sweden is a mature industrial nation, once regarded as the "socialist state that works." The reputation was apt because Sweden provided a broader range of social welfare programs for its citizens than did any other free-world country. Some

Changes in Sweden

Restructuring Many government-owned businesses in Sweden were privatized in the early 1990s. ***What led to the ouster of Sweden's Socialist party?***

of the basic industries were nationalized, but Sweden also had a considerable amount of private enterprise. The country, therefore, was not a model of pure socialism in the traditional sense.

The Welfare State

Many worker benefits were instituted during the 44-year rule of the Socialist party. During this time, wages were high, jobs were easy to find, and unemployment was in the 1- to 3-percent range. The Swedish economy—with its generous maternity, education, disability, and old-age benefits—was thought to be the model of European socialism.

Because government owned some basic industries, and because many of these industries were not profitable, the government relied on steep taxes to pay for the welfare state benefits. In the mid-1980s, tax receipts were about 50 percent of GNP. In some cases, additional income that Swedish citizens earned was taxed at an 80 percent rate, meaning that a person who earned an additional $100 would keep only $20. Some individuals even left the country to avoid high taxes. When tennis star Bjorn Borg was at the peak of his career, he resided outside of Sweden to avoid paying high taxes.

Many others devised ways to avoid paying taxes. Some craft workers resorted to barter. A carpenter who built some cabinets for an auto mechanic, for example, might be paid with repair work on the family car.

Restructuring

Eventually, the heavy tax burden and the additional costs of the welfare state began to cut into Sweden's economic growth. Growing inflation added to the problems, as did a massive government deficit. Growing discontent with conditions finally led to the defeat of the Socialist party in 1976.

A free-market government was elected in 1991, and by 1993 the role of the public sector had been reduced, although current revenues by all levels of government exceed 60 percent of GNP. Taxes on individuals and corporations are also lower, although they are still high by U.S. standards. Many government-owned businesses have been privatized, and more are scheduled to be converted.

European nations such as Sweden were relatively unaffected by the Asian crisis, so economic growth was positive in the decade of the 1990s. Real GNP growth rates have been lower than those of the Asian tigers, however, leaving Sweden with a real GNP per capita about two-thirds of that in the United States.

Section 4 Assessment

Checking for Understanding

1. **Main Idea** Discuss how the approaches to economic growth differ in Taiwan and South Korea.
2. **Key Terms** Define capital-intensive, keiretsu, infrastructure, collateral, transparency.
3. **Describe** significant factors that contribute to economic growth and development in Japan.
4. **Rank** the "Asian Tigers" according to per capita GNP.
5. **Explain** how Sweden's retreat from socialism affected the nation's tax rates.

Applying Economic Concepts

6. **Economic Growth** How has Sweden's transition from socialism to capitalism helped promote economic growth?

Critical Thinking

7. **Making Predictions** How might continued economic growth in Asia affect industries in the United States?
8. **Making Comparisons** What type of help is provided to Japanese businesses by their government that the American government does not give to its businesses?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

Chapter 18 Summary

Section 1

The Spectrum of Economic Systems (pages 491–494)

- The world's three main types of economic systems are capitalism, socialism, and communism.
- Under capitalism, productive resources are privately owned and operated; capital is obtained through profits in the market; supply and demand determine prices; and the role of government is limited to promoting competition and providing public goods.
- Under **socialism,** many of the basic resources are government owned and operated, with prices playing a major role in the allocation of resources.
- Under **communism,** all productive resources are government owned and operated; centralized planning directs all resources; and labor is organized for the common advantage of the community.

Section 2

The Rise and Fall of Communism

(pages 496–499)

- In 1917 revolutionists overthrew the government of Russia and instituted a communist system.
- Utilizing a series of **Five-Year Plans,** Stalin wanted to achieve rapid industrialization. The plans included the **collectivization** of agriculture and the transformation of industry.
- When Stalin's brutal regime ended in 1953, the Soviet Union had successfully completed its transition to a major industrial power.
- The command economy ultimately proved to be a miserable failure. Low productivity and the lack of incentives led Mikhail Gorbachev to attempt **perestroika,** the fundamental restructuring of the economy and the government. The restructuring was not completed, however, and in the early 1990s, the Soviet economic system collapsed.

Section 3

The Transition to Capitalism

(pages 501–507)

- The former communist systems face several challenges–including the **privatization** of capital resources–as they try to move toward capitalism.
- These challenges include privatization, the shift in political power from Communists to elected officials, and the new incentives of a capitalist economy.
- Russia and Eastern Europe have had varying amounts of success in this transition to capitalism.
- Many countries in Latin America and even China are also moving toward a capitalist economy.

Section 4

The Various Faces of Capitalism

(pages 509–514)

- Japan achieved phenomenal economic growth with a combination of worker and corporate loyalty, technology, and low taxes until the early 1990s.
- Despite Japan's economic success, it experienced stagnation and recession during the 1990s.
- The economies of the "Asian Tigers"–Singapore, Taiwan, Hong Kong (before reunification with China), and South Korea–also owe much of their remarkable success to capitalism.
- Sweden, once regarded as the "socialist state that works," has restructured in an attempt to move away from socialism.

Chapter 18 Assessment and Activities

ECONOMICS Online

Self-Check Quiz Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 18—Self-Check Quizzes*** to prepare for the chapter test.

CLICK HERE

Identifying Key Terms

Write the key term that best completes the following sentences.

a. state farm
b. socialism
c. black market
d. capital-intensive
e. privatization
f. Five-Year Plan
g. collective farm
h. communism
i. perestroika
j. storming

1. In most former communist countries, state-owned enterprises are being converted to private ownership, a process known as _______ .
2. To direct production, Soviet planners adopted a _______ .
3. Under _______ , the government owns all the means of production.
4. In the Soviet agricultural system, the state owned and operated each _______ .
5. Soviet leader Mikhail Gorbachev introduced a policy of _______ , the fundamental restructuring of the economy and government.
6. In the Soviet Union, groups of peasant families, each of which was allowed to keep their home and household goods, a few cattle, and a small plot of land, worked each _______ .
7. Most nations of Eastern Europe had a flourishing _______ , where entrepreneurs and merchants sold goods illegally.
8. Under _______ , the government owns many, but not all, of the basic productive resources.
9. In _______ industries, a large amount of capital is used for every person employed in manufacturing.
10. Piecework quotas often led to _______ , where workers worked slowly until the last week of the month and then sped up to meet the unrealistically high quota.

Reviewing the Facts

Section 1 (pages 491–494)

1. **Explain** the role of the government in a capitalist economic system.
2. **Describe** how the people in a socialist economy help allocate the use of resources.
3. **Describe** who answers the basic economic questions in a communist system.

Section 2 (pages 496–499)

4. **Describe** Stalin's efforts to implement centralized planning.
5. **Describe** the problems that central planning caused in the Soviet economy.
6. **Explain** the impact that perestroika had on the Soviet economy.

Section 3 (pages 501–507)

7. **List** the problems that nations may face as they try to make the transition from communism to capitalism.
8. **Name** the nations that are currently trying to adapt to a market economy and describe the specific problems they are facing in their transition.

Section 4 (pages 509–514)

9. **Explain** the role that the government plays in Japan's economy.
10. **Describe** how the approaches to economic growth differ in South Korea and Singapore.

Chapter 18 Assessment and Activities

Thinking Critically

1. **Evaluating Information** Do you think five-year plans could work in the United States? Why or why not?
2. **Drawing Conclusions** What safeguards are in place to ensure that the United States will not face an economic downturn as severe as the Great Depression? List the safeguards on a graphic organizer like the one below.

3. **Sequencing Information** Trace Sweden's transition from socialism to capitalism.
4. **Drawing Conclusions** The Communists promised people that their system would lead to workers' paradises throughout the world. By the early 1990s, however, communist systems and their command economies in most countries had collapsed. Why do you think communism was such a failure?

Applying Economic Concepts

1. **Capitalism** Many nations are attempting to switch from communism or socialism to capitalism. Often, the transition has been quite difficult. What suggestions would you make to the leaders of these nations to help ease the transition to capitalism?
2. **Economic Growth** The "Asian Tigers" have experienced rapid economic growth and development. Do you think they can sustain this growth rate? Why or why not?
3. **Economic Change** Why have many countries chosen to change the mix of socialism and capitalism in their economies in recent years?

Math Practice

Assume that your salary is 500 rubles per month. The government-controlled price of bread is 10 rubles, and you buy five loaves each month. What percentage of your income do you spend on bread? After the government deregulates prices, bread costs 25 rubles. What percentage of your income goes to buy bread? How does the inflation affect your standard of living?

Thinking Like an Economist

Explain why firms in the former Soviet Union could make low-quality products and continue to exist year after year. What would happen to such a firm in the United States economy?

Technology Skill

Using a Computerized Card Catalog For one week, summarize in your journal news articles you read about events in eastern Europe and other former Soviet bloc nations. Focus on articles that relate to those regions working to convert from a command economy to a market economy.

Using a computerized card catalog, find other sources describing economic events in these areas. Compose a journal article analyzing current developments in either of those regions of the world. Include quotes from the sources you found using the computerized card catalog.

Building Skills

Building a Database Review recent issues of newsmagazines and current newspapers. Using the steps described on page 495, build a database of information about current world developments concerning capitalism and socialism that the newspapers or the news magazines mention. Explain to a partner why the database is organized the way it is and how it might be used in class.

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

ECONOMICS WORKSHOP IN ACTION

Simulating Trade in Various Economies

From the classroom of . . .
Danielle Dressler
Mifflinburg High School
Mifflinburg, Pennsylvania

The world contains various types of economic systems. Some countries have market economies, some command economies, some traditional, and still others have mixed economies. Each type of economy poses its own challenges when it comes to international trade. In this workshop, you will organize into groups and attempt to trade your products for goods produced in another country.

Setting Up the Workshop

Your teacher will separate you into groups and provide you with your products. Your group will represent a command, market, traditional, or mixed economic system. Read the instructions for your economic system. Then, read the steps of the procedures and begin the activity.

Procedures

STEP 1

Your group has all the "goods" your country produces (for example, the command economy has all the sugar packets). Later, you will use your goods to trade for the staples you need that are produced in the other countries.

STEP 2

When your group trades, keep in mind that the trade value of the products are: 100 lbs of sugar = 100 lbs of tea = 50 lbs of cotton = 25 lbs of meat.

STEP 3

Begin trading with the other "countries," paying careful attention to your restrictions on imports and exports. To satisfy the needs of its population, the goal of each country is to trade its product in such a way that it comes as close as possible to achieving the following mix of goods:

- 75 lbs of meat
- 250 lbs of cotton
- 500 lbs of sugar
- 300 lbs of tea

Command Economy

You are citizens of a country under a command economy. Your country has 1,500 pounds of **sugar** to trade. Your government has placed many regulations on both imports and exports. Three regulations are required during sugar production in order for sugar to be exported. Also, three regulations protecting your citizens need to be met in order for products to come into the country. Before you begin, organize your society (government officials, farmers, etc.) and list your regulations on imports and exports.

Traditional Economy

You are members of a society that has a traditional economic system. Your country has 800 pounds of **tea** to trade. You must decide in what quantities and with what countries you want to trade your tea, which is in very low supply. Before you begin, describe the characteristics of your society (climate, organization, leaders, etc.) and organize your group so that each member has a part in the economy.

Mixed Economy

You are members of a country that has a mixed economic system. You have 400 pounds of **cotton** to trade. Your government does not have complete control over the economy, but it places two regulations on the export of the cotton produced in your country and two regulations on imported products. Before you begin, organize your society (government officials, producers, etc.) and list your country's regulations on imports and exports.

Market Economy

You are a member of a country that has a market economic system. Your main export is **meat**—300 pounds in total. (Every member has an equal share.) You are free to compete in trade against one another. Your task is to export the meat from your country by competing with the other members of your group. Before you begin, describe the characteristics of your society and decide if you want to implement regulations on imports and exports.

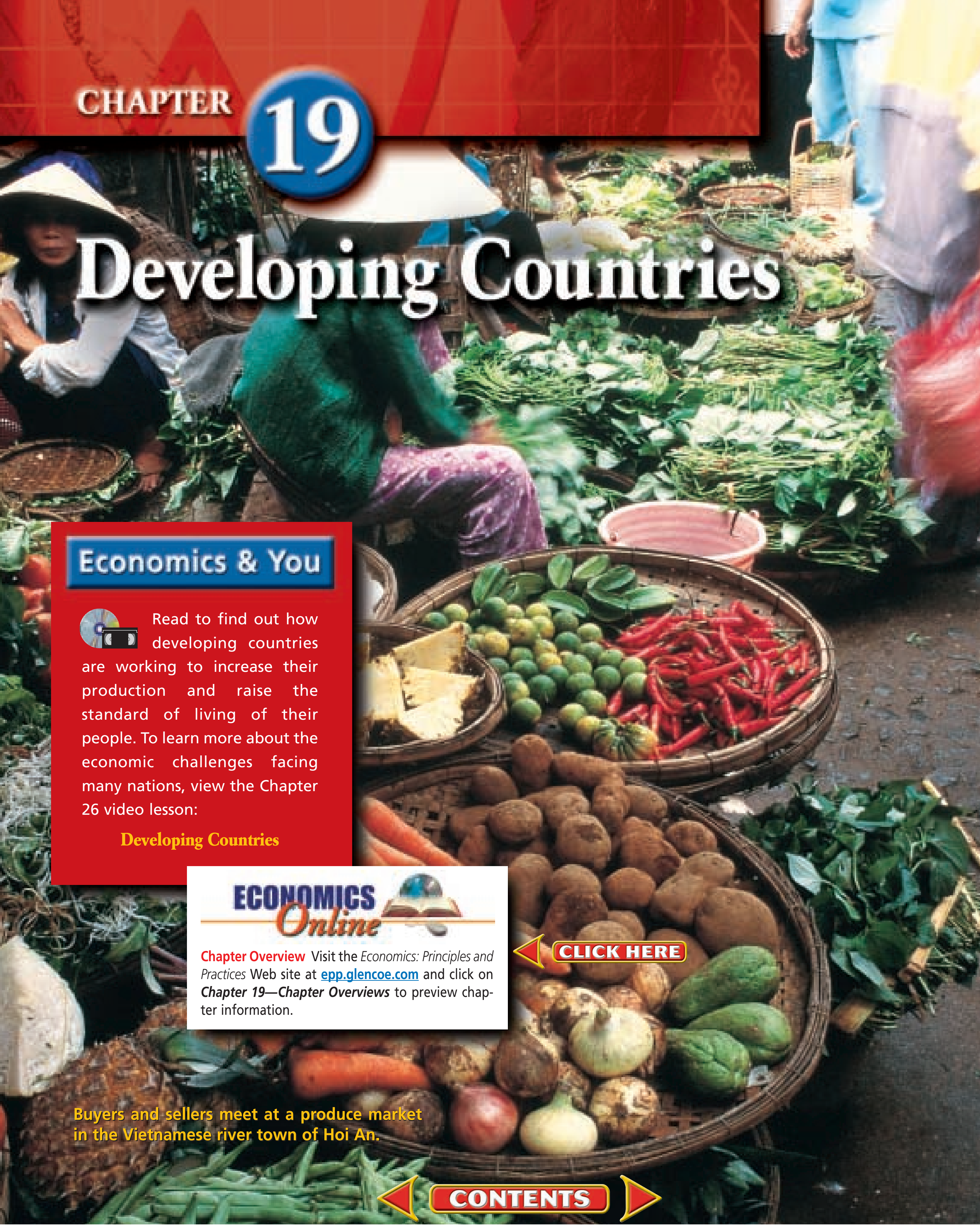
Summary Activity

When the trading has been completed, discuss the following questions.

1. Which "country" came closest to the optimal mix of products? What factors of the economic system made this possible?
2. Which types of economies were least able to achieve a good mix of products? Why do you think this is so?

CHAPTER 19

Developing Countries



Economics & You

Read to find out how developing countries are working to increase their production and raise the standard of living of their people. To learn more about the economic challenges facing many nations, view the Chapter 26 video lesson:

Developing Countries

ECONOMICS Online

Chapter Overview Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 19—Chapter Overviews*** to preview chapter information.

CLICK HERE

Buyers and sellers meet at a produce market in the Vietnamese river town of Hoi An.

SECTION 1

Economic Development

Study Guide

Main Idea

Developing countries face a number of obstacles that make economic growth extremely difficult.

Reading Strategy

Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by providing at least two reasons why it would probably be more difficult to bring about change in a traditional economic system than in a developed country.

Key Terms

developing country, crude birthrate, life expectancy, zero population growth (ZPG), external debt, default, capital flight, International Monetary Fund, World Bank

Objectives

After studying this section, you will be able to:

1. **State** the concern for the plight of the developing countries.
2. **Identify** the obstacles to economic development.
3. **Compare** per capita GNP among various countries and regions.

Applying Economic Concepts

Life Expectancy Are there any downsides to longer life expectancies? Read to find out how a longer life expectancy affects the quality of life in developing countries.

Cover Story

The Casualties Don't Stop When the War Does

Mine detecting in Cambodia

Anti-personnel (AP) land mines have become the world's largest source of war-related injuries. According to the International Committee of the Red Cross, mines kill 800 people every month and another 1,200 are maimed—a total of 2,000 victims a month—one person every 20 minutes.

Low cost and easy availability have made anti-personnel land mines the weapons of choice in the developing world. The United Nations estimates that there are currently tens of millions of anti-personnel land mines buried in more than 70 countries . . . approximately one mine for every 50 people on earth. . . .

Land mines cost as little as $3 (U.S.) to produce and up to $1,000 to remove. For every 5,000 mines cleared, one de-miner is killed and two are injured.

—PALM *Physicians Against Land Mines*, August, 1999

Most of the people in the world today live in **developing countries**—countries whose average per capita GNP is a fraction of that in more industrialized countries. Most developing countries are located in Africa, Asia, and Latin America.

In many ways, developing economies are similar to other economies of the world. The major difference is that their problems are much greater. Some problems faced by developing countries, such as the residual effects of war highlighted in the cover story, are so serious that some developing nations may never reach their potential.

Interest in Economic Development

Economists know that all nations are better off when they produce and trade the products in which they have a comparative advantage. Even so, the international community's concern for the developing countries is humanitarian as well as economic and political.

Concern for Developing Countries

Industrialized countries of the world often believe it is their moral responsibility to help those who have less than they do. Assistance to developing countries helps assure the industrial nations of a stable supply of critical raw materials. In turn, developing countries also provide markets for the products of industrial nations.

Politics are also important. Despite the dramatic failure of communism in some countries, various political ideologies wage a continuing struggle for the allegiance of developing countries.

Per Capita Income

Today more than 1.2 billion people exist on an income of less than $1 a day. According to **Figure 19.1,** the majority of these people are in Africa and Asia. The map contrasts the income of the industrialized nations and the developing nations, scaling each country to show the size of its total GNP. Recall that GNP is a measure of *income,* while GDP is a measure of output relative to other countries. Thus, the United States, which has the largest total income in the world, is the largest area on the map. Countries with smaller GNPs are scaled accordingly.

The map is also color coded to show countries with similar per capita GNPs. When viewed this way, the contrast is clearly shown between the industrialized economies of North America, Western Europe, and Japan, and the developing countries of South America, the Caribbean, Africa, and Asia. The gap between industrialized and developing countries is enormous. If anything, the gap is getting larger, rather than smaller.

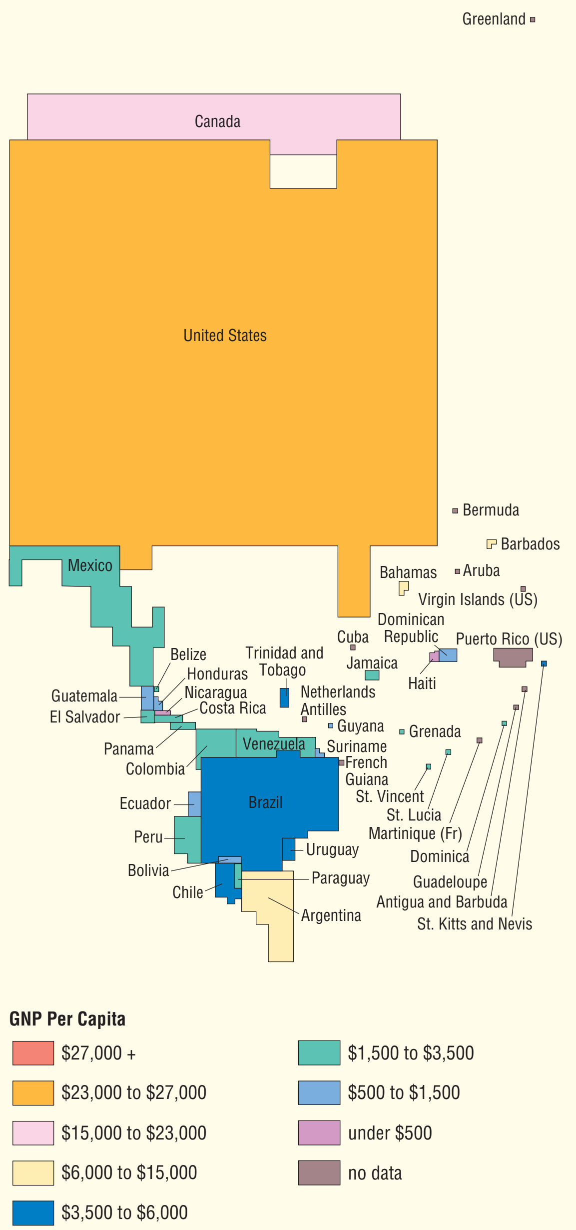
Obstacles to Development

Before examining some of the possible solutions to the plight of developing countries, we need to take a closer look at some common problems and challenges.

Population Growth

One obstacle to economic development is population growth. The populations of most developing

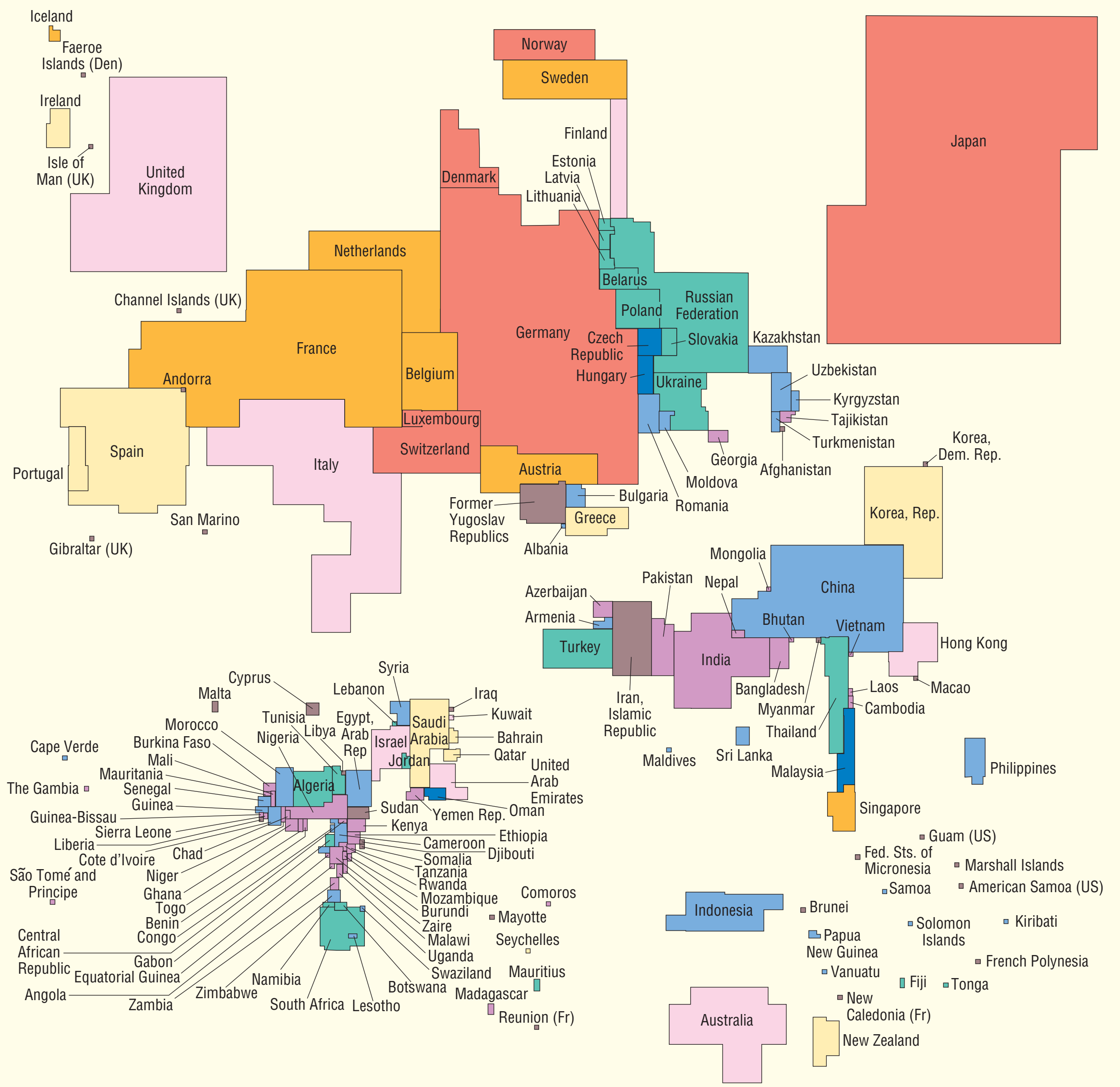
ECONOMICS
AT A GLANCE



Source: *The World Bank Atlas*

Figure 19.1

Gross National Product and Gross National Product Per Capita



Reading Maps If every nation's land area were proportional to its Gross National Product, the world would look like the map in this figure. When GNP is computed on a per capita basis, we get another view of a nation's productivity. **Which nations have a per capita GNP larger than that of the United States?**

countries grow at a rate much faster than the populations of industrialized countries. One reason for this growth is the high **crude birthrate**—the number of live births per 1,000 people.

People in many developing countries are also experiencing an increasing **life expectancy**—the average remaining lifetime in years for persons who reach a certain age. Longer life expectancies, coupled with a high crude birthrate, make it difficult to increase per capita GNP.

Some countries, like China, have encouraged lower birth rates and smaller families. Some people even feel that societies should work for **zero population growth (ZPG)**—the condition in which the average number of births and deaths balance. Others feel efforts to disrupt population growth are wrong from both moral and religious perspectives.

Natural Resources and Geography

Another obstacle to economic growth is limited natural resources, which includes unproductive land and harsh climates. A shortage of natural and energy sources needed for industry also hinder growth.

In some cases, countries with limited natural resources can make up for the deficiency by engaging in international trade, as Japan has done. However, if a country is landlocked, trade is much more difficult. It is no accident that all of the major economic powers today have long had coastal cities with access to major trade routes.

Education and Technology

Still another obstacle to economic development is a lack of appropriate education and technology. Many developing countries do not have a highly literate population nor do they have the high level of technical skills needed to build an industrial society. In addition, most do not have money to train engineers and scientists.

Many developing countries cannot afford to provide free public education for school-age children. In those that can, not everyone is able to take advantage of it because children must work to help feed their families.

CYBERNOMICS SPOTLIGHT

Agricultural Development

Genetically modified cotton crops may be the means by which countries of Africa south of the Sahara become more competitive with the developed world. Some economists fear, however, that as more countries plant the genetically modified crops, the market for cotton will become saturated. Prices will drop, leaving farmers poorer than ever.

Religion

Religious beliefs may also stand in the way of economic development. While almost everyone realizes that capital investment and new technologies can help economic growth, some people may not be interested for religious reasons. In the United States, for example, many Mennonites have long rejected these advances on religious grounds.

In Asia, most Hindus and Buddhists believe that life is governed by a fate called karma; they believe that people are caught up in an eternal cycle of life, death, and rebirth. The Hindus believe that the eternal cycle can be broken, in part, by purifying the mind and body through living a simple and austere lifestyle. The Buddhists believe that the way to break the cycle is to extinguish desire and reject the temptations of the material world. Consequently, many Hindus and Buddhists—representing approximately 20 percent of the world's population—have little motivation to improve their material well-being.

The teachings of Catholicism, Protestantism, and Judaism are much more compatible with the concept of economic growth and material improvement, while the Islamic world is in between the Christians and the Hindus. We must realize, however, that some cultures may not be as interested in the Western concept of economic growth and development as we imagine.

External Debt

Another major problem facing the developing nations today is the size of their **external**

debt—money borrowed from foreign banks and governments. Some nations have borrowed so much they may never be able to repay loans.

Today a number of developing countries—Bulgaria, Cameroon, the Ivory Coast, Ethiopia, Honduras, Jordan, Madagascar, Syria, and Tanzania—all have external debts larger than their GNP. Sudan and Zambia have external debts more than twice their GDP, and Angola's external debt is *three* times larger than its GDP.

When debts get this large, countries have trouble even paying interest on the loans. As a result, some developing nations have teetered on the brink of **default,** or not repaying borrowed money. Even this strategy is dangerous, however, because a country that defaults on its loans may not be able to borrow again.

Capital Flight

Another problem for developing nations is **capital flight**—the legal or illegal export of a nation's currency and foreign exchange. Capital flight occurs because people lose faith in their government or in the future of their economy. When capital flight occurs, businesses and even the government often face a cash shortage. At a minimum, capital flight limits the funds available for domestic capital investment.

Even private citizens can contribute to capital flight. Suppose that someone in Moscow wants to turn rubles into dollars. First, the person would go to several banks and purchase traveler's checks. Next, the individual would destroy the checks and then fly to New York. Third, the checks would be declared as being lost or stolen so that they can be redeemed in the U.S. for dollars.

Corruption

Corruption at any level of government is an obstacle to economic development. Sometimes corruption takes the form of minor officials requiring modest bribes to get even the smallest things done. At other times, corruption occurs on a massive scale.

When Ferdinand Marcos was president of the Philippines, foreign investors poured billions into the country's economy. Years later, however, the majority of Filipinos still lived in poverty. Officials later charged that Marcos had stolen at least $500 million from the nation and deposited the money in personal Swiss bank accounts.

When the Soviet Union began to collapse in the late 1980s and early 1990s, the Communist party took billions of dollars out of its own accounts, government-owned enterprises, and even its own central bank and deposited the money in various Swiss, European, and American banks. At the time, the Soviet secret police used a sophisticated network of trade delegations, central bank offices, and even Soviet embassies to move the money abroad—money that could have been used to modernize the Russian economy after the fall of communism.

War and Its Aftermath

Unfortunately, many of the developing nations of the world—Angola, Afghanistan, Egypt, Ethiopia, Cambodia, Somalia, and Vietnam to name just a few—were the scenes of bloody civil wars in the late 1900s. The immediate impact of war is the devastating loss of lives and property, not to mention the damage to the country's infrastructure.

Education

Developing Nations Although enrollment in schools, and the literacy rate, are improving in developing nations, many lack basic educational tools. ***What is the status of free public education in developing countries?***

The aftermath of war can linger for decades. Poland lost virtually all of its *intelligentsia*—its scientists, engineers, and even most of its merchant class—to the gas chambers and concentration camps in World War II. The loss of this talent contributed to the slow recovery of the Polish economy after the war, and even hindered its economic development after the fall of communism.

The widespread use of chemical weapons and land mines make simple activities like farming extremely difficult in many areas. Moreover, many of the people injured by these weapons, such as children playing in fields, were not participants in the war in the first place. The weapons of war—as discussed in the cover story—often impede economic development long after the war is over.

International Agencies

The problems of the developing countries have not gone unnoticed by the more successful countries of the world. Two agencies, in particular, work directly with developing nations to solve their problems.

The **International Monetary Fund (IMF)** offers advice to all nations on monetary and fiscal policies. It also helps support the currency of some developing nations with loans so that the countries can compete in an open market and attract foreign investors.

Another important international lending and development agency is the World Bank Group, more commonly known as the **World Bank.** The World Bank is an international corporation that makes loans and provides financial assistance and advice to developing countries. The World Bank is owned by IMF member nations, but it operates as a separate organization.

Recently, the World Bank has undertaken projects to control the desert locust in East Africa. It also has funded projects to develop inland water transportation in Bangladesh, rural transportation systems in Vietnam, and even tax modernization in Kazakhstan.

CLICK HERE

ECONOMICS Online

Student Web Activity Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 19—Student Web Activities*** for an activity on the International Monetary Fund.

Section 1 Assessment

Checking for Understanding

1. **Main Idea** Describe what a developing country is and some of the economic problems it may experience.
2. **Key Terms** Define developing country, crude birthrate, life expectancy, zero population growth, external debt, default, capital flight, International Monetary Fund, World Bank.
3. **List** three reasons why there is concern for the plight of developing countries.
4. **List** eight factors that may be obstacles to economic development.
5. **Compare** the per capita GNP of Algeria with that of Argentina.

Applying Economic Concepts

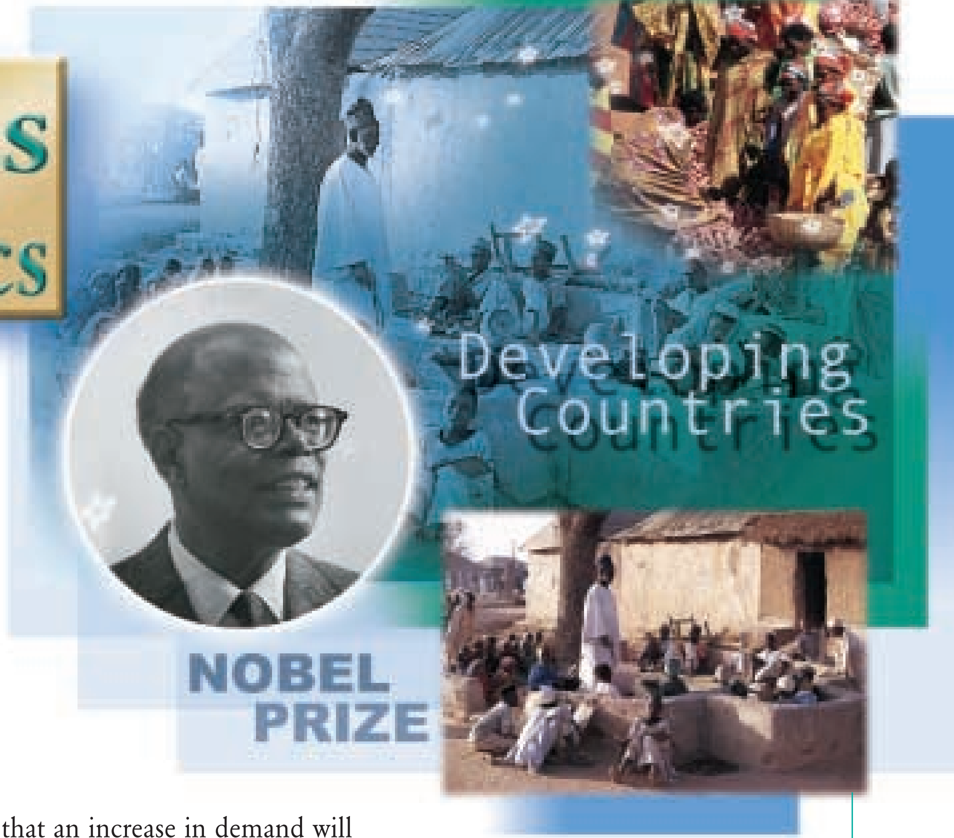
6. **Life Expectancy** Explain why an official of a developing nation would have both positive and negative views of increasing life expectancy.

Critical Thinking

7. **Identifying Alternatives** Suppose you are an official in charge of economic development in a developing country. Choose the first two obstacles to economic development that you would address. Then tell why you would tackle them first.

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

Profiles in Economics



Opening Doors:

W. Arthur Lewis

(1915–1991)

Economist Sir W. Arthur Lewis achieved many firsts. After attending school in his native St. Lucia, he earned a scholarship to attend the London School of Economics (LSE) where, in 1937, he graduated first in his class. Soon after, while working on a Ph.D. in economics, he became the first black to receive an assistant lectureship at the LSE. In 1979 he became the first black to win the Nobel Prize in economics (jointly with Theodore Schultz). Lewis's prize-winning work focused on the economic problems of developing nations.

INSIGHT INTO DEVELOPING NATIONS

In particular, Lewis challenged the prevailing view that the supply of labor in developing nations is upward sloping, so that an increase in the demand for labor results in an increase in wages. Real wages, noted Lewis, tend to stay at low levels in many developing nations regardless of the increases in demand for labor. The only solution, he reasoned, is that the supply curve for labor has to be perfectly elastic—or horizontal rather than upward sloping—so that an increase in demand will leave wages unchanged. His theory explains why countries such as Sri Lanka are still underdeveloped, although they have been developing for nearly 100 years.

Lewis did not claim to have solved the problems of the developing countries. His contributions, however, have made existing economic models and theory more applicable to realistic conditions.

"HOW I CONDUCT MYSELF"

Lewis explained how he felt about his illustrious career:

"I had never meant to be an economist. . . . What was this economics? I had never heard of it before, and nobody in St. Lucia knew what it was . . . ," he recalled. "Looking backward . . . I have lived through a period of transition. . . . I have been subject to all the usual disabilities—refusal of accommodations, denial of jobs for which I had been recommended, generalized discourtesy, and the rest of it. All the same, some doors that were supposed to be closed opened as I approached them. I have got used to being the first black to do this or that, which gets to be more difficult as the transition opens up new opportunities. Having to be a role model is a bit of a strain, but I try to remember that others are coming after me, and that whether the door will be shut in their faces as they approach will depend to some small extent on how I conduct myself."

Examining the Profile

1. **Demonstrating Reasoned Judgment** Why might an increase in demand for labor not increase the wage rate in developing countries?
2. **Drawing Conclusions** What does Lewis mean by "the usual disabilities" he faced?

SECTION 2

A Framework for Development

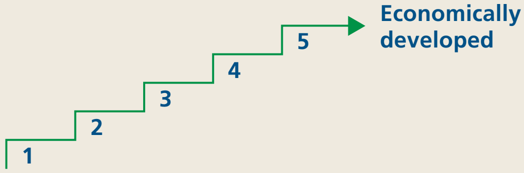
Study Guide

Main Idea

Economists suggest that developing nations have several ways of achieving their economic growth.

Reading Strategy

Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by listing the stages of economic development. Then describe what occurs during each of the stages.



Key Terms

primitive equilibrium, takeoff

Objectives

After studying this section, you will be able to:

1. **Explain** the stages of economic development.
2. **Describe** the steps industrialized countries can take to help developing countries.
3. **Describe** the steps developing countries can follow to help themselves.

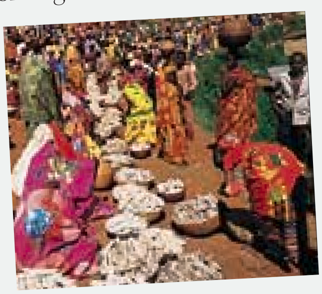
Applying Economic Concepts

Primitive Equilibrium Have you ever had a day during which nothing much was attempted and nothing much got done? Read to find out why this type of equilibrium is a stage that developing economies sometimes go through.

Cover Story

Easing the Debt Burden

COLOGNE, Germany—Leaders from the Group of Seven industrial nations agreed Friday to cut the debt burden of the world's poorest countries in what they described as a decisive push to alleviate poverty.



Market in Burundi

President Jacques Chirac of France said the relief, mainly for African countries, could total about $65 billion . . . [but] the amount could approach $90 billion if other creditors joined the initiative.

Some loans—about $15 billion worth—would be canceled outright, and mechanisms would be put in place to evaluate the countries for other forms of debt relief, based on future economic reforms.

—*The New York Times*, June 19, 1999

Because the problems of the developing nations are so great, economic development is a formidable task. Many approaches have been tried, and others, such as the one described in the cover story, have much promise.

Stages of Economic Development

Some economists have suggested that developing countries normally pass through several stages on their way to economic development. Others argue that the process is not uniform for all countries. Even so, it is helpful to think of economic development as occurring in stages, even if the boundaries between these stages are not always clear-cut.

Primitive Equilibrium

The first stage toward economic development is **primitive equilibrium.** It is "primitive" in the sense that the society has no formal economic organization. An example would be the Inuit of

Did you know?

Population Explosion Over the next 30 years, almost 98 percent of population growth is projected to take place in developing countries.

the past century, who shared the spoils of the hunt with other families in the village.

A people—or country—in primitive equilibrium often have no monetary system and may not be economically motivated. No capital investment takes place, and the society is in equilibrium because nothing changes. Rules are handed down from one generation to the next, and culture and tradition direct economic decision making.

Transition

The second stage of economic development is one of transition. It consists of a break with primitive equilibrium and a move toward economic and cultural changes. The break may be brief and sudden, or it may take years. A country does not grow economically in this transition stage, but old customs begin to crumble. People begin to question their traditions, and they try new patterns of living.

Takeoff

The third stage of development—**takeoff**—is not reached until the barriers of primitive equilibrium are overcome. A country in the takeoff stage begins to grow more rapidly than before. One reason is that customs have been put aside, and people have begun to seek new and better ways of doing things. Another reason is that the people have begun to imitate the new or different techniques that outsiders have brought into the country. Still another reason is that an industrial nation may be providing financial, educational, or military aid.

During the takeoff stage, a country starts to save and invest more of its national income. New industries grow rapidly, and profits are reinvested in them. Industry uses new production techniques, and agricultural productivity greatly improves.

Semidevelopment

The fourth stage is semidevelopment. In it, the makeup of the country's economy changes. National income grows faster than population, which leads to higher per capita income. At the same time, the core of the country's industry is built. The nation spends heavily on capital investment, and technological advances are made.

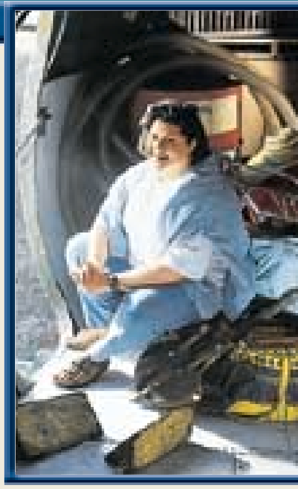
High Development

The final stage of development is high development. In this stage, efforts to obtain food, shelter, and clothing are more than successful. Most people have their basic needs and wants met. They turn their attention to services and consumer goods such as washing machines, refrigerators, and video equipment.

The nation no longer emphasizes industrial production. Instead, it increases services and provides more public goods. Mature service and

Careers

Peace Corps Volunteer



Are you willing to work for minimal pay in unfamiliar surroundings? Are you a dedicated individual who can work effectively with people?

The Work

Peace Corps volunteers take on two-year assignments overseas. They receive eight to 14 weeks of training in the history, culture, and language of the country in which they will serve. Duties include working with the people of the host country to improve food production, health care, and other basic needs. Salary is an allowance for living costs. Housing, medical care, and transportation are provided.

Qualifications

College training is not required, but assignments may be made on the basis of the volunteer's experience and skills. Volunteers must be U.S. citizens and at least 18 years old.

THE GLOBAL ECONOMY

The New Peace Corps

On March 1, 1961, President Kennedy signed an executive order establishing the Peace Corps. Since then, tens of thousands of volunteers have served in the villages, towns, and cities of more than 130 countries.

In the past, it was easy to spot Peace Corps volunteers. They wore Birkenstocks and loose-fitting, gauzy garb. They often had wide-eyed notions of saving the world. To many of them, "capitalism" was a four-letter word.

No more. Today's Peace Corps volunteers—80 percent of whom are in their 20s—still want to help the world, but they also want to help themselves. Many volunteers have business degrees and view the Peace Corps as a two-year internship, culminating with a return home to a job with a top company. What better way to gain experience than by helping a developing nation get its corporate feet on the ground?

"I'm definitely joining to improve my skills for a better job," said Beth Atkinson, 22, who recently received a bachelor's degree in business administration from Indiana Wesleyan University. Next month, she heads for Mali in West Africa to help craftsmen and entrepreneurs form businesses. "You hear a lot of talk about global business, and I thought there's no better way to go than this," she said.

—*The New York Times,* July 18, 1999

Critical Thinking

1. **Analyzing Information** According to the article, in what way is the Peace Corps changing?
2. **Understanding Cause and Effect** For what reasons are young people joining the Peace Corps?

manufacturing sectors are signs of a highly developed economy.

Priorities for Industrialized Nations

The World Bank has become a powerful force in economic development because it often requires that countries actually make market reforms as a condition for obtaining a loan. Because of its considerable experience with developing nations, the World Bank has a list of recommendations for both developing and industrialized countries.

First, trade barriers, especially nontariff barriers, need to be reduced or eliminated. The World Bank has estimated that eliminating trade barriers would generate as much as $50 billion annually in export earnings for the developing countries.

Second, industrialized countries need to implement macroeconomic policies that reduce budget deficits, lower interest rates, and stabilize inflation and foreign currency fluctuations. This would help the economic development of all types of economies. When industrialized economies grow, their increased international trade often includes, and benefits, the developing economies.

Third, the industrialized nations need to provide more external financing to the developing countries. This financing could be direct aid, or it could be indirect aid to international agencies.

Fourth, the industrial economies need to support the economic development of developing countries. Traditionally, the majority of United States foreign aid has been granted to achieve political aims. Between one-half and two-thirds of all U.S. foreign aid has been used for military supplies and training, either directly or indirectly.

Priorities for the Developing Countries

As mentioned earlier, the World Bank also has a list of recommendations for the developing countries. The developing countries face the responsibility for directing their own economic development and future.

First, governments in developing countries need to invest more in people—education, family planning, nutrition, and health care. The wealth of any nation, as Adam Smith wrote, resides in the strength and vitality of its people.

Second, improve the climate of free enterprise. Many price controls, subsidies, and other regulations that restrict the free development of markets should be removed. The World Bank suggests that competitive markets—not politicians—make the WHAT, HOW, and FOR WHOM allocation decisions.

Third, open economies to free trade. Many developing economies have quotas, tariffs, and other barriers that are used to protect domestic jobs and infant industries. At the same time, however, the trade barriers protect inefficient industries and depress a country's standard of living. Countries that open their markets to the world will benefit from comparative advantage and will ultimately develop competitive specialties of their own.

Fourth, developing countries, like the industrialized ones, need to follow policies that curb inflation, reduce borrowing, and decrease deficits. Their policies also must allow market incentives such as profits, so that the economies can begin to sustain their own growth.

Investment in People

Priorities Investment in basic health care is an important priority for developing nations. ***What is the reasoning for investing in people?***

Section 2 Assessment

Checking for Understanding

1. **Main Idea** Describe the nature of economic development. Does development happen all at once? Explain.
2. **Key Terms** Define primitive equilibrium, takeoff.
3. **List** the stages of economic development.
4. **Describe** what actions industrialized countries can take to help developing countries.
5. **Describe** recommendations that the World Bank has for developing countries.

Applying Economic Concepts

6. **Primitive Equilibrium** Imagine that a society is in primitive equilibrium—nothing is changing internally to begin economic development. Describe an event that could be a potential source of change.

Critical Thinking

7. **Making Inferences** The International Bank for Reconstruction and Development was organized near the end of World War II. For what purpose do you think it was founded?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

BusinessWeek

DECEMBER 7, 1998

Newsclip

In 1951 the Indian Institutes of Technology (IIT) was founded. The school was established to produce an educated class to build dams, bridges, and power plants for the newly independent country. Today, IIT graduates are seen as the key to helping India prosper.

Whiz Kids

Some of the most prominent chief executives, presidents, entrepreneurs, and inventors in the world are graduates of IIT, India's elite institution of higher learning. Its impossibly high standards, compelling the mostly male student body to average fewer than five hours of sleep a night, produce [numerous] graduates who are masters at problem-solving. . . .

The rise of IITians, as they are known, is a telling example of how global capitalism works today. The best companies draw from around the world, and the result is a global class of worker: the highly educated, intensely ambitious college grad who seeks out a challenging career, even if it is thousands of miles from home. By rising to the top of Corporate America, these alumni lead all other Asians in their ability to reach the upper echelons of world-class companies. . . .

And the Indian government, to its credit, has not tried to keep these first class students at home. In many ways, the IIT grad is the hottest export India has ever produced. . . .

. . . Thousands of graduates have [immigrated] to the U.S., causing the Indian government anxiety over the brain drain of its brightest. A full 30% of the graduating class—over 500 students—headed to the U.S. for graduate degrees and better job opportunities in 1998. In the more popular computer-science programs, nearly 80% leave for Silicon Valley. . . . While IIT does offer graduate programs, students know that an advanced degree from a U.S. institution is the entry ticket to an American or global corporation—and big bucks.

. . . The bottom line for students and grads is that India has produced a world-class university at surprisingly little cost. By nurturing the schools, the government hopes to reap huge rewards as these grads invest in India and draw it further into the circle of global trade and prosperity.

Examining the Newsclip

1. **Understanding Cause and Effect** In general, how has global capitalism affected today's college student?
2. **Making Predictions** Do you think India will benefit as IIT graduates move into the global workplace? Why or why not?

Financing Economic Development

Study Guide

Main Idea

Economists suggest that developing countries can make progress by encouraging foreign direct investment, building human capital, and encouraging regional cooperation.

Reading Strategy

Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by describing what may result if resources are mobilized for the wrong reasons.

Mobilization of resources for wrong reasons → Effect

Key Terms

expropriation, soft loan, free-trade area, customs union, European Union (EU), euro, ASEAN, cartel, population density

Objectives

After studying this section, you will be able to:

1. **Describe** one internal and two external sources of funds for economic development.
2. **Explain** the role of international lending and developing agencies.
3. **Explain** how regional cooperation can assist economic growth.

Applying Economic Concepts

Growth and Development Do you think you would buy more products if you didn't have to pay tariffs? Read to find out why free-trade areas are helping developing nations today.

Cover Story

Is Dollarization on the Horizon?

NEW YORK (CNNfn)—Federal Reserve Chairman Alan Greenspan said Thursday that "dollarization" by Latin American countries might help the United States if it promoted stability in the region.

Salvadoran currency

Dollarization is when another country adopts the dollar instead of its own currency. Countries reportedly considering such a move include Mexico, Argentina and El Salvador.

Greenspan appeared with Deputy Treasury Secretary Lawrence Summers at a Senate Banking panel hearing to discuss issues that would arise if other countries wanted to adopt the dollar as their own currency.

—*CNNfn*, April 22, 1999

For a developing country to foster industries in which it has a comparative advantage, it needs capital. Funds may be needed, for example, to provide irrigation for farms or heavy equipment for mining. Capital is also needed to build roads and highways for bringing products to ports for shipment to the rest of the world.

Financial capital generally can come from different sources, but it is always hard to obtain unless the developing countries have a certain degree of financial stability. One interesting attempt to achieve financial stability, as you read in the cover story, involves the potential use of the United States dollar in place of existing domestic currencies.

Development With Internal Funds

Internal funds are an important source of capital. In many cases, they may be the only source of capital for a developing country. To generate these internal funds from savings, an economy must produce more than it consumes.

Savings in a Market Economy

If a developing country is modeled after a market economy, the incentive to save stems from the profit motive. Firms often try to borrow funds for various projects, and banks charge interest rates on savings that are set by the forces of supply and demand. If the demand for money is high, the rate will rise, and more saving will be encouraged. Saving, in turn, produces financial capital.

One economy that developed in this way was Hong Kong. Before reunification with China, government interfered very little, and people were free to pursue almost any economic activity they desired. By 1997, Hong Kong's per capita GNP was about 90 percent of that of the United States, and more than 40 times greater than China's.

STANDARD &POOR'S INFOBYTE

Brady Bonds Brady bonds provide developing nations a way to restructure their sovereign debt obligations to foreign commercial banks. In a Brady restructuring, a portion of the developing country's debt is forgiven with the balance being exchanged for various series of bonds. The maturity of these new obligations is extended, reducing the country's annual debt service requirements. To attract investors, Brady bonds are often backed by U.S. Treasury securities and offer investors attractive yields.

Savings in a Command Economy

Other developing countries, such as Cuba, the Dominican Republic, and Uganda, had command economies at one time or another. However, because the citizens were also poor, they had no ability to save on their own. Despite the poverty, their governments were still able to force savings on the economy. This was done by forcing people to work on farms, roads, or other projects the government thought were needed for economic development.

Unfortunately, history shows that although command economies can mobilize resources, they do not always use them to promote economic growth. More often, resources are mobilized for political reasons or personal gain. In addition, nearly all forced mobilizations fail to instill long-term incentives or work ethics in the people. When resources are mobilized for the wrong reasons, the cost in personal, economic, and political freedoms is higher than most people want to pay.

Development With External Funds

No matter what system of government a less developed country has, it is never easy to develop an economy with internal funds alone. Therefore, some developing countries try to obtain external funds. There are three ways they can do this.

One way a country can obtain external funds is to attract private funds from foreign investors who might be interested in the country's natural resources. This happened in the Middle East with its abundance of oil, in Chile with its abundance of copper, and in Asia with its abundance of mahogany and teakwood.

If foreign investments are to work, the arrangement must be beneficial to both the investor and the host country. Many investors are unwilling to take major risks unless they are sure that the developing country is politically stable. Developing countries that follow a policy of **expropriation**—the taking over of foreign property without some sort of payment in return—make it harder for all developing nations to attract foreign capital.

Another way to obtain external funds is through borrowing from foreign governments. The United States and other industrialized countries, including Canada and those in Western Europe, grant some aid to developing countries.

The former Soviet bloc also gave economic assistance to developing countries. More than 50 percent of its aid, however, went to allies such as Cuba, Ethiopia, Afghanistan, and Iraq. Like most other foreign aid, it was given mostly to promote political, rather than economic, ends.

A third way a country can get external financial assistance is by obtaining a loan from an international agency. The International Bank for Reconstruction and Development—part of the World Bank Group—helps developing countries with loans and guarantees of loans from private sources. In the past, many of the loans have been for projects such as dams, roads, and factories. More recently, loans have been made to developing nations in an effort to get them to change their economic policies.

Another part of the World Bank Group is the International Finance Corporation (IFC), an agency that invests in private businesses and other enterprises. The International Development Association (IDA) makes **soft loans**—loans that may never be paid back—to the neediest countries. The rates on IDA loans are interest-free and may be for periods of 35 or 40 years.

Countries can also get help from the IMF. After the Berlin Wall came down and the Soviet Union collapsed, a number of former Soviet bloc countries wanted to trade their currencies on global exchanges. The IMF provided loans to help with the conversion. Today, such currencies as the Hungarian *forint,* the Polish *zloty,* and the Czech Republic's *koruna* are listed on world markets. This is important because investors must be able to purchase the currencies of these countries to conduct international trade with them.

Regional Cooperation

Some countries have joined together to form a **free-trade area**—an agreement in which two or more countries reduce trade barriers and tariffs among themselves. The free-trade area does not try to set uniform tariffs for nonmembers. Other countries have formed a **customs union**—an agreement in which two or more countries abolish tariffs and trade restrictions among themselves and adopt uniform tariffs for nonmember countries.

The European Union

The most successful example of regional cooperation in the world today is the **European Union (EU).** The EU, formerly known as the European Community, started out as a customs union and now consists of the 15 member nations shown in **Figure 19.2** on page 536.

In January 1993, the EU became the single largest unified market—in terms of population and output—in the world, although the United States has since caught up in terms of GNP. The EU is a single market because there are no internal barriers regulating the flow of workers, financial capital, or goods and services. Citizens of the EU hold common passports, can vote in European elections, and can travel anywhere in the EU to work, shop, save, and invest.

The final stage of European integration is scheduled for 2002 when the EU introduces a single currency—the **euro**—to replace the majority of individual national currencies now issued by the member nations.

ASEAN

The economic success of the EU has encouraged other nations to try regional cooperation. In 1967 five nations—Indonesia, Malaysia, Singapore, the Philippines, and Thailand—formed the Association for Southeast Asian Nations, or ASEAN.

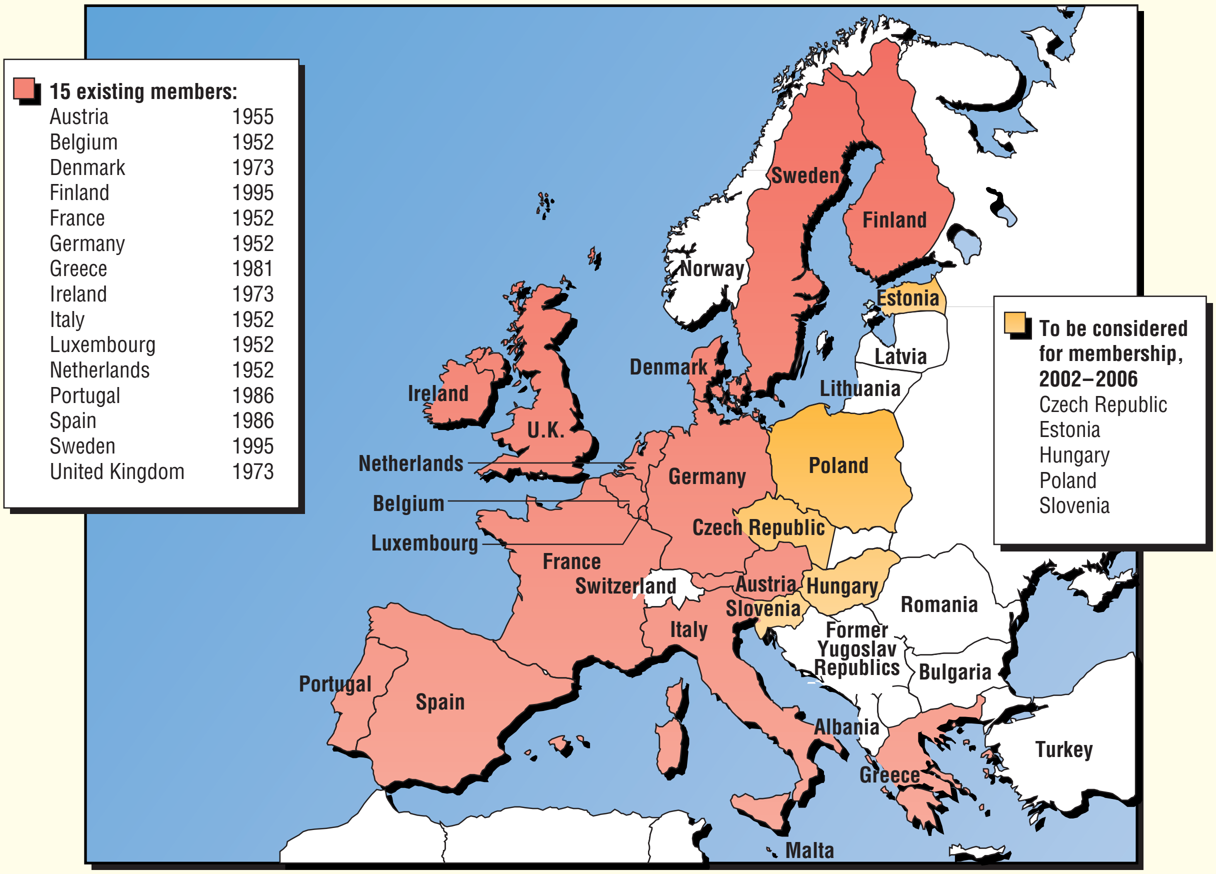
Today, **ASEAN** is a ten-nation group working to promote regional peace and stability, accelerate economic growth, and liberalize trade policies in order to become a free-trade area by 2008.

Development

External Funds This hydroelectric dam is part of the Uribante-Caparo development in the Venezuelan Andes. ***Through what agencies can developing countries borrow money to finance projects?***

ECONOMICS AT A GLANCE

Figure 19.2



Reading Maps The 15 members of the European Union currently make up the largest single market in the world, with more than 370 million people. **What are the benefits of membership in the EU?**

OPEC

A number of oil-producing nations have joined to form a **cartel**—a group of producers or sellers who agree to limit the production or sale of a product to control prices. OPEC's members were able to take advantage of a natural monopoly and push up world oil prices. Since it was organized in 1960, OPEC has successfully transferred trillions of dollars from the industrialized nations to the OPEC members as a result of higher prices paid for oil.

Even with all this financial capital, however, the growth rates of most OPEC nations were low by most standards. In Iran, revolution interrupted the development of the domestic economy. After Iraq invaded Kuwait, Iraq suffered huge losses during the Persian Gulf War. Overproduction by OPEC also pushed oil prices down.

The South Korean Success Story

One of the most successful developing nations is South Korea. In the early 1950s, South Korea was one of the poorest nations in Asia. It had the highest **population density**—number of people per square mile of land area—in the world. It also had a war-torn economy that had to be rebuilt.

The South Korean government opened its markets to world trade. In addition, the government focused only on a few industries so that its people could gain experience producing and exporting for world markets. Businesses in the South Korean economy first began to produce inexpensive toys and consumer goods for the world market. Next, they moved into textiles such as shirts, dresses, and sweaters. Then they invested in heavy industry, such as shipbuilding and steel manufacturing. Later, South Korea produced consumer and electronic goods such as radios, televisions, microwave ovens, and home computers. Most recently, the country has been making a strong bid as a leading producer of automobiles. The South Korean experience shows that a country can change a war-damaged economy to a well-developed, highly industrial one.

Economic Development

South Korea The Republic of Korea, also know as South Korea, overcame overwhelming odds to become the second largest economic power in Asia and the eleventh largest in the world. ***What plans did South Korea implement to bring about economic growth?***

Section 3 Assessment

Checking for Understanding

1. **Main Idea** What can a country do to encourage economic development?
2. **Key Terms** Define expropriation, soft loan, free-trade area, customs union, European Union (EU), euro, ASEAN, cartel, population density.
3. **Describe** one internal and two external sources of funds for economic development.
4. **Describe** the role of international lending and developing agencies.
5. **Explain** how regional cooperation aids economic growth.

Applying Economic Concepts

6. **Growth and Development** Provide an example to support the following statement: Economic growth in developing nations is often slowed by the internal political problems and external political goals of industrialized nations.

Critical Thinking

7. **Drawing Conclusions** Developing countries often need capital from foreign investors. What economic and political conditions serve to encourage this kind of investment?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

CRITICAL THINKING

Skill

Summarizing Information

Have you ever read something and just a short time later forgotten what it was all about? Summarizing information–reducing many sentences to just a few well-chosen phrases–helps you remember the main ideas and important facts contained in a longer reading selection.

Learning the Skill

To summarize information, follow these guidelines:

- Your summary should be much shorter than the reading selection.
- Your summary should contain the main ideas of the reading selection.
- Your summary should not contain your opinion. It should contain only the opinion of the person who wrote the selection.
- Your summary sentences and phrases should not be copied word for word from the selection. Write a summary in your own words to be sure that you understand the main ideas of the selection.

Memorial sculpture, Hiroshima Peace Park

Practicing the Skill

Read the selection below, then answer the questions that follow.

During the 1950s, foreign aid from industrialized countries was considered absolutely necessary for the economic growth of developing nations. European countries and Japan, just beginning to recover from the massive destruction of World War II, were unable to provide aid during that period. The United States, which had helped with Japan's and Europe's recovery, provided the largest share of aid to developing nations during that decade. When Europe and Japan became richer, the distribution burden shifted. From 1960 to 1990, the United States's percentage of total aid supplied by the Western nations to developing countries dropped from 60 percent to 17 percent.

1. What is the main idea of this paragraph?
2. What are the supporting details of the main idea?
3. Write a short summary that will help you remember what the paragraph is about.

Application Activity

Spend fifteen minutes reading and summarizing two articles on the front page of today's newspaper. Circle the articles and have a classmate ask you questions about them. How much were you able to remember after summarizing the information?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

Chapter 19 Summary

Section 1

Economic Development (pages 521–526)

- **Developing countries** have the same problems that industrialized countries have, only their problems are much larger.
- With more than 1.2 billion people in the world existing on an income of less than $1 a day, concern for developing countries is humanitarian as well as political.

- Developing countries face numerous obstacles, including population pressures from high **crude birthrates** and increasing **life expectancies.**
- A shortage of natural resources, limited education and technology, religion, large **external debts, capital flight,** corruption, and the aftermath of war all add to the problems of developing countries.
- The **IMF** and the **World Bank** are two international agencies that help with development.

Section 2

A Framework for Development

(pages 528–531)

- It helps to think of economic development as proceeding in stages, even if this does not always describe the pattern experienced by every nation.
- The stages include **primitive equilibrium,** breaking with primitive equilibrium, **takeoff,** semidevelopment, and high development.
- The World Bank recommends that developed nations reduce trade barriers, reform macroeconomic policies, increase financial support, and support the policy reforms of the developing countries.
- The World Bank also recommends that the developing countries themselves invest in people, improve the climate for enterprise, open their economies to international trade, and revise their macroeconomic policies.

Section 3

Financing Economic Development

(pages 533–537)

- Developing countries need to encourage saving to secure a domestic source of investment funds. Command economies often try to force saving by mobilizing resources in a manner that restricts individual freedoms.
- Attempts to secure capital through **expropriation** usually backfire because foreign investors become fearful of investing.
- External funds are sometimes available from foreign governments and banks; the World Bank and the IMF also provide considerable assistance.
- Some countries have been able to help themselves through regional cooperation in the form of a **free-trade area,** or a **customs union** such as the **European Union.**

- The ten ASEAN countries are working to develop a free-trade area by 2008.
- The oil-producing nations also organized a **cartel,** called OPEC, to increase the price of oil.
- South Korea is a striking example of a developing nation having achieved success: it has developed from a poor war-torn economy to the eleventh-largest economy in the world.

Chapter 19 Assessment and Activities

ECONOMICS Online

Self-Check Quiz Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 19—Self-Check Quizzes*** to prepare for the chapter test.

CLICK HERE

Identifying Key Terms

Write the key term that best completes the following sentences.

a. **population density**
b. **customs union**
c. **primitive equilibrium**
d. **external debt**
e. **capital flight**
f. **expropriation**
g. **free-trade area**
h. **cartel**
i. **crude birthrate**
j. **takeoff**

1. A(n) _____ is the formal arrangement to limit the production of a product.
2. A cooperative trade arrangement among nations that does not set uniform tariffs for nonmembers is called a(n) _____ .
3. A(n) _____ is a cooperative trade arrangement among nations that sets uniform tariffs for nonmembers.
4. A developing country may have a very high _____ , contributing to rapid population growth.
5. When _____ becomes too large, countries have difficulty paying the interest.
6. The least developed stage in economic development is called _____ .
7. The third stage of economic development is the _____ .
8. The problem of _____ occurs when corrupt officials take money out of the country and deposit it abroad.
9. When _____ takes place, it is harder for developing nations to attract foreign capital from industrialized countries.
10. The number of people per square mile of land is a measure of _____ .

Reviewing the Facts

Section 1 (pages 521–526)

1. **Identify** three reasons why industrialized countries are concerned about the problems of developing nations.
2. **Name** the condition in which the average number of births and deaths are approximately equal.
3. **Identify** two agencies that help developing economies.

Section 2 (pages 528–531)

4. **Describe** what happens in a developing country in the stage of breaking with primitive equilibrium.
5. **Identify** four changes that take place in the takeoff stage of economic development.
6. **List** the four World Bank recommendations for developing nations.

Section 3 (pages 533–537)

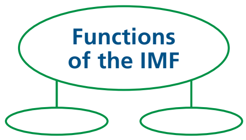
7. **Name** three sources of financial capital for development.
8. **Explain** how a developing country can attract foreign capital.
9. **List** three international agencies that provide funds for economic development.

Thinking Critically

1. **Predicting Consequences** What do you think would happen if industrialized nations and international agencies chose to withdraw support for developing nations?

Chapter 19 Assessment and Activities

2. **Summarizing Information** What are the functions of the IMF? Use a graphic organizer similar to the one below to help answer the question.



3. **Demonstrating Reasoned Judgment** Would it be effective policy for the United States to increase financial aid to developing nations, regardless of their internal political conditions or economic policies? Explain the reasoning behind your answer.
4. **Making Generalizations** Studies indicate that, in general, landlocked nations tend to have lower per capita income levels than surrounding nations that are bordered by oceans and seas. Why do you think this is the case?

Applying Economic Concepts

1. **Growth and Development** How will the economic growth and development of developing countries affect you in the future?
2. **Primitive Equilibrium** Why is it increasingly unlikely that countries in the world today will remain in the primitive equilibrium stage of economic development?
3. **Drawing Conclusions** Developing nations often need capital from foreign investors. What economic and political conditions serve to encourage this kind of investment?

Math Practice

Suppose that a small country has a per capita GNP of $20,000 and a population of 1,000,000. How large is the total GNP? If population is expected to grow by 20 percent in the next ten years, and if total GNP is only expected to be 10 percent larger, what will be the per capita GNP in 10 years?

Thinking Like an Economist

What advice would you give a developing nation that was trying to decide between a command-type economy and a market-based economy?

Technology Skill

Using E-Mail For one week, keep a journal of all the economic problems of developing nations that you hear reported in the news. List the countries in one column and their problems in a second column.

Using the information you collected, write a plan detailing how the United States could assist in alleviating some of the economic problems of a specific country. E-mail your plan to your local representative or legislator. Be sure to support your proposal with statistics, facts, quotes, and historical events.

Building Skills

Summarizing Information A summary is a list of the major points or themes of something. To summarize is to present those points or themes briefly and without details. Read the following excerpt, then summarize the main points.

A problem for many developing countries is a lack of infrastructure. Infrastructure refers to the physical developments necessary for efficient production and distribution of goods and services. Such things as roads, ports, electric generators, telephones, and sewers are considered infrastructure. Without these things, it is difficult for an economic system to function efficiently. The lack of infrastructure makes it impossible for such countries to compete successfully with more developed nations. Building an infrastructure is very expensive. Many developing nations cannot afford to invest in these improvements.

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

A Case Study:

SHOULD CHILD LABOR BE ABOLISHED?

Although it may surprise many Americans, child labor is prevalent in many parts of the world today, especially in developing countries. The estimates vary, but perhaps 200 million children under the age of 12 work regularly instead of going to school. Sometimes, the children start to work as soon as they are able; some of the youngest workers are just three years old.

Should the United States take steps to end child labor? Many people answer that question with a resounding "Yes!" They hold that child labor is immoral. The children, they say, are virtual slaves. Many are treated harshly, even cruelly—forced to work 12-hour days at mind-dulling yet dangerous tasks. These activists have put forth a variety of proposals aimed at eliminating child labor throughout the world.

Other people, however, oppose any such action. While deploring any mistreatment of children, they emphasize the contexts in which the children live. The cultures in many developing countries, they point out, support children working, while the state of the economies of these countries often requires it. Westerners, they say, may oppose child labor, but are in no position to force their beliefs onto other countries.

As you read the selections, ask yourself: Should the United States work to abolish child labor in developing countries?

PRO Child Labor Is "Reprehensible"

[There is] an unmistakable trend . . . toward convergence on global condemnation of child labor. . . .

However, . . . global child labor continues to flourish. The movement toward convergence in law seems strangely detached from everyday experience. Because it is illegal almost everywhere, child labor remains largely a hidden phenomenon, confined to the back channels and informal sectors of many economies, including advanced economies. The simple fact that child labor remains widespread would seem to belie any convergence of global sentiment around its eradication. The sheer magnitude of the problem suggests a movement in law quite divergent from plain reality. The gross dimensions of the problem provide alarming support for the conclusion that cultural relativism may be prevailing–that local exceptionalism may dominate over convergent trends.

But examination of the history of child labor in advanced economies brings the argument full circle. While it can be argued that use of child labor is particular to a nation's current stage of economic development (a relativist argument), it also appears to be true, in the main, that advanced nations, always and everywhere, have grown beyond their heavy reliance on child labor and, thus, every nation should eventually be expected to do so (a universalist argument). When the debate is shifted in this way, the relevant question becomes: is heavy reliance on child labor necessary to economic development? We have shown that it is not; that it has always been economically inefficient and injurious. . . .

Child labor is inappropriate because, first, it is (or will come to be seen as) morally reprehensible and, second, it is economically inefficient and injurious. Case closed.

–Hugh D. Hindman and Charles G. Smith, *Journal of Business Ethics*

CON "Cultural Interference Is Not the Answer"

Ah, America! Thy commandeering ways!

We, the self-styled world's policeman, are seeing the error in our authoritarianism, our imposition of U.S. values on foreign cultures, our self-righteous yet mistaken belief that our way is the best way, indeed, the only way. . . . I'm talking about child labor. . . .

Even the previously unbending International Labor Organization has recognized the validity of not trying to force other cultures to adopt Western ideals. Several years ago it amended its broad-brush policy against all child labor after hearing from children in a variety of cultures at an international conference on child labor. . . .

Americans are finding out our lush economy provides luxuries to American families and children not afforded in many other countries, particularly poor ones. Most developing countries rely heavily on child labor. . . .

In developing countries, children are considered economic commodities. Parents love their children, of course, but they rely on them to help support the family and that is considered normal. As a result, the more children a poor family has, the greater a labor pool it possesses.

Former Pakistani Prime Minister Benazir Bhutto once told me that her country, one of the worst offenders, has passed laws that ban child labor. But every time she would try to enforce them, hundreds of thousands of parents would storm her residence. . . .

Every American would tell you our goal is to wipe out child labor completely: to bring developing nations on par with us economically so they no longer need to make 6-year-olds toil.

But . . . the fear is cultural, not economic, extinction. . . .

[W]e'll just have to learn to watch and worry, because, as we are just beginning to recognize, cultural interference is not the answer.

–Bonnie Erbe, *Journal of Commerce*

Analyzing the Issue

1. What are two basic objections that Hindman and Smith raise against child labor?
2. Would Hindman and Smith consider Erbe's argument "relativist" or "universalist"? Explain.
3. Do you think the United States should take steps to end child labor in developing countries? Explain your position.

CHAPTER 20

Global Economic Challenges

Economics & You

In order to accomplish economic development, the nations of the world have to overcome the problems that hinder their economic growth and they must make use of their resources effectively. To learn more about the challenges and opportunities of a global economy, view the Chapter 27 video lesson:

Global Economic Challenges

ECONOMICS Online

Chapter Overview Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 20—Chapter Overviews*** to preview chapter information.

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Dish-shaped solar power reflectors at a solar power station

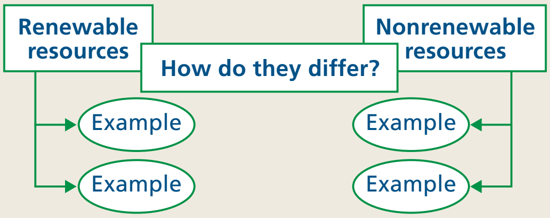
SECTION 1

The Global Demand for Resources

Study Guide

Main Idea
Worldwide economic challenges include overpopulation, food shortages, resource depletion, and environmental pollution.

Reading Strategy
Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by explaining the difference between renewable and nonrenewable energy resources and providing two examples of each.



Key Terms
subsistence, nonrenewable resources, embargo, gasohol, aquifer

Objectives
After studying this section, you will be able to:
1. **Explain** Malthus's views on population growth.
2. **Explain** the importance of conserving nonrenewable resources.
3. **List** ways that people are using renewable energy resources to conserve scarce resources.
4. **Identify** other resources endangered by population growth.

Applying Economic Concepts
Scarcity Have you ever had a water shortage in your area? Read to find out how the price system works to solve this problem.

Cover Story

Six Billion People on Earth

WASHINGTON (AP)—Chances are it will be a boy born in the Third World on Oct. 12 [1999], but no one will know exactly which child pushes the world's population to 6 billion.


Earth's population surpassed 6 billion in 1999.

It took most of the age of humanity to mark the first billion in 1804 and more than a century to mark the second. But now the world is adding a billion every dozen years or so.

Demographers believe growth will slow down, [but] . . . median U.N. projections say it will take 14 years to add another billion people . . . . That's calculated from the yearly rate of population increase of about 1.4 percent . . .

—*The Cincinnati Post*, June 19, 1999

Scarcity has been defined as the fundamental economic problem. You experience scarcity at the personal level, and scarcity is also a problem at the national level, even for relatively prosperous nations such as the United States. At the global level, scarcity reveals itself through food, energy, and other resource shortages—all of which are compounded as world population grows.

The world population has now surpassed 6 billion, and, as you read in the cover story, the next billion will be here before long. In many respects, the earth is a very small planet, and it seems to be getting smaller every day.

The Global Population Issue

Population growth has fascinated the world ever since Thomas Malthus published his *Essay on the Principles of Population* in 1798. His views, published over 200 years ago, are still relevant because of the earth's growing population and its demand for resources.

Malthus: Views on Population

Thomas Malthus argued that population would grow faster than its ability to feed itself. The problem, he stated, was that population tended to grow geometrically, as in the number sequence 1, 2, 4, 8, 16, 32, 64, and so on. The ability of the earth to feed people, however, would grow at a slower and more constant rate, such as 1, 2, 3, 4, 5, and so on. Eventually, according to Malthus, the masses of the world would be reduced to a condition of **subsistence**—the state in which a population produces only enough to support itself.

In many countries—especially in the larger cities of the developing world—poverty is widespread. The Indian city of Calcutta, for example, has about 14 million people. Calcutta is one of the poorest and most crowded cities in the world. Hundreds of thousands of street dwellers beg and search for food in the city dumps and refuse piles. At night they sleep in the streets. Similar conditions exist in other parts of the world. In these places, the Malthusian prediction of a subsistence standard of living is a cruel reality.

Was Malthus Wrong?

In many other parts of the world, conditions are much better. Malthus did not foresee the enormous advances in productivity that have allowed an increasing standard of living to accompany a growing population. He also did not foresee that families might choose to have fewer children. In some countries, such as Japan, for example, the population is actually shrinking.

Malthus's predictions may not have been entirely accurate for the industrialized countries, but they still have long-term consequences for all nations. Today, for example, population pressures in other parts of the world are causing problems for many industrialized countries, including the United States, which is besieged by illegal immigrants from China, Mexico, and Haiti. As a result, many experts argue that it is in everyone's interest to control global population growth.

World Population Trends

Comparative world population growth rates are shown in **Figure 20.1.** For the world as a whole, the annual growth is approximately 1.4 percent a year. Although this may not seem very fast, the consequences can be enormous over time. Every year, the population increase is almost the equivalent of adding another Mexico to the world. If the population keeps growing at this rate, it will reach about 8 billion by 2020, and nearly 12 billion by 2050. At this rate, the population of the world will almost double from the time you graduate from high school until you retire at age 65.

Nonrenewable Energy Resources

Population pressure adds to the depletion of many important resources, and energy is one of these resources. Energy is necessary for production, and energy makes our lives more comfortable. In the form of gasoline, it powers cars. In the form of gas and electricity, it heats and cools homes.

Most of the energy we use comes from **nonrenewable resources**—resources that cannot be replenished once they are used. The major nonrenewable resource category—fossil fuels—is being consumed at an alarming rate and may only last for a few more generations at current consumption levels.

Oil

Oil is the biggest category of nonrenewable energy in use today—primarily because it was so inexpensive during much of the 1900s. Oil was also much more convenient to use than natural gas or coal. Because it could be refined into low-cost gasoline, automobiles were large, heavy, and usually got poor gas mileage.

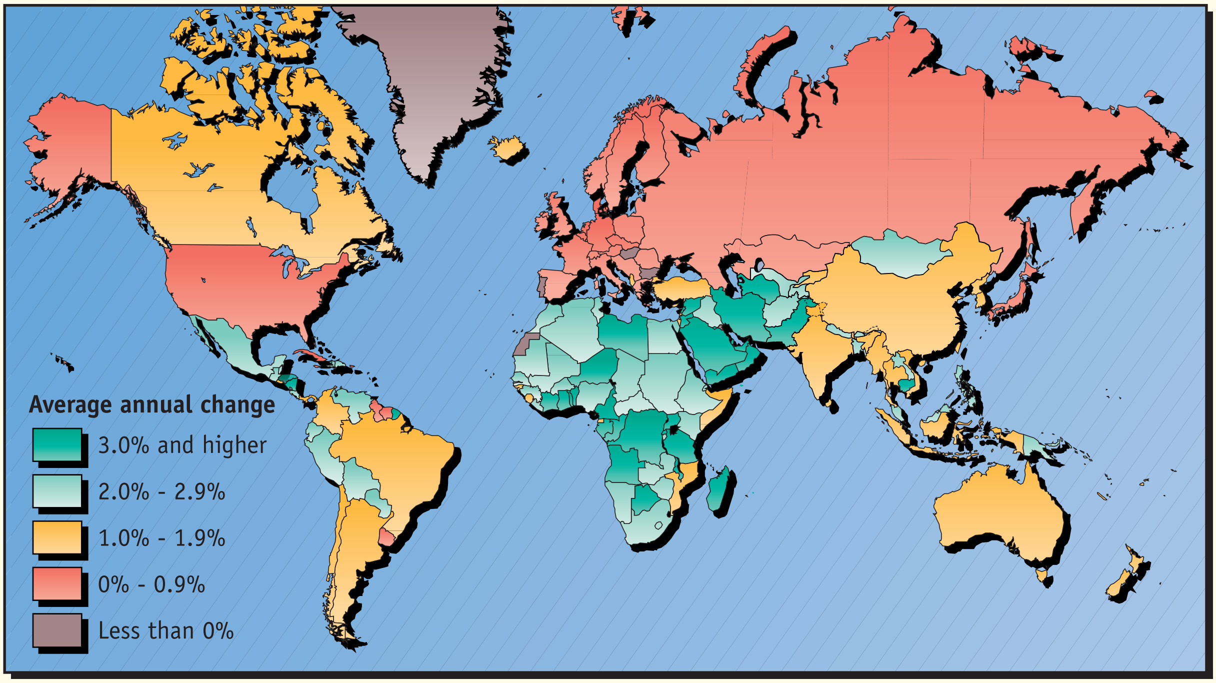
The low cost of oil even affected living habits. People moved to the suburbs and then spent hours traveling to and from their jobs. Gasoline was so inexpensive that trains and city busses never became as important as the automobile.

In 1973, however, the oil-producing countries of the Middle East placed an **embargo**—a restriction on the export or import of a commodity in trade—on oil sales to the West. The embargo caused energy shortages in many parts of the world, driving the price of oil from $5 to more than $35 a barrel. Prices came

ECONOMICS AT A GLANCE

Figure 20.1

World Population Growth Rates



Source: *The World Bank Atlas,* 1999

Reading Maps The map shows the population growth rates of the countries of the world. **How does the annual growth rate in China compare with that of Brazil?**

ECONOMICS Online

Visit epp.glencoe.com and click on ***Textbook Updates—Chapter 20*** for an update of the data.

CLICK HERE

down slowly after that, reaching their inflation-adjusted pre-embargo levels in the mid-1990s. In late 1998, the price of oil even dropped below $9 a barrel, although it has since rebounded.

With the exception of the 20 years following the oil embargo, the world was flooded with, and grew up on, cheap oil. The oil was eagerly consumed and, because it is a nonrenewable resource, is gone forever.

Natural Gas

This category constitutes our second most important energy source, accounting for nearly 25 percent of energy consumption in the United States. Historically, natural gas was more difficult to transport and use than oil, and so it did not become an important energy source until much later. Eventually inexpensive natural gas became popular as an industrial fuel, and so many factories and industrial technologies were built around it.

Coal

Coal is the third-largest nonrenewable resource used in the United States. While it was the first nonrenewable resource to be used on a large scale, oil and natural gas soon displaced it because they are more convenient to use.

CONTENTS

Today, nearly two-thirds of the world's known coal reserves are in the United States, Russia, and China. Coal is the most plentiful fossil fuel in the world, but even these supplies will eventually run out. Estimates based on the present rate of consumption indicate that the reserves will last about 200 years.

Nuclear Energy

Nuclear energy is the newest and fourth largest source of nonrenewable energy, accounting for nearly 8 percent of all energy used in the United States. The future of nuclear power is uncertain, however, for a number of reasons.

One of the reasons is cost. Nuclear reactors are expensive to build and maintain. Second, nuclear energy produces highly hazardous byproducts, the safe disposal of which poses a major problem.

Finally, there is always some chance that a nuclear plant will fail, or that another accident would happen like the 1979 near-meltdown at Three Mile Island in Pennsylvania. The 1986 meltdown of the reactor in Chernobyl, Ukraine, served as another reminder of the nuclear power hazards.

Renewable Energy Resources

Before 1973, the low price of oil gave everyone very little incentive to develop alternative energy sources. Renewable energy resources became more popular after the oil embargo, but today they still account for a small portion of the total energy we consume.

Hydroelectric Power

Historically, hydropower was used to power the mills and factories of the Northeast in the 1800s. The power was reliable, and its source—water—was free at the time. Later, a number of larger generators at the Hoover Dam and the Tennessee Valley Authority were completed to generate power on a much larger scale. Aside from these newer projects, most dams were small and could not distribute power very efficiently to other locations.

When oil was obtained cheaply from the Middle East, hydroelectric power became less important. By the late 1950s, many of the commercial power dams in the United States had been abandoned. When oil became more expensive, however, steps

Natural Resources

Energy Demand for scarce resources is one of the most pressing problems facing all nations. ***What are nonrenewable energy resources?***

were taken to bring some of the dams back into use. Today, hydroelectricpower is our most important renewable energy source, accounting for half of all renewable energy consumed in the United States.

Biomass

Energy made from biomass–wood and wood waste, peat, municipal solid waste, straw, corn, tires, landfill gasses, fish oils, and other waste–is the second most important category of renewable energy sources. While relatively new, this category accounts for approximately 40 percent of all renewable energy consumed in the United States today.

Ethanol is grain alcohol made from corn. Ethanol is used to make **gasohol**–a fuel that is a mixture of 90 percent unleaded gasoline and 10 percent ethanol. Although gasohol has not been accepted as quickly as supporters first hoped, it still has a small share of the market in some areas.

Other, lesser-known alternatives are also being used. Major food firms have made progress in converting chicken waste to fuel in the form of methane gas. This gas can then be recycled for industrial and commercial use. Over 100 cities are currently recovering and using methane gas generated in municipal landfills when the landfill waste decomposes.

Solar Energy

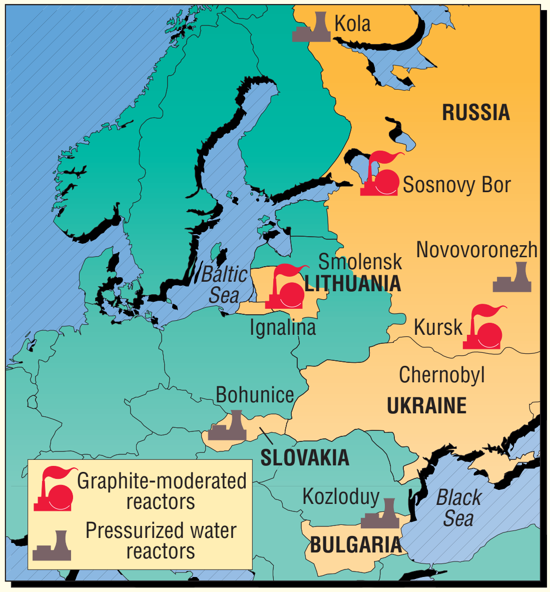
Solar power is the third largest source of renewable energy. Solar power has never been effectively harnessed, however, and it did not get much attention at first. After the oil embargo, the federal government began issuing grants to researchers to find ways to reduce the cost of solar energy. While solar power holds much promise, it only accounts for a fraction of the renewable energy used today.

Wind Power

The fourth-largest category of renewable energy sources is wind-generated electricity. In the early 1980s many wind farms were built, each of which produced enough electricity to power a medium-sized city. California is the largest producer of wind-generated energy, but it can also be found in Texas, Minnesota, Vermont, Hawaii, and Iowa.

ECONOMICS AT A GLANCE **Figure 20.2**

The Most Dangerous Nuclear Reactors



Reading Maps Nuclear reactors serve three general purposes. Civilian reactors generate energy for electricity and sometimes also steam for heating. Military reactors create materials that can be used in nuclear weapons. Research reactors are used to develop weapons or energy production technology. **How many nuclear power plants are located in the former Soviet Union and Eastern Europe?**

While this is still a small category, wind-generated electricity is an important source of power in areas such as islands or remote peninsulas where it is difficult to obtain other forms of energy.

Other Resources

Resources other than those used to generate energy–water and land in particular–may also be in danger. In the past, American concern with water focused mainly on the pollution of the

CYBERNOMICS SPOTLIGHT

Science

Biotechnology is making an impact in the world economy. Genetic engineering allows researchers to place a gene into a plant in order to create a new plant that can grow twice as fast. Agricultural experts estimate that within the next 40 years the world population will increase by 50 percent, which means farmers will need to produce more crops than ever before. To sustain economic growth in the developing world, experts believe that food productivity improvements must be made using this type of biotechnology.

country's waterways. Today, however, the focus has shifted to the availability of water and the realization that water is in critical supply in many parts of the country.

More than 80 percent of the water consumed in the United States is used in agriculture, and most of this water is used in surface irrigation, which has a high evaporation rate. As a result, much water is lost into the atmosphere.

Farmers have been able to tap large sources of water from rivers, streams, ponds, and **aquifers**—underground, water-bearing rock formations. Aquifers supply nearly 40 percent of the water that farmers use and are also the source of fresh water for many communities.

One of the largest aquifers in the country is the Ogallala Aquifer, which supplies water to the High Plains states from Texas to Nebraska. So much water has been pumped out, however, that the aquifer's water table has been dropping about three feet a year. Some experts even predict that the Ogallala Aquifer will run out of water in the next 40 or 50 years.

The water shortage is also a problem in southern California. Over the years, plans have been proposed and projects have been undertaken to bring in water from areas hundreds of miles away.

Land is another valuable natural resource subject to the demands of a growing world population. Land, however, is different from other resources because there is only a fixed supply that cannot be moved from one place to another.

A growing population has the effect of reducing the amount of land available for agriculture. As communities grow, factories, roads, and houses are built on the fertile land near the rivers. The development of this land forces the farmers to move to the outskirts. The phenomenon, now known as urban sprawl, has claimed some of our finest farmland—covering fertile fields with expressways, shopping centers, and housing developments.

Section 1 Assessment

Checking for Understanding

1. **Main Idea** How does population growth affect world resources?
2. **Key Terms** Define subsistence, nonrenewable resources, embargo, gasohol, aquifer.
3. **Describe** how Malthus believed population growth would affect the future of the planet.
4. **Identify** the importance of conserving nonrenewable resources.
5. **List** the major renewable resources today.
6. **Describe** the effects that a growing population has on scarce resources such as aquifers.

Applying Economic Concepts

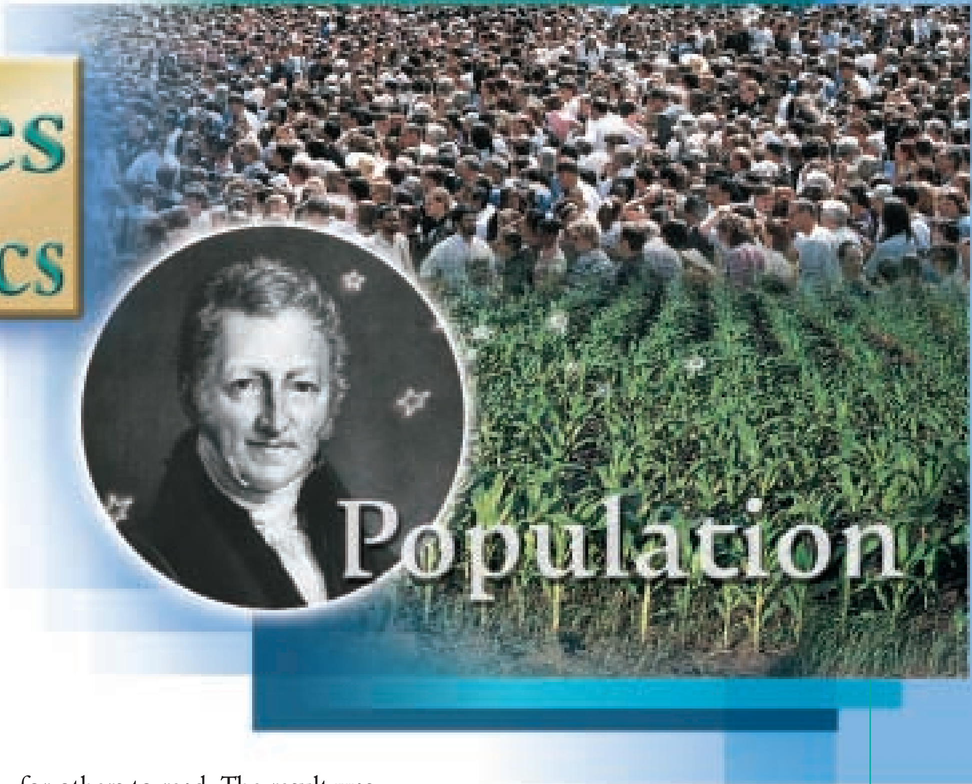
7. **Scarcity** During the oil embargo, many people openly advocated nonprice gasoline rationing. Some favored allowing each automobile owner to use 10 gallons per week. What are the pros and cons of such a mandatory rationing program?

Critical Thinking

8. **Making Comparisons** How do renewable resources differ from nonrenewable resources?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

Profiles in Economics



A Classical Economist: Thomas Malthus

(1766–1834)

Thomas Malthus was an English economist, sociologist, and member of the clergy who pioneered modern population study. He was a kind, gentle person dedicated to his father and his church. He was also the economist who is credited with giving economics the title of "the dismal science."

EDUCATION

Malthus was born to wealthy parents and was educated at home by his father and by private tutors. At age 18 he enrolled at Jesus College, Cambridge, to study mathematics and the classics.

While he was away from home, Malthus and his father often exchanged letters debating the popular issues of the day. At one point, the elder Malthus became fascinated with a popular utopian vision that promised eventual peace, prosperity, and equality for all. Malthus attacked the argument in a 50,000-word letter to his father. The elder Malthus was so impressed that he encouraged Thomas to publish the treatise for others to read. The result was *An Essay on the Principle of Population as It Affects the Future Improvement of Society,* published in 1798.

POPULATION THEORY

The book was an instant success that was to change forever the way people viewed population. In it, Malthus argued that poverty and distress would be the eventual fate of people, not the popular utopian vision. He reasoned that population would increase at a geometric rate (1, 2, 4, 8, 16, . . .), while food supplies would increase at an arithmetic rate (1, 2, 3, 4, 5, . . .).

According to this progression, population growth would eventually outstrip the available food supply, resulting in famine, misery, and a subsistence standard of living for the masses.

At first, Malthus thought only three factors could check the growth of population: war, famine, and disease. Several years later, as he refined his ideas, he added a fourth check: moral restraint. Separately or together, these factors could raise the death rate, lower the birthrate, or both. In Malthus's view, however, these restraints on population growth would not be enough to prevent most of the world from forever remaining at the subsistence level. Despite his considerable accomplishments in other aspects of economics, Malthus is best remembered for his pessimistic views on population.

Examining the Profile

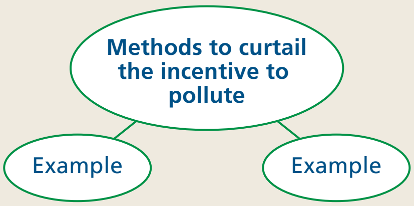
1. **Evaluating Information** Do you agree or disagree with Malthus's predictions about population? Why or why not?
2. **For Further Research** Find out what Malthus's other contributions to economics were.

Economic Incentives and Resources

Study Guide

Main Idea
Incentives help preserve scarce resources.

Reading Strategy
Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by providing examples of ways to curtail the incentive to pollute.



Key Terms
glut, pollution, acid rain, pollution permit

Objectives
After studying this section, you will be able to:
1. **Explain** how the price system helps conserve water, natural gas, and oil.
2. **Describe** government efforts to limit pollution.
3. **State** the importance of using resources wisely.

Applying Economic Concepts
Markets and Prices Have you ever traveled to different gasoline stations to get the cheapest price for a gallon of gas? Read to find out how markets and prices operate in the free enterprise system.

Cover Story

Lawmakers Can Recycling in House

Recycling area

WASHINGTON (AP)—The House of Representatives has rejected mandatory recycling for its offices.

The House has had a voluntary recycling program for a decade. But the Associated Press reported last month that most congressional offices were still mixing aluminum cans, bottles and different grades of paper. Many federal agencies and local governments separate their trash and sell recyclable material.

—*The Washington Post*, June 11, 1999

Economic systems require incentives to make them work smoothly. In a market economy, incentives such as the profit motive and prices can be used to preserve scarce resources.

Economic incentives are important because they tend to encourage more widespread and lasting results than other programs that rely on conscience, patriotism, or other motivations. Those who create them, as you read in the cover story, often abandon voluntary conservation programs.

The Price System

With resources becoming increasingly scarce, it is important to see how the price system contributes to the conservation—or lack—of scarce resources. The examples that follow illustrate this influence.

The higher price for oil after 1973 dramatically affected the production of oil. When oil was priced below $5 a barrel, few countries were willing to devote large resources to retrieve it. When the price increased to $35 and more, many countries increased their production almost overnight. At the same time, interest in alternative energy sources soared, and countries poured billions into energy-research projects ranging from shale oil to solar power.

By 1981, however, prices began to fall because of a worldwide **glut**—a substantial oversupply—of oil. A decline in demand caused by a recession contributed to the worldwide oversupply. People had also learned to conserve energy, which further reduced the demand for oil.

The collective impact of the increase in world supply and the decline in demand caused OPEC to lose some of its ability to control the supply of oil. This control slipped even further after the Persian Gulf War, when some OPEC members increased oil production to replenish their financial reserves depleted during the war. Finally, oil prices reached their pre-embargo levels in the mid-1990s.

Lower oil prices had several consequences. First, the search for alternative energy sources began to wane. Second, the exploration for new oil slowed dramatically because companies already had enough oil. Third, consumers changed their spending habits again. New houses became large once more, and consumers opted for low-mileage, sport utility vehicles instead of fuel-efficient economy cars.

In the end, the very mechanism that encouraged people to conserve energy when oil prices were high—the price system—did exactly the opposite when oil prices went down again.

When farmers pump water out of the ground to water their crops, they use pumps driven by electricity or natural gas. When water tables fall because of pumping, it costs more to pump the water. The increased cost of pumping encourages everyone to use it more efficiently, thus conserving a scarce resource.

In time, the falling water table makes some of the shallow wells useless, requiring deeper and more costly wells to be drilled. At this point, the price system will affect farming decisions again. Deeper wells will be dug for the most profitable crops, while marginal and unprofitable crops will be abandoned.

Ultimately, the price system works to establish an equilibrium between the rising cost of obtaining water and the profitability of the crops grown with the water. Although some crops and fields will be abandoned, they are likely to be the ones that were the least productive in the first place. As a result, the actual amount of lost agricultural output will not be that large.

When the price of natural gas was low in the 1960s, the quantity demanded was high. Because government regulated the price, however, producers had little incentive to increase its production.

Congress then tried to stimulate gas discovery and production by lifting the price controls on deep gas-pockets of natural gas, 15,000 feet or more below the earth's surface. The price of this gas then rose to three or four times its previous level, causing even more exploration for deep gas. Later, all gas price controls were removed, which encouraged even more production.

Conservation

The Price System Surface irrigation systems are fairly common in the United States. ***How does the price system affect farming decisions?***

The lack of interest in drilling for shallow gas was consistent with the law of supply, which maintains that the lower the price paid to producers, the less will be brought to market. Also consistent with the law of supply was the effort by producers to produce more of the deregulated deep gas when its price went up.

Pollution and Economic Incentives

Pollution is the contamination of air, water, or soil by the discharge of poisonous or noxious substances. Pollution is a problem that most countries face today.

Careers

EPA Inspector

The Environmental Protection Agency (EPA) is the federal agency responsible for protecting the environment. It employs thousands of inspectors to supervise enforcement of pollution control laws and regulations.

The Work

EPA inspectors examine air, water, and soil for evidence of pollution. Investigating the cause and scope of pollution requires inspectors to visit sites where pollution might occur and test for pollutants and collect samples for analysis. They monitor the air quality of major cities and of industrial sites. After completing their examination, EPA inspectors put together reports of their findings and initiate action to stop further pollution.

Qualifications

EPA inspectors generally have a college education with a specialization in environmental or biological science, plus several years of experience in the field. As with most government jobs, EPA applicants must pass a civil service examination.

The Incentive to Pollute

Pollution does not occur on its own: it occurs because people and firms have an incentive to pollute. If that incentive can be removed, pollution will be less of a problem.

For years, factories have located along the banks of rivers so they could dump their refuse into the moving waters. Some factories that generated smoke and other air pollutants located farther from the water, but their tall smokestacks still blew the pollutants long distances. Others tried to avoid the problem by digging refuse pits on their property and burying their toxic wastes.

In all three situations, factory owners were trying to lower production costs by using the environment as a giant waste-disposal system. From an economic point of view, the reasoning was sound. Firms get ahead when they lower production costs. Those who produce the most at the least cost make the most profits.

The cost of pollution to society as a whole, however, is huge. For example, **acid rain**—a mixture of water and sulfur dioxide that makes a mild form of sulfuric acid—falls over much of North America, damaging countless rivers and streams. Fertilizer buildup and raw sewage runoff poison ecosystems in other areas. The damage caused by pollution is extensive, but it can be controlled. One way to control pollution is through legislated standards. Another way is through economic incentives.

Controlling Pollution

Legislated standards include laws that specify the minimum standards of purity for air, water, and auto emissions. Congress, for example, has declared that all automobiles sold in the United States must meet certain pollution standards.

Legislated standards can be effective, but they are generally inflexible. Once a standard is set, a firm has to meet it or cease production. Because of this, many firms lobby extensively to exempt their industry from the pollution controls.

Another method of controlling pollution is to have companies pay taxes on the amount of pollutants they release. The size of the tax would depend on the severity of the pollution and the quantity of toxic substances being released.

Fighting Pollution

The Incentive to Pollute Pollution is one of the painful by-products of modern life. Damage caused by pollution is extensive. ***What methods are used to hinder the incentive to pollute?***

Suppose a community wants to reduce air pollution caused by four factories, each of which releases large quantities of coal dust. A $50 tax on every ton of coal dust released into the air would be applied to each factory. Devices attached to the top of the factory's smokestacks would measure the amount of dust released during a given period, and the factory would be billed accordingly.

Each company would then have the choice of paying the tax or removing the pollutants themselves. This tax approach does not try to remove all pollution. It does, however, allow individual companies freedom of choice. It also provides flexibility that legislated standards lack–and may even prevent some plants from closing entirely.

Some firms would rather pay the tax than clean up their own pollution. These firms, however, help fund the pollution clean-up campaign. Consumers will not have to fund these efforts out of their income, sales, or property taxes.

Pollution Permits

The Environmental Protection Agency (EPA) currently uses a similar system to reduce sulfur dioxide emissions at coal-burning electric utilities. Sulfur dioxide emissions from the burning of coal and oil react with water and oxygen to form compounds that fall to the earth as acid rain. The EPA's target is to ultimately reduce sulfur dioxide emissions to a level of nine million tons per year.

Student Web Activity Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 20—Student Web Activities*** for an activity on the Environmental Protection Agency.

Issuing Permits

The EPA started its program by issuing sulfur dioxide **pollution permits**—federal permits allowing public utilities to release pollutants into the air—in 1993. Utilities are not allowed to operate without them, but if a utility has more permits than it needs, it can sell them in one-ton increments. Thus, utilities that want to spend money on emissions cleanup could sell their permits, and use the cash to clean up their emissions. Those who prefer to purchase and use the permits can do so.

The first set of pollution permits went on sale in March 1993 at the Chicago Board of Trade. The one-ton permits brought prices ranging from $122 to $450 each. The EPA issued additional permits in successive years, but fewer permits will be issued as time goes on, making them scarcer and more expensive. Ultimately, the utilities will either have to pay very high prices for the permits, or they will have to buy additional antipollution devices.

Advantages

The system also has advantages for environmentalists who wanted utilities to reduce pollution at even faster rates. Several environmental groups purchased the pollution permits with their own funds, making them scarcer and therefore more expensive, for the utilities.

Did you know?

Global Warming Most climatologists agree that the earth is likely to warm by as much as 2° to 9° F over the next 50 to 60 years. Human activities have released gasses that trap in the sun's rays and heat the earth. Scientists believe that polar caps will begin to melt, raising sea levels from at least a foot to as much as 6.6 feet in the next century. An estimated one-third of the world's population who live within 40 miles of the sea could be facing severe flooding and depletion of their freshwater sources.

Using Resources Wisely

The resource challenge is vital to a growing global economy. Resources become scarce when the quantity demanded for them is greater than the quantity supplied. In a market economy, the price system plays a major role in the allocation of resources. It tells consumers when resources are scarce. It also helps decision makers allocate resources more wisely.

Economists who understand the workings of a market economy are optimistic about the future, especially if the price system is allowed to function and fulfill its role in the economy. As long as the price "system" is allowed to operate, we will never suddenly run out of an endangered resource.

Section 2 Assessment

Checking for Understanding

1. **Main Idea** What are two incentives that can be used to preserve scarce resources in a market economy?
2. **Key Terms** Define glut, pollution, acid rain, pollution permit.
3. **Describe** how the price system helps conserve water, natural gas, and oil.
4. **Identify** the ways that the government tries to limit pollution.
5. **Explain** why resources should be used wisely.

Applying Economic Concepts

6. **Markets and Prices** Suppose that the demand for natural gas increases sharply because of a series of extremely harsh winters. How would a price increase affect gas usage as well as research efforts by natural gas companies?

Critical Thinking

7. **Making Comparisons** How do legislated standards and economic incentives differ in regard to pollution control?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

BusinessWeek

MAY 24, 1999

Newsclip

Foreign plants and animals are invading North America as a result of increased global trade and tourism. It is estimated that invasive species cost the U.S. more than $122 billion a year in damages.

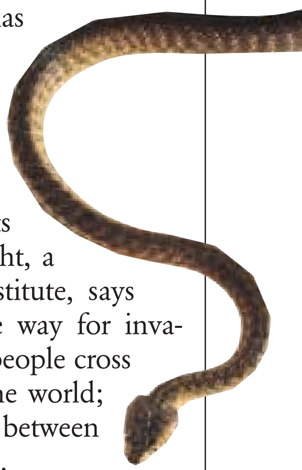
They're Here, and They're Taking Over

Bioinvasion, the spread of nonnative species, is fast becoming one of our most costly ecological problems as it disrupts food and agriculture, destroys wetlands, interferes with shipping, and drastically alters natural habitats. . . .

. . . The list of troublemakers include noxious weeds ($35 billion), harmful insects ($25 billion), and organisms, such as the AIDS virus and cholera, that cause human disease ($6.5 billion). . . .

There is also a huge untallied cost. Exotic species destroy the ecosystems that support native species, leaving them nowhere to go. . . .

Jack Russell terriers sniffing for snakes in cargo at Guam airport



In Guam, the brown tree snake has eradicated 9 lizard species and 10 types of forest bird. . . .

In many ways, bioinvasion is the dark side of globalization. With more and more goods entering the country, it's easier for pests to stow away. Christopher J. Bright, a researcher at the Worldwatch Institute, says booming tourism also opens the way for invasions. Every day, some 2 million people cross an international border around the world; every week, a million people move between developed and developing nations.

Efforts to control the menace have been far too fragmented. There are 24 federal agencies with some authority to regulate nonnative species, and it has been difficult to coordinate their efforts. . . .

. . . Under the current system, an import is deemed safe unless it's on a list of organisms known to be harmful. Often, by the time federal regulators have the evidence to blacklist a particular species, it's too late. . . .

Ecologists would prefer a "white-list" law, one that bans entry of plants and animals until they're proven innocent. New Zealand and Australia already have such laws, but some U.S. officials worry that such a policy could alienate trading partners. Still, there is a growing sense that it may be worth the risk. . . .

Examining the Newsclip

1. **Understanding Cause and Effect** How has globalization contributed to bioinvasion?
2. **Analyzing Information** Why would a "white-list" law alienate some U.S. trading partners?

Applying the Economic Way of Thinking

Study Guide

Main Idea
Economics provides a foundation for analyzing choices and making decisions.

Reading Strategy
Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by describing how American capitalism has changed.

American capitalism

Capitalism of the 1930s | Capitalism today

Key Terms
cost-benefit analysis, modified free enterprise economy

Objectives
After studying this section, you will be able to:
1. **Describe** the reasoned approach to economic decision making.
2. **Understand** how our market economy will be able to cope with the future.

Applying Economic Concepts
Cost-Benefit Analysis Have you ever decided not to do something because the cost of doing it was greater than the benefits that would be received? Economists call this cost-benefit analysis—and they use this analysis often. If you think the same way, perhaps you are starting to think like an economist.

Cover Story

The Outlook—Pushing Adam Smith Past the Millennium

WASHINGTON—If Adam Smith were to visit the U.S. at the millennium's end, he would like what he saw. . . . Today, the invisible hand is more limber and supple than ever.


Free market idea grows

In the past two decades, globalization has forced American companies to compete on a worldwide scale, and the collapse of communism has extended capitalistic principles to every corner of the globe. Deregulation has injected market forces into areas long insulated from them . . . [and] the Internet has helped better-informed buyers find legions of new sellers, and sellers find far-flung buyers. . . .

—*The Wall Street Journal*, June 6, 1999

As a science, economics is concerned with the way in which people cope with scarcity. Because scarcity is a universal problem, the study of economics is important to everyone.

The economic system based on capitalism and free enterprise has, as you just read in the cover story, done quite well. There is also every likelihood that it will continue to do well in the future–although we also expect some evolution and modifications as we deal with new challenges and opportunities.

A Framework for Decision Making

Through the study of economics, you learn that choices must be made. You begin to discover different ways to analyze a problem, and that alternatives must be considered. The late economist Kenneth Boulding observed that economics has evolved to the point that it has now become a generalized theory of choice.

THE GLOBAL ECONOMY

THE INFORMATION REVOLUTION

In this era, not only is capitalism global but so is the Information Revolution. As powerful data networks spread, the developing nations are being drawn into the borderless information economy.

Inside a gleaming computer center in Taipei, a young engineer labors late into the night. Connected by the Internet to some of the best software writers in the U.S., he is helping design a digital phone system that will match anything the U.S. or Europe can muster.

In China's northern boomtown of Tianjin, an auto worker pores over documents on how to arrange a low-interest mortgage on a modern condominium. In Mexico City, a working couple plows savings into a mutual fund, all to put two children through private school.

Ingenuity, new prosperity, middle-class striving—familiar Western values are appearing on the frontiers of capitalism. Multiply these scenes by the millions, and you see the shape of a revolution that will transform the global economy well into the next century. Already, capitalism is flourishing in regions as diverse as communist Asia and the former dictatorships of Latin America. Affluence is lifting millions out of poverty, giving many the chance to purchase their first Fiats and Toyotas as well as their first Apple computers and Panasonic VCRs. And inflation is brought to heel in even the most wayward economies.

The implications are huge for rich and poor alike. Hundreds of millions of peasants are leaving ancient ways of life for the factory. Cities such as Guangzhou and Bangalore teem with new inhabitants. Many are living poorly, of course, but just as many are thriving.

—*Business Week,* December 14, 1998

Critical Thinking

1. **Summarizing Information** What is the main point of the article? Write a thesis sentence in your own words explaining the main point.
2. **Drawing Conclusions** "The Information Revolution will draw economies from different parts of the world closer." Do you agree or disagree with this statement? Explain your answer.

Economics provides a framework for decision making that helps people to become better decision makers. The future will be different than the past, or even the present for that matter, but some things in economics–the way we think about problems–are likely to remain the same.

A Reasoned Approach

Economic decision making requires a careful, reasoned approach to problem solving. The National Council on Economic Education, an organization dedicated to the improvement of economic literacy in the United States, recommends five steps. These steps provide useful guidelines to decision making.

1. State the problem or issue.
2. Determine the personal or broad social goals to be attained.
3. Consider the principal alternative means of achieving the goals.
4. Select the economic concepts needed to understand the problem and use them to appraise the merits of each alternative.
5. Decide which alternative best leads to the attainment of the most goals or the most important goals.

–*A Framework for Teaching the Basic Concepts,* 1996

Life is full of trade-offs, but you will be better equipped to deal with the future if you know how to analyze the problems you will encounter.

Decision Making at the Margin

Economists use a number of tools to help them analyze and make decisions. Some of these tools include production possibilities curves, supply and demand curves, production functions, and even the National Income and Product Accounts.

One of the most important decision-making tools is the concept of marginal analysis. For example, when a firm makes a decision to produce additional output, it compares the extra cost of production with the extra benefits to be gained. If the benefits outweigh the costs, the firm decides to continue with the additional production. If the costs outweigh the benefits, the firm decides not to produce the additional output.

This process—**cost-benefit analysis**—involves comparing the costs of an action to its benefits. Firms use cost-benefit analysis when they make decisions to produce or purchase additional capital equipment. Many government agencies use it when they evaluate programs. Individuals also use it when they make decisions. Cost-benefit analysis is even used to make choices among economic goals. Some choices will work against one goal while favoring another, but evaluating the costs and benefits of each choice helps in making decisions.

Finally, we must remember that the economist uses a very broad definition of costs—that of opportunity costs. This ensures that we account for all of the costs of a decision, not just the monetary ones.

> STANDARD & POOR'S INFOBYTE
>
> **Economic Forecasts** An economic forecast is a projection regarding the future direction of all or part of the economy. Economists analyze economic data to identify trends, and perform statistical evaluations to build their forecasts. Economists are like scientists in that they study phenomena by making observations based on collected data. The purpose of their studies is to uncover relationships between economic events and variables. An economist may, for example, study trends in the price and sales behavior of the domestic automobile market to arrive at a prediction of future auto sales. Businesses and governments rely on such forecasts for policy-making and goal-setting purposes. Individuals rely on these forecasts for their spending and investing decisions.

Coping With the Future

Everyone wants to know what will happen to the economy in the future. How will it adjust and what course will it take? Part of the answer can be found by examining the way markets work.

Markets and Prices

Our **modified free enterprise economy**—a free enterprise economy with some government involvement—is one that allows buyers and sellers to freely make the decisions that satisfy their wants and needs. The forces of supply and demand interact to establish prices in a market. Prices, in turn, act as signals, helping producers and consumers to make or even alter their spending decisions.

Prices also influence the allocation of resources across markets. The high price of oil in the 1970s made other energy sources competitive. In the 1980s, the high prices of personal computers attracted producers. Competition soon lowered prices and made the same computers affordable to mass markets.

A market economy has many advantages, including the ability to adjust to change gradually, without the need for government intervention. As long as the forces of supply and demand are allowed to function, they will send producers and consumers the signals needed to reallocate resources. Although no one knows what the future will bring, capitalism has demonstrated its ability to adapt in the past, and it is likely to do so again in the future.

The Triumph of Capitalism

During the 1930s, the forces of socialism and communism were sweeping the world, while capitalist countries were in economic depression. Communism in the Soviet Union had considerable impact upon the world, and socialist parties were on the rise in the European colonies in Africa.

Since then, communism in the former Soviet Union has collapsed under the weight of its own inefficiencies. Many socialist countries have embraced capitalism and the discipline of the market system. In addition, many developing countries have chosen capitalism as their economic system. Many emerging economic powers—including Singapore, South Korea, and Taiwan—owe much of their remarkable growth to capitalism.

Capitalism is now the dominant economic force in the world, but it is not the laissez-faire capitalism of the past. Capitalism has changed because people have addressed some of the weaknesses that Karl Marx and others identified many years ago.

The capitalism of the 1930s was ruthlessly efficient in that it provided only for those who produced or earned enough to buy the necessities of life. Early capitalism had little room for the elderly, the ill, or the incapacitated. Many economies today, including that of the United States, have a modified free enterprise economy, or modified private enterprise system. This is a free-market economy based on capitalism, yet modified by its people to satisfy the economic goals of freedom, efficiency, equity, security, full employment, price stability, and economic growth.

Capitalism has evolved over the years, and it shows every sign of continuing to do so in the future. In this respect, capitalism adjusts to change the same way a market adjusts to small changes in supply and demand—incrementally, with adjustments so small that they are hardly noticed in the short run. This ability to evolve, and to adjust to the demands placed on it, are strengths of capitalism that will continue to ensure its success.

Nature of Capitalism

Adaptability In many industrial countries, capitalism is the prevailing economic system. Capitalism is based on private ownership of the means of production and on individual economic freedom. ***How was the capitalism of the past different from the capitalism of today?***

Section 3 Assessment

Checking for Understanding

1. **Main Idea** How does cost-benefit analysis affect the decision-making process?
2. **Key Terms** Define cost-benefit analysis, modified free enterprise economy.
3. **Explain** the reasoned approach to economic decision making.
4. **Describe** how a market economy adapts to change.
5. **Explain** how marginal analysis assists in decision making.

Applying Economic Concepts

6. **Cost-Benefit Analysis** Think of a decision you must make in the next few days. How will you use your estimates of the costs and benefits to make your decision?

Critical Thinking

7. **Synthesizing Information** Provide an example of how prices act as a signal to you as a buyer and as a seller.

Practice and assess key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

CRITICAL THINKING

Skill

Making Predictions

Predicting future events is obviously difficult and sometimes risky. The more information you have, however, the more accurate your predictions will be.

Learning the Skill

Follow these steps to help you analyze information in order to make predictions.

- Gather information about the decision or action.
- Use your knowledge of history and human behavior to identify what consequences could result.
- Analyze each of the consequences by asking: How likely is it that this will occur?

Practicing the Skill

Study the following passage, then answer the questions that follow.

Market scene, Peru

In 1950, only 42 percent of Latin Americans were city dwellers; today almost 73 percent live in cities, according to the United Nations. This compares with 34 percent in Africa and 33 percent in Asia. Despite oppressive poverty, Peruvians seeking a better life, for example, have been fleeing the countryside for Lima at the rate of more than a thousand a day and building settlements that seem like a never-ending expanse of small straw huts next to a noisy highway. The trend has created megacities throughout the continent.

The equation is similar in many countries. The major city attracts one-quarter to one-third of the country's population, with many living in squalid slums . . . encircling the affluent city. Experts say that by the year 2010, Rio de Janeiro and Sao Paulo will be one continuous megalopolis 350 miles long with almost 40 million people.

–by John L. Petersen, *The Road to 2015*

1. What trend does the passage show?
2. Do you think the trend the writer describes is likely to continue?
3. On what do you base this prediction?
4. What occurrences might have an effect on changing the trend?
5. What are three possible consequences or outcomes of this trend?

Application Activity

Analyze three articles in the business section of the newspaper. Predict three consequences of the actions in each of the articles. On what do you base your predictions?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

Chapter 20 Summary

Section 1

The Global Demand for Resources (pages 545–550)

- Over 200 years ago, Thomas Malthus predicted many of the population problems some developing nations face today—high birthrates, famine, and the threat of a **subsistence** standard of living.
- Malthus did not foresee advances in technology or that some birthrates would fall and some populations cease to grow.
- Many **nonrenewable resources** such as oil, natural gas, and coal are threatened today.
- The oil **embargo** of the early 1970s raised oil prices and encouraged Americans to seek alternative energy sources, along with alternative and renewable energy sources.
- Some renewable energy resources—hydroelectric power, biomass, solar power, wind power—have been developed, including **gasohol,** a combination of unleaded gasoline and grain alcohol.
- Other resources like water and land are also coming under pressure because of population growth.

Section 2

Economic Incentives and Resources (pages 552–556)

- During the oil embargo of the 1970s, high gas prices provided an incentive to preserve resources. When prices came back down, conservation efforts waned.
- As the population has grown and used more energy resources, people have become concerned about pollution.

- The traditional response to pollution is to have the government pass legislated standards prohibiting it.
- Economists argue that pollution cannot be controlled until the economic incentives to pollute are removed.
- Programs including pollution taxes and **pollution permits** are designed to give firms the incentive to not pollute.
- Markets have the flexibility to adjust to change—an adjustment that affects prices and the allocation of resources.

Section 3

Applying the Economic Way of Thinking (pages 558–561)

- Economics has become a generalized theory of choice and a framework for decision making.
- The National Council on Economic Education has recommended a five-point approach to decision making; the final step involves **cost-benefit analysis,** which compares the cost of a decision to the benefits gained.
- A fundamental knowledge of economics helps people cope with the future, especially now that capitalism has emerged as the dominant type of economic organization in the world today.
- Modern capitalism is not the ruthlessly efficient version of the 1930s; modern capitalism has been modified to suit the economic goals of their people.
- In the markets of the world today, supply and demand establish prices, and prices serve as signals to both producers and consumers.
- The flexibility markets provide enables the modern **modified free enterprise economy** to better deal with the unforeseen events of the future.

Chapter 20 Assessment and Activities

ECONOMICS Online

Self-Check Quiz Visit the *Economics: Principles and Practices* Web site at epp.glencoe.com and click on ***Chapter 20—Self-Check Quizzes*** to prepare for the chapter test.

CLICK HERE

Identifying Key Terms

Write the term that best completes the following sentences.

a. **pollution permits**
b. **biomass**
c. **modified free enterprise economy**
d. **glut**
e. **acid rain**
f. **pollution**
g. **aquifer**
h. **embargo**
i. **gasohol**
j. **subsistence**

1. The state in which the population produces barely enough to support itself is _____ .
2. The United States has a(n) _____ , a system that has been altered by its people to satisfy economic goals.
3. A restriction on the export or import of a commodity in trade is a(n) _____ .
4. _____ is a mixture of 90 percent unleaded gasoline and 10 percent grain alcohol.
5. An underground water-bearing rock formation is a(n) _____ .
6. The second largest source of renewable energy is _____ .

Reviewing the Facts

Section 1 (pages 545–550)

1. **Describe** why, despite Malthus's predictions, certain parts of the world have enjoyed steadily increasing standards of living.
2. **Explain** where the most rapid rates of population growth are found.
3. **List** the four major nonrenewable energy resources.
4. **Describe** the major drawback of nuclear energy.

Section 2 (pages 552–556)

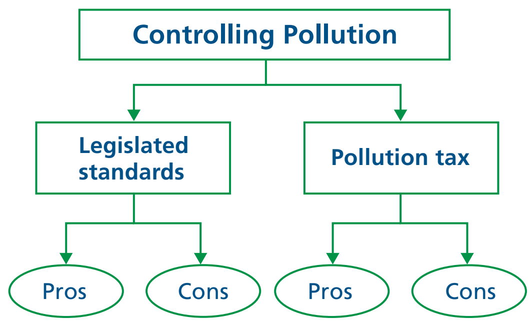
5. **Explain** how American consumers and the automobile industry reacted to the oil price increases of the 1970s.
6. **Explain** how the reluctance of oil and gas producers to drill for shallow gas was consistent with the law of supply.
7. **Describe** what the EPA hopes to accomplish by issuing pollution permits.
8. **State** how the price system in a market economy helps ensure that resources are used wisely.

Section 3 (pages 558–561)

9. **List** the steps involved in economic decision making.
10. **State** the importance of cost-benefit analysis.
11. **Explain** why adapting to change is important for an economic system.

Thinking Critically

1. **Making Comparisons** If you had to decide to use legislated standards or a pollution tax to reduce pollution, which would you choose? In your reasoning, explain the pros and cons of each approach. Use a graphic organizer similar to the one below to organize your answer.



Chapter 20 Assessment and Activities

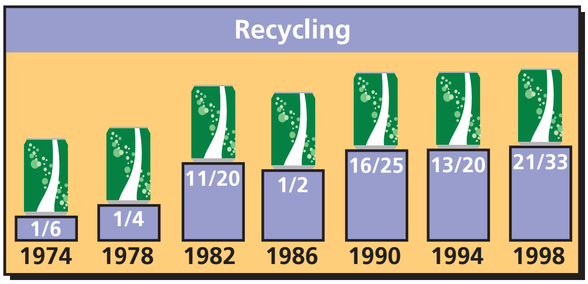
2. **Making Predictions** In what ways can Americans ensure the wise use of resources? How might the world be different in 50 years if we do not use resources wisely today?

Applying Economic Concepts

1. **Scarcity** Scarce natural resources are a problem that concerns citizens throughout the world. What can you personally do to help conserve resources?
2. **Modified Free Enterprise Economy** The United States has a modified free enterprise economy in which the government regulates some industries. Do you think the government should play a smaller or larger role in regulating the American economy? Give reasons to support your answer.

Math Practice

Many people all over the world recycle their aluminum cans in order to help our environment. The graph below shows the percentage of aluminum cans that have been recycled over the years. Study the information presented in the graph, then answer the questions.



Source: The Aluminum Association, Inc.

1. During which year was the largest percentage of aluminum cans recycled?
2. In 1974, 2.3 billion cans were recycled. Write a formula to show the total number of cans consumed during that year.

Thinking Like an Economist

Renewable energy resources only account for a small portion of our total energy production. Explain the changes that would have to take place in order for people to make greater use of renewable energy resources.

Technology Skill

Using a Database Create a database on recycling centers in your community. Look in the telephone book to locate the nearest recycling centers. Find out the name, address, phone number, and operation hours of each service, and what services each provides. Use this information to create a database, making separate fields for the materials, the locations, and the rebates paid for recycled items. Print and distribute your database to the rest of the class.

Building Skills

Making Predictions The table below depicts the median inflation rate for advanced economies, developing countries, and countries in transition for selected years. Study the table, then answer the questions that follow.

	1997	1998	1999	1980–89	1990–99
Countries in Transition	14.8	11.0	7.7	1.2	165.6
Developing Countries	5.6	4.8	4.1	9.9	8.4
Advanced Economies	1.7	2.1	2.1	6.9	2.8

Source: *World Economic Outlook*

1. Which economies do you predict to maintain a relatively low rate of inflation? Why do you think this is the case?
2. If trends continue, do you project the median inflation rate for developing countries to rise, decrease, or stay at about the same level? Why?

Practice and **assess** key social studies skills with the *Glencoe Skillbuilder Interactive Workbook, Level 2.*

CONTENTS

Reference Atlas

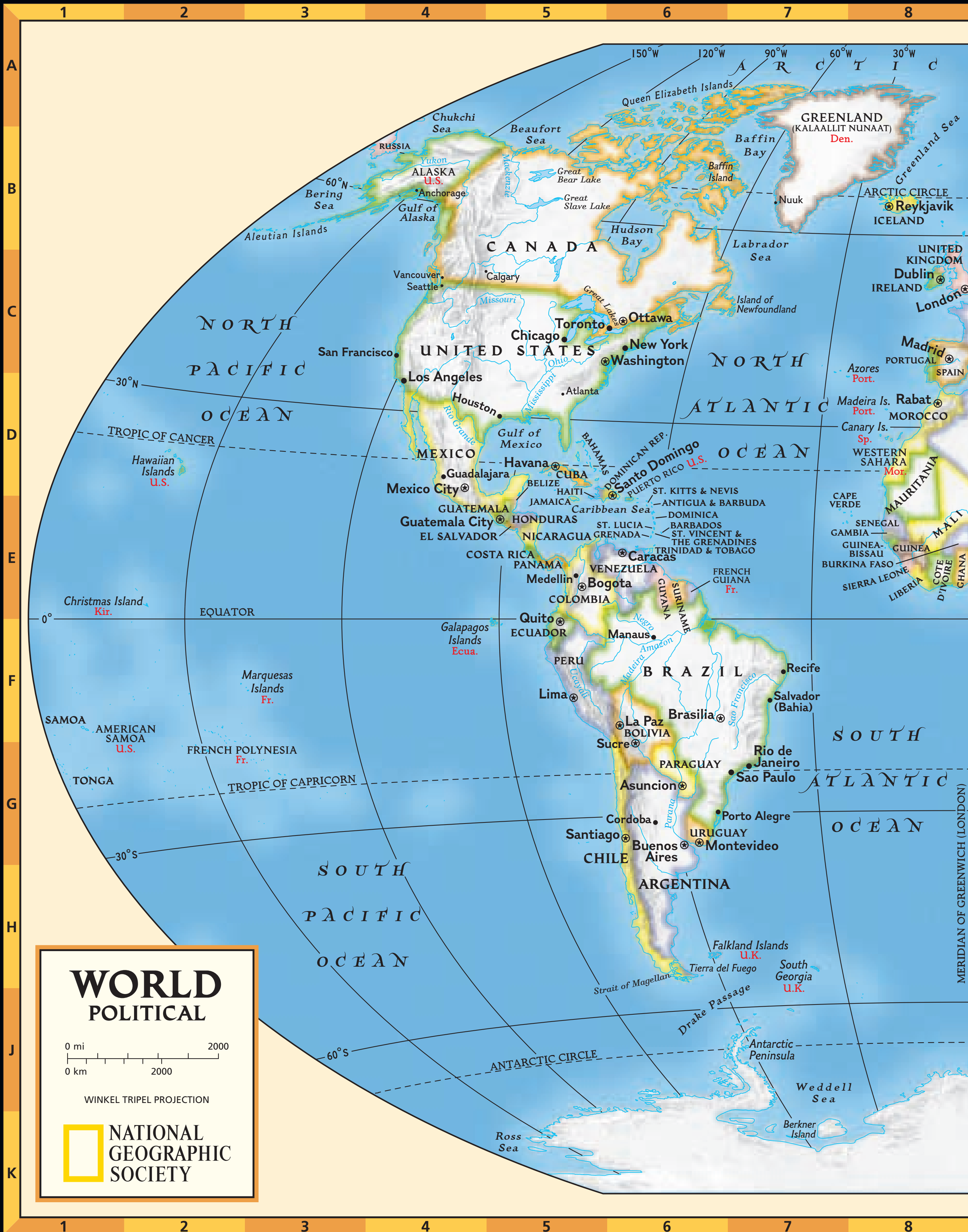
NATIONAL GEOGRAPHIC SOCIETY

World Political	A2
United States Political	A4
World Land Use	A6
United States Land Use	A8
World GDP Cartogram	A10
World Population Cartogram	A12

ATLAS KEY

SYMBOL KEY

Canal
Claimed Boundary
International Boundary
Depression
Elevation
National Capital
Towns
Below Sea Level
Dry Salt Lake
Lake
Rivers
Lava
Sand
Swamp


WORLD
POLITICAL
0 mi 2000
0 km 2000
WINKEL TRIPEL PROJECTION
NATIONAL GEOGRAPHIC SOCIETY
ARCTIC
Queen Elizabeth Islands
GREENLAND (KALAALLIT NUNAAT) Den.
Greenland Sea
Baffin Bay
Baffin Island
Nuuk
ARCTIC CIRCLE
Reykjavik
ICELAND
Chukchi Sea
Beaufort Sea
RUSSIA
Yukon
ALASKA U.S.
Mackenzie
Great Bear Lake
Great Slave Lake
60°N
Bering Sea
Anchorage
Gulf of Alaska
Aleutian Islands
Hudson Bay
Labrador Sea
CANADA
UNITED KINGDOM
Dublin
IRELAND
London
Vancouver
Seattle
Calgary
Missouri
Great Lakes
Ottawa
Toronto
Island of Newfoundland
Chicago
New York
Washington
UNITED STATES
Ohio
San Francisco
Los Angeles
Atlanta
Mississippi
Madrid
PORTUGAL
SPAIN
Azores Port.
NORTH PACIFIC OCEAN
NORTH ATLANTIC OCEAN
30°N
Houston
Rio Grande
Gulf of Mexico
Madeira Is. Port.
Rabat
MOROCCO
Canary Is. Sp.
TROPIC OF CANCER
BAHAMAS
DOMINICAN REP.
Santo Domingo
PUERTO RICO U.S.
WESTERN SAHARA Mor.
MEXICO
Havana
CUBA
Guadalajara
BELIZE
HAITI
Hawaiian Islands U.S.
Mexico City
JAMAICA
ST. KITTS & NEVIS
ANTIGUA & BARBUDA
MAURITANIA
CAPE VERDE
GUATEMALA
Caribbean Sea
DOMINICA
Guatemala City
HONDURAS
ST. LUCIA
BARBADOS
SENEGAL
GAMBIA
EL SALVADOR
NICARAGUA
GRENADA
ST. VINCENT & THE GRENADINES
MALI
GUINEA-BISSAU
GUINEA
TRINIDAD & TOBAGO
COSTA RICA
Caracas
PANAMA
VENEZUELA
BURKINA FASO
FRENCH GUIANA Fr.
SIERRA LEONE
LIBERIA
COTE D'IVOIRE
GHANA
Medellin
Bogota
GUYANA
SURINAME
COLOMBIA
Christmas Island Kir.
0°
EQUATOR
Galapagos Islands Ecua.
Quito
ECUADOR
Negro
Manaus
Amazon
PERU
Madeira
BRAZIL
Recife
Marquesas Islands Fr.
Ucayali
Lima
Salvador (Bahia)
Sao Francisco
Brasilia
SAMOA
AMERICAN SAMOA U.S.
La Paz
BOLIVIA
SOUTH ATLANTIC OCEAN
Sucre
FRENCH POLYNESIA Fr.
Rio de Janeiro
PARAGUAY
Sao Paulo
TONGA
TROPIC OF CAPRICORN
Asuncion
Parana
Porto Alegre
Cordoba
URUGUAY
Santiago
Buenos Aires
Montevideo
30°S
CHILE
ARGENTINA
SOUTH PACIFIC OCEAN
MERIDIAN OF GREENWICH (LONDON)
Falkland Islands U.K.
Tierra del Fuego
South Georgia U.K.
Strait of Magellan
Drake Passage
60°S
Antarctic Peninsula
ANTARCTIC CIRCLE
Weddell Sea
Ross Sea
Berkner Island
150°W
120°W
90°W
60°W
30°W

ABBREVIATIONS

AUST. .... AUSTRIA
B.&H. .... BOSNIA & HERZEGOVINA
BELG. .... BELGIUM
CROAT. .... CROATIA
CZECH REP. .... CZECH REPUBLIC
DEM. REP. OF THE CONGO .... DEMOCRATIC REPUBLIC OF THE CONGO
EQ. GUINEA .... EQUATORIAL GUINEA
EST. .... ESTONIA
HUNG. .... HUNGARY
LITH. .... LITHUANIA
MACED. .... MACEDONIA
MOLD. .... MOLDOVA
NETH. .... NETHERLANDS
SLOV. .... SLOVENIA
SWITZ. .... SWITZERLAND
U.A.E. .... UNITED ARAB EMIRATES
YUG. .... YUGOSLAVIA

CONTENTS


RUSSIA
St. Lawrence Island
Bering Strait
Seward Peninsula
Norton Sound
Nunivak Island
Point Barrow
ARCTIC OCEAN
Beaufort Sea
Brooks Range
Yukon
ALASKA
Fairbanks
Alaska Range
Anchorage
Bristol Bay
Aleutian Islands
Alaska Peninsula
Kodiak I.
Gulf of Alaska
Juneau
Alexander Archipelago
PACIFIC OCEAN
Seattle
Tacoma
Olympia
WASH.
Spokane
Portland
Salem
Eugene
OREGON
Cascade Range
Snake
Butte
IDAHO
Boise
Great Salt Lake
Salt Lake City
UTAH
Reno
Carson City
NEVADA
Sacramento
San Francisco
CALIFORNIA
Sierra Nevada
Las Vegas
ARIZONA
Los Angeles
San Diego
Phoenix
Tucson
Honolulu
HAWAII
Hilo
TROPIC OF CANCER
170°E
180°
170°W
160°W
150°W
140°W
130°W
120°W
110°W
50°N
60°N
70°N
40°N
30°N
20°N
10°N
A
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CONTENTS


UNITED STATES
POLITICAL
0 mi 600
0 km 600
OBLIQUE AZIMUTHAL EQUIDISTANT PROJECTION
NATIONAL GEOGRAPHIC SOCIETY
9 10 11 12 13 14 15 16
A B C D E F G H J K
130°W 120°W 110°W 100°W 90°W 80°W 70°W 60°W 50°W 40°W 30°W 20°W
70°N 60°N 50°N 40°N 30°N 20°N
GREENLAND (KALAALLIT NUNAAT)
Den.
N
ARCTIC CIRCLE
CANADA
MONTANA
Helena
Billings
NORTH DAKOTA
Bismarck
MINNESOTA
Lake Superior
MICHIGAN
Lake Huron
Montpelier
MAINE
Augusta
Portland
Concord, N.H.
NEW YORK
VT.
N.H.
Lake Ontario
Albany
Boston, MASS.
Providence, R.I.
Hartford, CONN.
Minneapolis
St. Paul
WISCONSIN
Missouri
SOUTH DAKOTA
Pierre
L. Michigan
Lansing
Detroit
L. Erie
Buffalo
Milwaukee
Madison
Casper
WYOMING
Cheyenne
Sioux City
IOWA
Des Moines
Chicago
Toledo
Cleveland
PA.
Harrisburg
New York
Trenton, N.J.
Philadelphia
NEBRASKA
Omaha
Lincoln
ILLINOIS
IND.
Pittsburgh
OHIO
Columbus
Baltimore
Dover, DEL.
Annapolis, MD.
Washington, D.C.
Denver
COLORADO
Kansas City
Springfield
Indianapolis
Cincinnati
Dayton
W. VA.
Charleston
Richmond
ROCKY MOUNTAINS
APPALACHIAN MTS.
Topeka
KANSAS
MISSOURI
Jefferson City
St. Louis
Frankfort
Louisville
KENTUCKY
VIRGINIA
Virginia Beach
Mississippi
Arkansas
Raleigh
NORTH CAROLINA
Nashville
TENNESSEE
Charlotte
Santa Fe
Albuquerque
Oklahoma City
Tulsa
OKLAHOMA
ARKANSAS
Memphis
Little Rock
SOUTH CAROLINA
Columbia
Atlanta
GEORGIA
Charleston
Birmingham
ALABAMA
MISS.
NEW MEXICO
Fort Worth
Dallas
Jackson
Montgomery
Savannah
El Paso
TEXAS
LOUISIANA
Tallahassee
Jacksonville
Austin
Baton Rouge
San Antonio
Houston
New Orleans
FLORIDA
Tampa
Miami
Rio Grande
Bermuda Is.
U.K.
ATLANTIC OCEAN
BAHAMAS
Gulf of Mexico
Straits of Florida
MEXICO
CUBA
HAITI
DOMINICAN REPUBLIC
San Juan
PUERTO RICO
U.S.
ANTIGUA & BARBUDA
ST. KITTS & NEVIS
DOMINICA
JAMAICA
Caribbean Sea
100°W 90°W 80°W 70°W 60°W

CONTENTS


WORLD
LAND USE
0 mi 2000
0 km 2000
WINKEL TRIPEL PROJECTION
NATIONAL GEOGRAPHIC SOCIETY
Forestry
Agriculture
Subsistence agriculture
Stock raising on ranch
Nomadic herding
Hunting
Manufacturing
Fishing
Little or no economic activity
Largest urban areas
Tokyo (selected urban areas are named)
ARCTIC
NORTH AMERICA
SOUTH AMERICA
NORTH PACIFIC OCEAN
NORTH ATLANTIC OCEAN
SOUTH PACIFIC OCEAN
SOUTH ATLANTIC OCEAN
Chukchi Sea
Beaufort Sea
Bering Sea
Baffin Bay
Greenland Sea
Great Bear Lake
Great Slave Lake
Hudson Bay
Labrador Sea
Lake Winnipeg
Great Lakes
Great Salt Lake
New York
Los Angeles
Gulf of Mexico
Mexico City
Caribbean Sea
London
Rio de Janeiro
Sao Paulo
Buenos Aires
Scotia Sea
Bellingshausen Sea
Weddell Sea
Ross Sea
ARCTIC CIRCLE
TROPIC OF CANCER
EQUATOR
TROPIC OF CAPRICORN
ANTARCTIC CIRCLE
MERIDIAN OF GREENWICH (LONDON)
150°W
120°W
90°W
60°W
30°W
60°N
30°N
0°
30°S
60°S

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J
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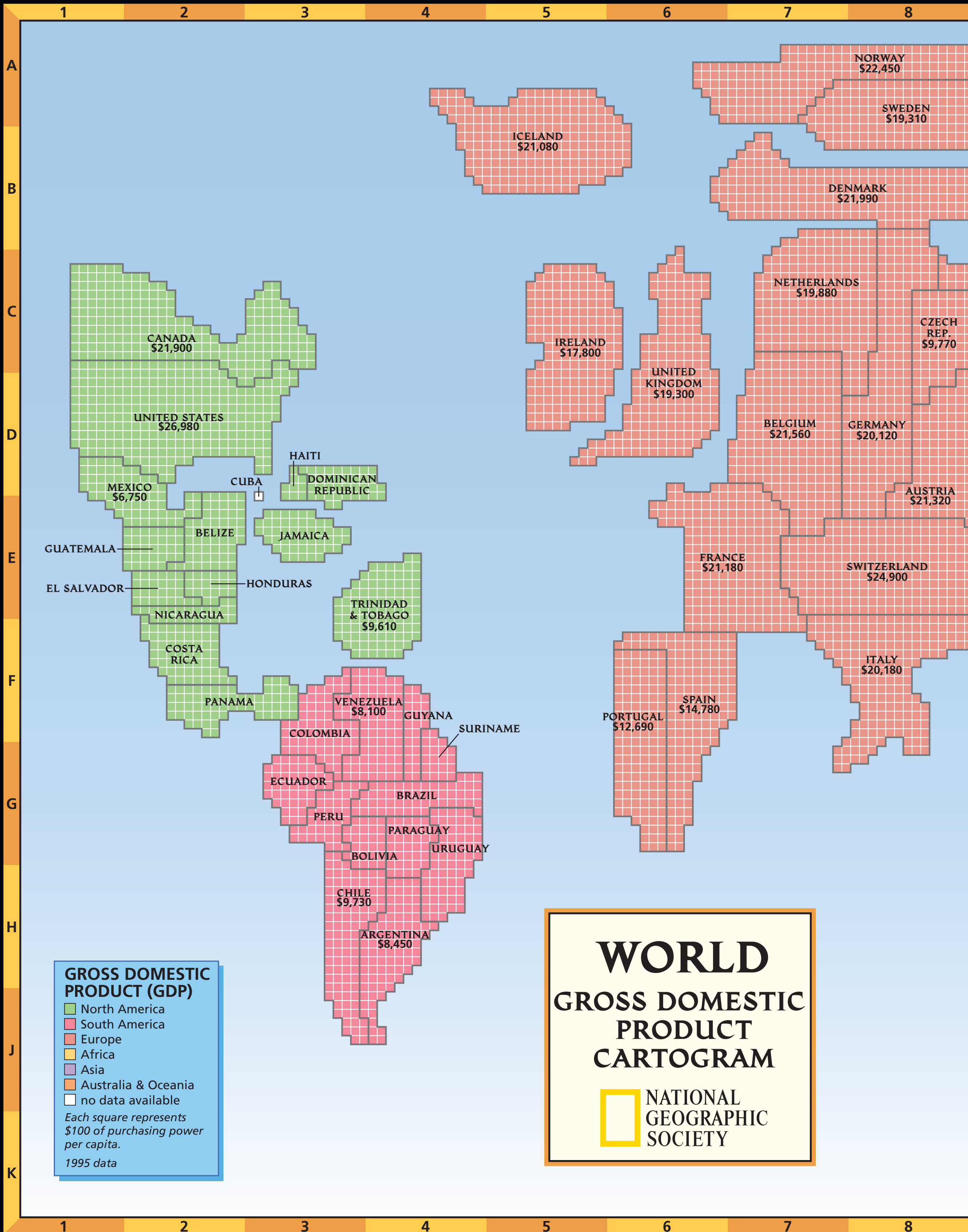
30°E
60°E
90°E
120°E
150°E
O C E A N
Kara Sea
Laptev Sea
East Siberian Sea
Barents Sea
Norwegian Sea
60°N
Bering Sea
Sea of Okhotsk
North Sea
Baltic Sea
Moscow
Lake Baikal
E U R O P E
A S I A
Caspian Sea
Aral Sea
Black Sea
Sea of Japan
Seoul
Tokyo
Yellow Sea
Shanghai
East China Sea
NORTH PACIFIC OCEAN
30°N
TROPIC OF CANCER
Mediterranean Sea
Cairo
Red Sea
Mumbai
Arabian Sea
Calcutta
Bay of Bengal
Andaman Sea
Philippine Sea
South China Sea
Gulf of Aden
A F R I C A
Lagos
Gulf of Guinea
EQUATOR
0°
Lake Victoria
Kinshasa
Lake Tanganyika
Arafura Sea
Coral Sea
INDIAN OCEAN
TROPIC OF CAPRICORN
AUSTRALIA
SOUTH PACIFIC OCEAN
Sydney
Tasman Sea
60°S
Ross Sea
A N T A R C T I C A

CANADA
PACIFIC OCEAN
WASHINGTON
Seattle
Tacoma
Olympia
Spokane
Columbia
Portland
Salem
Eugene
OREGON
IDAHO
Boise
Snake
MONTANA
Helena
Missouri
NORTH DAKOTA
Bismarck
SOUTH DAKOTA
Pierre
Sioux Falls
WYOMING
N. Platte
Cheyenne
NEBRASKA
Lincoln
CALIFORNIA
Sacramento
San Francisco
Oakland
San Jose
Fresno
Bakersfield
Los Angeles
San Bernardino
San Diego
NEVADA
Reno
Carson City
Las Vegas
UTAH
Salt Lake City
COLORADO
Denver
Colorado Springs
KANSAS
Arkansas
Wichita
ARIZONA
Colorado
Phoenix
Tempe
Tucson
NEW MEXICO
Santa Fe
Albuquerque
El Paso
Rio Grande
OKLAHOMA
Oklahoma City
Amarillo
Red
Lubbock
Brazos
Dallas
Fort Worth
Abilene
Waco
TEXAS
Austin
San Antonio
Corpus Christi
Laredo
MEXICO
ARCTIC OCEAN
Chukchi Sea
Beaufort Sea
RUSSIA
Bering Strait
ARCTIC CIRCLE
Yukon
ALASKA
Anchorage
Bering Sea
Bristol Bay
Gulf of Alaska
Juneau
PACIFIC OCEAN
0 mi 300
0 km 300
Forestry
Agriculture
Forestry and Agriculture
Stock raising on ranch
Wetlands
Urban land
Fishing
Tundra
Little or no economic activity

CONTENTS

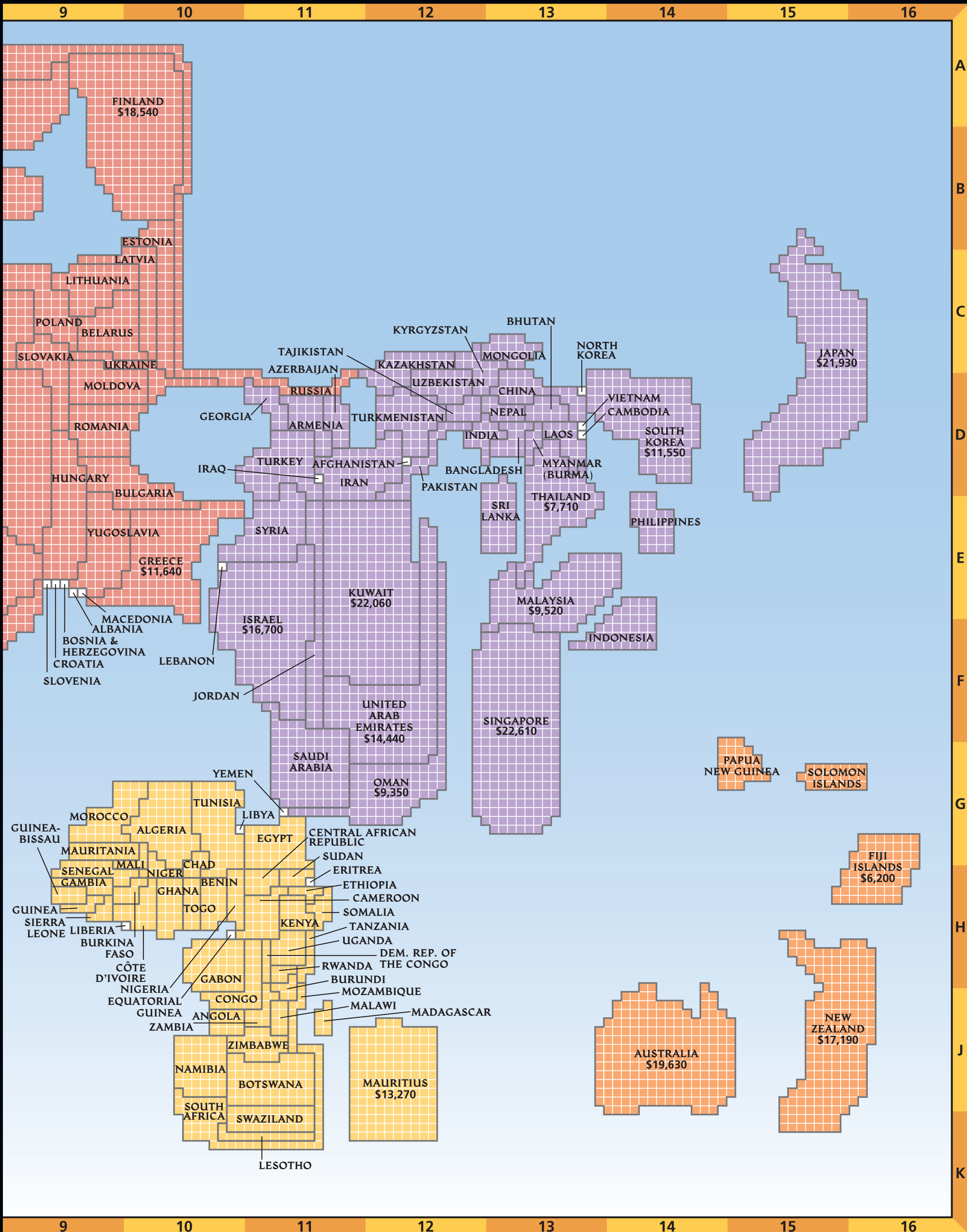
UNITED STATES
LAND USE
0 mi 300
0 km 300
ALBERS CONIC EQUAL-AREA PROJECTION
NATIONAL GEOGRAPHIC SOCIETY
CANADA
MINNESOTA
WISCONSIN
MICHIGAN
IOWA
ILLINOIS
INDIANA
OHIO
MISSOURI
KENTUCKY
TENNESSEE
ARKANSAS
MISSISSIPPI
ALABAMA
GEORGIA
LOUISIANA
FLORIDA
NORTH CAROLINA
SOUTH CAROLINA
VIRGINIA
WEST VIRGINIA
PENNSYLVANIA
NEW YORK
MARYLAND
DELAWARE
N.J.
CONN.
RHODE ISLAND
MASS.
VT.
N.H.
MAINE
CUBA
Lake Superior
Lake Michigan
Lake Huron
Lake Erie
Lake Ontario
Mississippi
Ohio
Tennessee
Red
Savannah
ATLANTIC OCEAN
Gulf of Mexico
TROPIC OF CANCER
Minneapolis
St. Paul
Milwaukee
Madison
Chicago
Gary
Grand Rapids
Lansing
Detroit
Toledo
Cleveland
Akron
Fort Wayne
Columbus
Dayton
Cincinnati
Indianapolis
Springfield
Cedar Rapids
Des Moines
Omaha
Kansas City
Topeka
Jefferson City
St. Louis
Evansville
Louisville
Frankfort
Springfield
Tulsa
Little Rock
Memphis
Nashville
Knoxville
Chattanooga
Huntsville
Birmingham
Atlanta
Montgomery
Jackson
Shreveport
Baton Rouge
New Orleans
Mobile
Tallahassee
Jacksonville
Orlando
Tampa
St. Petersburg
Fort Lauderdale
Miami
Beaumont
Houston
Savannah
Columbia
Charlotte
Raleigh
Richmond
Norfolk
Newport News
Virginia Beach
Charleston
Washington, D.C.
Annapolis
Baltimore
Dover
Philadelphia
Trenton
Harrisburg
Pittsburgh
Erie
Buffalo
Rochester
Syracuse
Albany
Newark
New York
Bridgeport
Hartford
Providence
Boston
Concord
Montpelier
Augusta
PACIFIC OCEAN
PRINCIPAL HAWAIIAN ISLANDS
0 mi 100
0 km 100
Niihau
Kauai
Oahu
Honolulu
Molokai
Maui
Lanai
Kahoolawe
Hawaii
159°W
156°W
21°N
90°W
80°W
70°W
50°N
40°N
30°N
20°N

CONTENTS



1 2 3 4 5 6 7 8
A B C D E F G H J K
NORWAY $22,450
SWEDEN $19,310
ICELAND $21,080
DENMARK $21,990
NETHERLANDS $19,880
CZECH REP. $9,770
IRELAND $17,800
UNITED KINGDOM $19,300
BELGIUM $21,560
GERMANY $20,120
AUSTRIA $21,320
FRANCE $21,180
SWITZERLAND $24,900
ITALY $20,180
SPAIN $14,780
PORTUGAL $12,690
CANADA $21,900
UNITED STATES $26,980
MEXICO $6,750
HAITI
DOMINICAN REPUBLIC
CUBA
BELIZE
JAMAICA
GUATEMALA
EL SALVADOR
HONDURAS
NICARAGUA
TRINIDAD & TOBAGO $9,610
COSTA RICA
PANAMA
VENEZUELA $8,100
GUYANA
SURINAME
COLOMBIA
ECUADOR
BRAZIL
PERU
PARAGUAY
URUGUAY
BOLIVIA
CHILE $9,730
ARGENTINA $8,450
GROSS DOMESTIC PRODUCT (GDP)
North America
South America
Europe
Africa
Asia
Australia & Oceania
no data available
Each square represents $100 of purchasing power per capita.
1995 data
WORLD
GROSS DOMESTIC PRODUCT CARTOGRAM
NATIONAL GEOGRAPHIC SOCIETY

CONTENTS


9
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16
A
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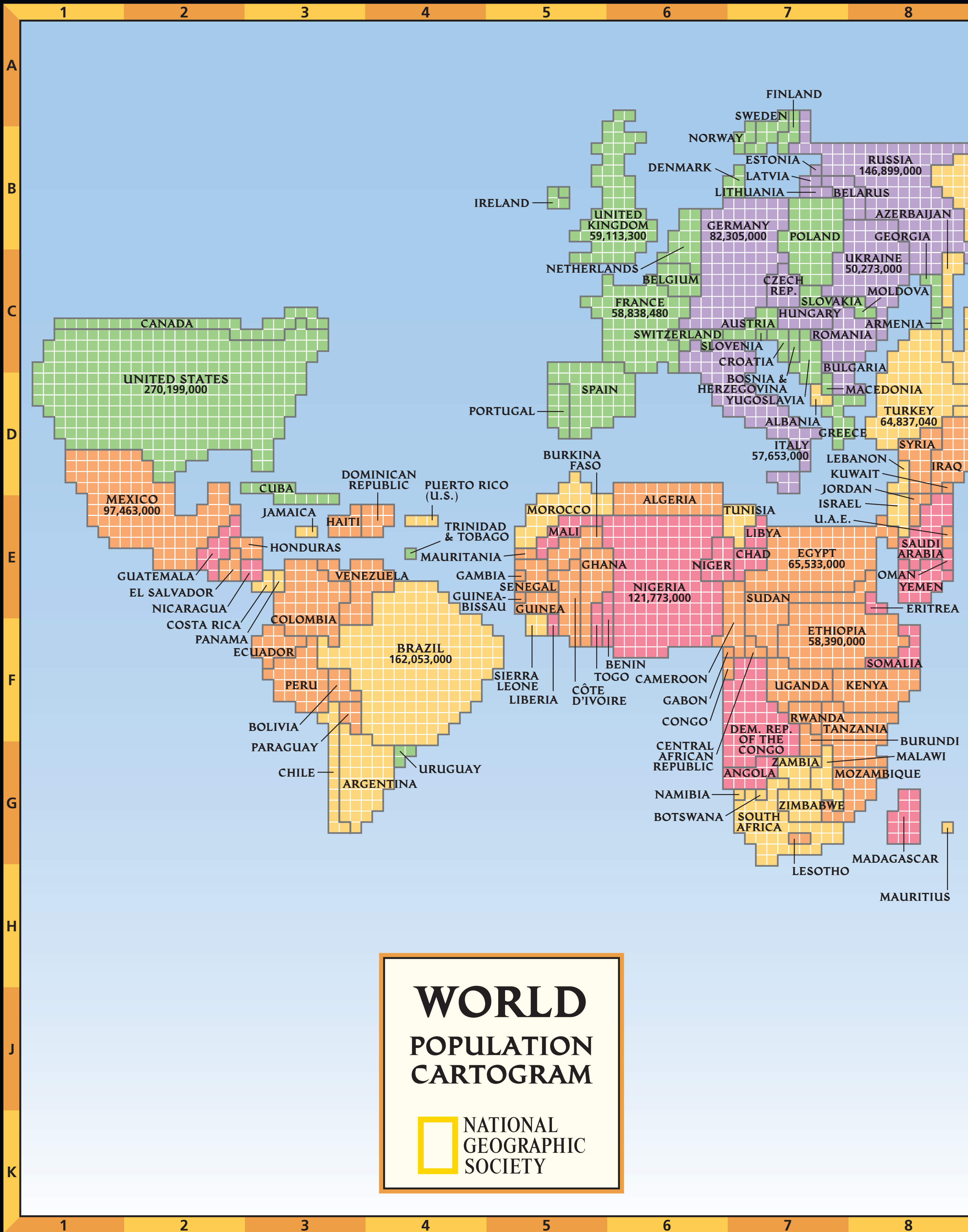
J
K
FINLAND
$18,540
ESTONIA
LATVIA
LITHUANIA
POLAND
BELARUS
SLOVAKIA
UKRAINE
MOLDOVA
ROMANIA
HUNGARY
BULGARIA
YUGOSLAVIA
GREECE
$11,640
MACEDONIA
ALBANIA
BOSNIA &
HERZEGOVINA
CROATIA
SLOVENIA
RUSSIA
GEORGIA
AZERBAIJAN
TAJIKISTAN
ARMENIA
TURKEY
IRAQ
SYRIA
LEBANON
ISRAEL
$16,700
JORDAN
KYRGYZSTAN
KAZAKHSTAN
UZBEKISTAN
TURKMENISTAN
AFGHANISTAN
IRAN
PAKISTAN
KUWAIT
$22,060
UNITED
ARAB
EMIRATES
$14,440
SAUDI
ARABIA
OMAN
$9,350
YEMEN
BHUTAN
MONGOLIA
CHINA
NEPAL
INDIA
BANGLADESH
SRI
LANKA
NORTH
KOREA
VIETNAM
CAMBODIA
LAOS
MYANMAR
(BURMA)
THAILAND
$7,710
SOUTH
KOREA
$11,550
PHILIPPINES
MALAYSIA
$9,520
INDONESIA
SINGAPORE
$22,610
JAPAN
$21,930
PAPUA
NEW GUINEA
SOLOMON
ISLANDS
FIJI
ISLANDS
$6,200
AUSTRALIA
$19,630
NEW
ZEALAND
$17,190
MOROCCO
TUNISIA
LIBYA
ALGERIA
EGYPT
GUINEA-
BISSAU
MAURITANIA
MALI
CHAD
SENEGAL
GAMBIA
NIGER
BENIN
GHANA
TOGO
GUINEA
SIERRA
LEONE
LIBERIA
BURKINA
FASO
CÔTE
D'IVOIRE
NIGERIA
EQUATORIAL
GUINEA
GABON
CONGO
ANGOLA
ZAMBIA
CENTRAL AFRICAN
REPUBLIC
SUDAN
ERITREA
ETHIOPIA
CAMEROON
SOMALIA
KENYA
TANZANIA
UGANDA
DEM. REP. OF
THE CONGO
RWANDA
BURUNDI
MOZAMBIQUE
MALAWI
MADAGASCAR
ZIMBABWE
NAMIBIA
BOTSWANA
SOUTH
AFRICA
SWAZILAND
LESOTHO
MAURITIUS
$13,270



WORLD
POPULATION CARTOGRAM
NATIONAL GEOGRAPHIC SOCIETY
1 2 3 4 5 6 7 8
A B C D E F G H J K
CANADA
UNITED STATES 270,199,000
MEXICO 97,463,000
CUBA
JAMAICA
HAITI
DOMINICAN REPUBLIC
PUERTO RICO (U.S.)
TRINIDAD & TOBAGO
HONDURAS
GUATEMALA
EL SALVADOR
NICARAGUA
COSTA RICA
PANAMA
VENEZUELA
COLOMBIA
ECUADOR
PERU
BRAZIL 162,053,000
BOLIVIA
PARAGUAY
CHILE
URUGUAY
ARGENTINA
IRELAND
UNITED KINGDOM 59,113,300
NETHERLANDS
BELGIUM
FRANCE 58,838,480
SWITZERLAND
PORTUGAL
SPAIN
FINLAND
SWEDEN
NORWAY
DENMARK
ESTONIA
LATVIA
LITHUANIA
RUSSIA 146,899,000
BELARUS
GERMANY 82,305,000
POLAND
CZECH REP.
SLOVAKIA
AUSTRIA
HUNGARY
SLOVENIA
CROATIA
BOSNIA & HERZEGOVINA
YUGOSLAVIA
ROMANIA
BULGARIA
MACEDONIA
ALBANIA
GREECE
ITALY 57,653,000
UKRAINE 50,273,000
MOLDOVA
AZERBAIJAN
GEORGIA
ARMENIA
TURKEY 64,837,040
SYRIA
LEBANON
IRAQ
KUWAIT
JORDAN
ISRAEL
U.A.E.
SAUDI ARABIA
OMAN
YEMEN
ERITREA
BURKINA FASO
MOROCCO
ALGERIA
TUNISIA
LIBYA
EGYPT 65,533,000
MALI
MAURITANIA
GAMBIA
SENEGAL
GUINEA-BISSAU
GUINEA
GHANA
NIGER
CHAD
NIGERIA 121,773,000
SUDAN
ETHIOPIA 58,390,000
SOMALIA
SIERRA LEONE
LIBERIA
CÔTE D'IVOIRE
BENIN
TOGO
CAMEROON
GABON
CONGO
CENTRAL AFRICAN REPUBLIC
UGANDA
KENYA
RWANDA
TANZANIA
BURUNDI
DEM. REP. OF THE CONGO
MALAWI
ZAMBIA
ANGOLA
MOZAMBIQUE
NAMIBIA
BOTSWANA
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SOUTH AFRICA
LESOTHO
MADAGASCAR
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141,872,000
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VIETNAM
78,484,000
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123,355,000
LAOS
THAILAND
61,098,000
INDIA
988,708,000
CAMBODIA
PHILIPPINES
75,313,000
MALAYSIA
SINGAPORE
PAPUA NEW GUINEA
I N D O N E S I A
207,379,000
SRI LANKA
AUSTRALIA
NEW ZEALAND
POPULATION GROWTH RATE
(excluding effects of migration)
3% and above
2-2.9%
1-1.9%
0-.9%
Population loss
Each square represents one million people.
1998 data

CONTENTS

Planning Your Career

Whether you plan to attend college after high school or begin working immediately, now is a good time to start thinking about what you want to do when you finish your high school education.

Thinking About What You Want From a Career Choosing a career depends on many factors, including your interests and skills, your level of education and training, and the opportunities available. To help you think about what kind of career you would like to pursue, use this checklist to identify skills, weaknesses, and interests.

Self-Assessment Checklist

- What are my interests?
- What are my strengths?
- What are my goals?
- Do I like working with people, or do I prefer working alone?
- Do I like working in an office, or do I prefer working outdoors?

Researching Job Opportunities Once you identify your strengths, weaknesses, and interests, you will want to try to identify what kinds of jobs could make use of those interests and skills. Several sources can help you learn about different types of jobs. These government publications are particularly helpful:

- *The Occupational Outlook Handbook* provides detailed information on hundreds of occupations. Included are job duties, working conditions, levels and places of employment, education and training requirements, job trends, and average earnings.
- *The Dictionary of Occupational Titles* lists 20,000 different jobs and is a good source for finding out about jobs you never knew about. The *Dictionary* provides detailed explanations of job responsibilities, but it does not provide information on education or training requirements.
- *The Guide for Occupational Exploration* focuses on career interests and indicates the kinds of jobs that match different interests. It also offers guidelines on how to prepare for a career and find a job in a particular field.

Other good sources of information are schools and libraries, which often have career resource centers, and the Internet, which has many useful Web sites. Many schools also have computerized guidance programs that you can use to find out about different careers.

Finding a Job Once you have identified the kind of job you would like, you need to find out what opportunities are available in your community. You can find out about jobs by

- talking to people you know, including your guidance counselor.
- checking the classified ads in your local newspaper.
- contacting an employment agency.
- using the Internet.

Applying Life Skills

Identify three fields that interest you. Use resources available to you to learn as much as you can about jobs in these fields. In particular, find out what educational requirements are necessary, what the projected future demand for these jobs is, and what kind of salaries these jobs offer. Prepare a one-page report of your findings.

Financing Your College Education

College costs have risen steadily in recent years. If you need financial aid, regardless of the reason, start researching for aid in your junior year or early in your senior year of high school. Check with your guidance counselor about federal aid and state, military, ethnic, and fraternal grants.

Financial Aid Financial aid comes in three basic forms: loans, which must be repaid; scholarships and grants, which need not be repaid; and jobs. Most financial-aid sponsors distribute their money through colleges. Therefore, contact the financial aid office of the college(s) of your choice. Because most colleges send out financial aid applications only upon request, you should obtain these forms early and then file them with your application for admission. Missing the appointed deadline will reduce your chances for aid.

Loans There are four major types of student loans.

1. The *National Direct Student Loan* is granted only to needy students. The funds come from the federal government, but individual colleges choose the students who receive them. The loan is interest-free while you are in school. After graduating, you have 10 years to repay the loan at low interest.
2. The *Government Guaranteed Student Loan* is made by financial institutions, and is guaranteed by the federal government to be repaid. While you are in school, the government pays the interest, which is generally 9 percent. After you graduate, you have 10 years to repay the loan.
3. A *bank loan* requires you or your parents to begin repayment while you are still in college. Although interest rates vary on this type of loan, they generally are higher than the rates on government loans.
4. A *special student loan* is one offered by colleges, civic and professional groups, and other organizations. The interest rates vary on these loans.

Scholarships and Grants Scholarships provide another source of financial aid and do not have to be repaid. In most cases, income plays no part in eligibility. Some available scholarships are *national, state, and college merit scholarships,* awarded on the basis of academic excellence, and *Reserve Officers' Training Corps scholarships,* awarded to students willing to spend four years in the armed forces after graduation. Grants also are available, but they generally are based on need. For those who qualify, *Pell Grants* can be used at any accredited college, vocational school, nursing school, and the like.

Work and Study The third basic kind of financial aid is in the form of a job. One is the *College Work-Study Program* sponsored by the federal government. To be eligible, you must be a full-time student who would not be able to afford school without the job.

If you are seeking financial aid for college, keep the following in mind:

- *Start your investigation early.*
- *Apply for every scholarship or grant for which you may qualify.*
- *You can borrow from more than one program.*

Applying Life Skills

1. If you need financial aid for college, when should you begin your search?
2. What are three forms of financial aid?
3. What kinds of scholarships are available?

Preparing a Resume

One of the most critical parts of finding a job is preparing a resume. A good resume provides a brief history of your accomplishments along with a description of your strengths and abilities. A prospective employer's decision to interview you often depends on his or her reaction to your resume.

Before You Begin Before writing your resume, conduct an inventory of your strengths and weaknesses by asking yourself questions such as:

- What kinds of skills and talents do I have?
- What is my work history?
- How much formal education have I had?
- What are my goals?
- What kind of work do I want?
- What salary would I be willing to accept?

Writing Your Resume When you have answered these questions, organize the entries on your resume.

- Begin with your name, address, and telephone number.
- Indicate the position or kind of position you are seeking.
- List all your relevant work experience, beginning with your most recent job. Include the dates of your employment, the names of the companies for which you have worked, and the positions you have held.
- List the schools you have attended. Include any special honors or awards you have received and any activities in which you have been or are involved.
- Provide at least three references, all of whom know you well enough to vouch for your abilities or strengths. Do not use relatives as references, and do not use more than two teachers.

Keep in mind that you may adjust the format of your resume to highlight the most relevant information.

Writing a Cover Letter When you send a resume, it should be accompanied by a cover letter. A cover letter identifies and explains anything you are sending to someone. It may be as short as two sentences or as long as several paragraphs. Follow these guidelines when you write your cover letter:

- State briefly what is enclosed, but include enough information to make the reader want to look at the attached resume.
- Mention why you are sending the resume.
- Indicate any response you are expecting or any future action you will be taking, such as a follow-up phone call.
- All cover letters should be typed on good quality paper.
- Address the person by name (instead of using "To Whom It May Concern").
- Sign each letter individually.

Applying Life Skills

Directions: View the Renssalaer Polytechnic Institute's *Preparing a Resume* Web page. Print a hard copy or read the article, and answer the following questions:

1. What is the purpose of a resume?
2. What are the steps in preparing a resume?
3. What type of information is included in a resume?
4. A cover letter should accompany the resume. Describe important items to include in this letter.

Preparing a Budget

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Net Income												
Rent												
Auto												
Telephone												
Utilities												
Cable												
Food												
Clothing												
Entertainment												
Miscellaneous												

To increase your wealth, financial planners recommend that you control your expenditures to live within your means. You can accomplish this by making a **budget**—a plan that matches expenditures with income. Budgeting can help you manage your money better and prevent you from buying goods and services that you do not really need or cannot afford.

Organizing Your Information The first step in setting up a budget is to obtain a **spreadsheet**—a large sheet of paper with columns for weeks and months, and rows for different categories of expenditures. You can buy spreadsheets in an office supply store, make one of your own using pencil and paper, or use a computer software program designed for this purpose.

Next, decide whether you want to set up your budget on a weekly, monthly, or yearly basis. If you get paid every two weeks, you might want to set up an annual budget with 26 biweekly columns. If you get paid monthly, you might prefer to set up an annual budget with 12 monthly columns.

The first row of your budget should consist of the income you expect to have for each period. Be sure to record your **net income**—the income received after taxes have been taken out. The remainder of the rows should be used to list your expenditures.

List your monthly expenditures, such as rent and utility bills. Then list miscellaneous expenditures, such as clothing or gifts. Because you do not know how many unexpected expenditures you will have, allow 5 to 10 percent of your net income for this category. Keep in mind that it is more efficient and sometimes easier to spread larger expenditures across time.

Keeping Track Monitor your budget to make sure that the amounts you have allotted for each expenditure are reasonable. If you find that a category does not reflect your actual spending, adjust it. One benefit of a budget is that it can show you where you need to increase or decrease your spending.

Applying Life Skills

1. Why is making a budget important?
2. What are the steps involved in making a budget?
3. What does it mean to monitor a budget?

Maintaining a Checking Account

Properly maintaining a checking account takes time and effort. Checking accounts generally are not free unless you are able to deposit–and not use–a minimum sum of money, which generally varies from $500 to $1,000. If you do not maintain the required minimum, you may have to pay a monthly fee, which can vary from one bank to another.

Comparing Terms Contact several banks to compare the terms of their checking accounts. After you've selected a bank, it will provide you with checks printed with your full name, current address, and telephone number. When you write checks, make all figures and amounts legible. Write the amount in the box on the extreme right and on the line on the left, using all the space available so that no one can change the amount. Be sure to date the checks correctly and sign them clearly and accurately. Immediately record in your checkbook the date the check was written, to whom it was written, and the amount for which it was written.

Balancing Your Checkbook You should balance your checkbook every month after receiving a statement from the bank. The statement will tell you which checks the bank has received and which deposits it has recorded. It will also tell you what the balance of your account is at the time the statement was issued. It is your responsibility to reconcile your account–make sure your balance agrees with the bank's balance. To reconcile your account, follow these steps:

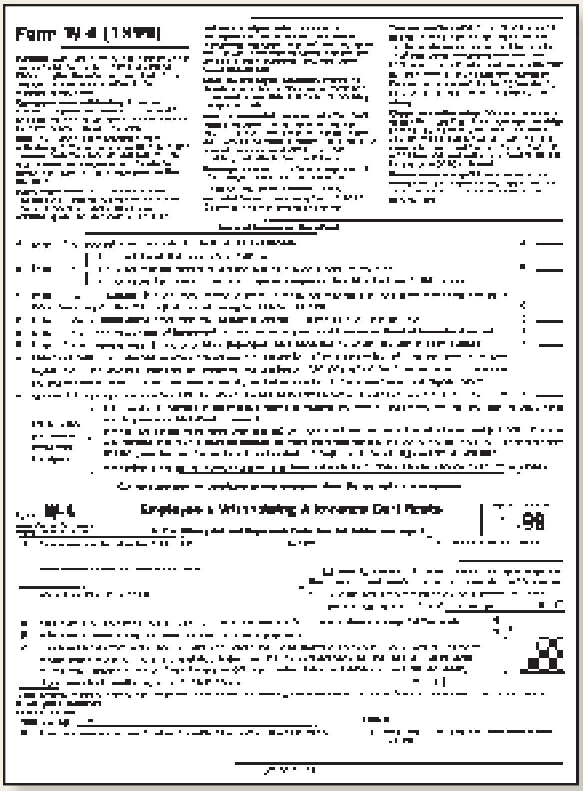
1. In your checkbook, mark each check entry listed on your bank statement with a checkmark to show that the check has been processed. As you do this, make sure the amount of each check recorded in your checkbook matches the amount on the statement.
2. List the checks you wrote but that have not been processed. Total the amounts of these checks, then add the total to the balance you have written in your checkbook.
3. Subtract any fees or charges indicated on the bank statement, such as a monthly service charge or a charge for new checks.
4. Subtract any cash withdrawals you made from automatic teller machines (ATMs).
5. Compare this balance with the balance on your bank statement. If no mistakes were made, your balance should match the bank's. If the two balances do not match, look for mistakes. If you cannot clear up the error immediately, call the bank. The error may carry over to the next month and make balancing your checkbook even more difficult. If the balance gets too far out of line, a check may "bounce" (be returned for insufficient funds), which will cost you a penalty of $10, $20, or more. If a number of checks bounce, you might get a bad credit rating.

Applying Life Skills

1. Why is having a checking account convenient for many consumers?
2. How do you balance a checkbook?
3. What does it mean when a check bounces?

Filing an Income Tax Return

If you work, you probably have to file income tax forms with the federal government and, in some cases, with the state and/or city in which you live or work. The first step in filing income tax forms is to fill out a withholding statement for your employer. The federal withholding form, known as a W-4, asks for such information as your name and address, social security number, marital status, and any special allowances for disabilities or dependents. This form is shown below. The purpose of the W-4 is to help your employer determine how much money to withhold from each of your paychecks for income taxes. If you do not complete the form properly, your employer may not withhold enough money, and you will have to pay additional taxes at the end of the year.



Keeping Track Keep your pay stubs and the receipts for your expenditures together in a safe place. By law, every January your employer must provide you with a W-2 form, which summarizes your earnings for the year. You should check the information on your pay stubs against the information on the W-2. Some expenditures are tax deductible and will save you money by lowering your taxes. You must be able to prove, however, that you actually made the expenditures. Your proof is the receipts that you have saved.

Deductions Depending on the current tax laws, deductible expenses may include mortgage interest, medical bills and pharmaceutical expenses, child-care expenses, charitable contributions, such work-related expenses as union dues or uniforms, and uninsured losses from theft or natural disasters.

Tax Forms At the beginning of each year, the Internal Revenue Service sends out tax forms with detailed instructions on how to complete them. You can find the same forms at most post offices, public libraries, or banks. You may complete the forms yourself or have them completed by a professional tax preparer. The fee for this service varies according to the complexity of your tax return and the amount of time it takes to prepare it. You generally must file the completed forms by midnight, April 15.

Applying Life Skills

1. What is a W-4 form? What is its purpose?
2. In preparing to file an income tax return, why are receipts important?
3. What are some examples of tax deductible expenses?

Borrowing Money

When you borrow money, you assume some risks. Being in debt can be dangerous and can even lead to personal bankruptcy. Before you decide to borrow money, keep the following factors in mind:

1. Do not borrow so much that if you become ill or lose your job, you no longer will be financially stable.
2. Stagger your debts. Spread out your payments so they are not all due at the same time.

If you have a legitimate need to borrow money, you might consider asking a family member or a friend for a loan. Life insurance companies, savings institutions, credit unions, commercial banks, retail organizations, and finance companies also lend money. The many types of loans that are available to consumers include the following:

- **Installment sales credit,** the most common type of loan available, is generally taken out to buy merchandise such as a major appliance. The consumer makes an initial deposit on the goods and agrees to pay the balance, plus interest and service charges, in equal installments over a period of time.
- **Installment cash credit** is a direct cash loan often used for vacations, home improvements, or other personal expenses. No down payment is required, but the loan, plus interest and other charges, must be repaid in equal installments over a specified period of time.
- **Single lump-sum credit** is a direct cash loan requiring that the amount borrowed plus interest be repaid on a specified day.
- **Open-ended or revolving credit** allows consumers to purchase goods and services from merchants on credit, often without a down payment. In some cases, the consumer may repay the entire balance within 30 days without any interest charges. Monthly payments are required thereafter, with interest being computed on the outstanding balance.
- **Credit card loans** are loans made through the use of a bank credit card. The payment plans for this type of loan vary widely. In some cases, the consumer pays an annual fee for the use of the card. In other cases, the consumer may have to pay the balance in full at the end of the month or make monthly installment payments.

Costs of the Loan Regardless of the type of loan you obtain, you are entitled by law to receive information about the cost of credit. First, you are entitled to know the **finance charge**—the total dollar amount the credit will cost, including interest charged plus any carrying or service charge. Second, you are entitled to know the **annual percentage rate (APR)**—the interest cost of the loan on a yearly basis. Because repayment schedules differ, the APR is your guide to the true cost of the loan.

To obtain a loan, you must be a good credit risk. The lender checks on your character, your ability to repay the loan, and your capital assets. To determine your creditability, lenders often check with a **credit bureau**—an agency that collects credit information on consumers. If your **credit rating**—a record of debt and payment history—is not good or is in doubt, you probably will be denied credit. Thus, to maintain a good credit rating, you should pay debts on time.

Applying Life Skills

1. What do you think are some wrong reasons for borrowing?
2. What kinds of loans are available for consumers?
3. What is a credit rating? Why is it important to maintain a good one?

Buying Insurance

Almost everyone needs some kind of insurance. Your parents, for example, may have several types of insurance: homeowners or renters insurance in case of theft, fire, or natural disaster; automobile insurance in case of accident or disability; and health insurance to cover their expenses if they are hospitalized.

How much and what kind of insurance you need depends on your lifestyle, your job, your age, and many other factors. Most people need enough insurance to protect their belongings and potential income, but not so much that paying for it strains their budget.

Types of Insurance There are six major types of insurance that you should consider:

- **Whole life insurance,** sometimes called ordinary life insurance, pays money to your survivors in the event of your death. It also carries a provision for savings against which you can borrow. You may collect the savings in one lump sum when you retire.
- **Term insurance** offers one type of coverage only—payment to your survivors in the event of your death.
- **Health insurance** covers medical and hospital bills if you become ill. Some health insurance policies also cover medication. A standard policy covers approximately 80 percent of medical expenses with some restrictions.
- **Automobile insurance** can provide several different kinds of coverage: **Liability** coverage protects you from claims and lawsuits if you cause an accident. **Collision** covers damage to your automobile if another vehicle hits it.
- **Homeowners insurance** covers a homeowner when his or her home or property has been damaged. Mortgage lenders generally insist that a homeowner carry this type of insurance until his or her mortgage has been paid in full.
- **Property liability** protects renters and homeowners against claims of negligence filed by others when an accident occurs on the renter's or homeowner's property.

Deciding exactly what insurance to buy can be confusing. Different insurance companies often offer the same type of insurance under separate names, which makes it difficult to know if the insurance companies are talking about the same kind of policy. In addition, the product—coverage—is invisible. The consumer cannot always tell how much the policy will pay until something happens for which he or she wants to collect payment on a claim.

When you are buying insurance, keep the following factors in mind:

1. "Group" policies—offered to a group of people, generally through an employer or organization—tend to be less expensive than individual policies purchased from an insurance agent.
2. Always consult more than one agent before buying a policy. Describe your needs carefully to each agent, and ask each to recommend a policy and provide a written list of benefits and estimates of costs—usually in the form of a monthly premium. Inform each agent that you are consulting other agents and intend to compare costs and benefits before making any decision. Base your decision to buy a policy on the results of your comparison.

Applying Life Skills

1. Why do consumers need insurance?
2. What are six major types of insurance?
3. What factors should you consider when buying insurance?

Analyzing Your Saving and Investing Options

Economists define saving as the nonuse of income for a period of time so that it can be used later. You may already be setting aside some of your income for some future use, such as continuing your education.

The Decision to Save Any saving that you do now may be only for purchases that require more money than you usually have at one time. When you are self-supporting and have more responsibilities, you will probably save for other reasons. For example, you may save to have money in case of emergencies, such as losing your job, and for your retirement. Most Americans who save do so for these reasons. Saving evens out a person's ability to spend throughout his or her lifetime.

Analyzing Your Options Generally, when people think of saving, they think of putting their money in a savings bank or a similar institution where it will earn interest. However, you have many options of places and ways to invest your savings. The most common places are commercial banks, savings and loan associations, savings banks, and credit unions. Before depositing money, investigate the different types of financial institutions in your area and the services they offer. Each institution usually has several types of savings plans, each paying a different interest rate. In comparison shopping for the best savings plan for you, you need to consider the trade-offs. Some savings plans allow immediate access to your money but pay a low rate of interest. Others pay higher interest and allow immediate use of your money, but require a large minimum balance.

Saving and Investing People usually distinguish between saving and investing. People have savings plans because they want a sure, fixed rate of interest. If people are willing to take a chance on earning a higher rate of return, however, they can invest their money in other ways, such as stocks and bonds. Nevertheless, it is usually impossible to get a higher rate of return without taking some risk. Of course, the very nature of risk implies that some investment may yield a lower rate of interest, too.

Deciding How Much to Save and Invest Saving involves a trade-off like every other activity. The more you save today, the more you can buy and consume a year from now, 10 years from now, or 30 years from now. You will, however, have less to spend today. Deciding what percentage of income to save depends on several factors:

- How much do you spend on your fixed expenses?
- What are your reasons for saving?
- How much interest can you earn on your savings and, therefore, how fast will they grow?
- How much income do you think you will be earning in the future?

If you expect to make a much higher income tomorrow, you have less reason to save a large percentage of today's income. In this case, it would be better to wait to start a large savings plan. It is a good idea, however, to have some sort of savings plan.

Applying Life Skills

Write down a list of short-term saving goals, such as saving to buy a new bicycle. Make a list of typical ways in which you can save for such a purchase. Then make a list of long-term saving goals, such as saving for a house or retirement. Then, describe the different ways you can go about achieving your goals. What is the major difference between the two ways of saving?

Renting an Apartment

If you decide to rent an apartment, take time to choose wisely. Determine the best location in terms of getting back and forth from work or school and convenience for shopping. Decide if you want a furnished or an unfurnished apartment. Consider how much space you need to have adequate storage and be comfortable. Most importantly, determine how much rent you can afford to pay. Monthly rent plus related expenses should not be more than one week's take-home pay.

Carrying Out the Search To find an apartment, consult the classified section of newspapers, ask friends for recommendations, or hire a rental agent. Never agree to rent an apartment until you have personally seen it. The best time to do this is during an evening or on a weekend, which will reveal the surrounding noise level and what the neighbors are like. If possible, talk to some of the people in the apartment complex to learn the advantages and disadvantages of moving into the area.

Inspect the apartment and the surrounding area carefully for the following:

1. Is the building well-built, well-maintained, and well-lit?
2. Is the apartment the right size? Does it have a convenient floor plan, enough wall space for your furniture, and adequate lighting and electrical outlets?
3. How many windows are there? Do they open and close easily? Are there screens and storm windows?
4. Is the apartment air-conditioned? Does it have its own heating and cooling controls?
5. Are major appliances, such as a stove and refrigerator, in good working condition?
6. If there is carpeting, is it clean? Are there drapes, blinds, or shades for the windows?
7. Does the building have fire walls? Smoke alarms?
8. Are laundry equipment and storage facilities available?
9. Is there trash collection or disposal? Where? How often? By whom? Who pays for it?
10. What kind of burglary protection is there?
11. What are the parking facilities?

The Lease After you have selected the apartment you want, you probably will have to sign a lease, a written agreement between you and the landlord that states the major terms of your occupancy. It generally includes a description of the rental property; the amount of rent to be paid and when it is due; how much deposit is required, what it covers, and under what conditions it may be forfeited; and how long the lease is in force and under what conditions it may be renewed. The lease also should include the terms for rent increases; who pays for specific utilities and repairs; what alterations you can make on the property; how much notice you must give before moving; whether you can rent the apartment to someone else; and whether children, pets, or roommates are allowed.

Before signing a lease, inspect the apartment with the landlord. Point out and write down any damage to walls, floors, appliances, and fixtures. Attach a copy of this list to the lease so that you cannot be held responsible for damage done before you moved into the apartment. Check to see if a security deposit is required in addition to the rental deposit. If it is, determine the amount and under what conditions it will be returned.

Applying Life Skills

1. What are some things to consider if you decide to rent an apartment?
2. When is the best time to look for an apartment?
3. What is a lease? What does it include?

ECONOMIC HANDBOOK

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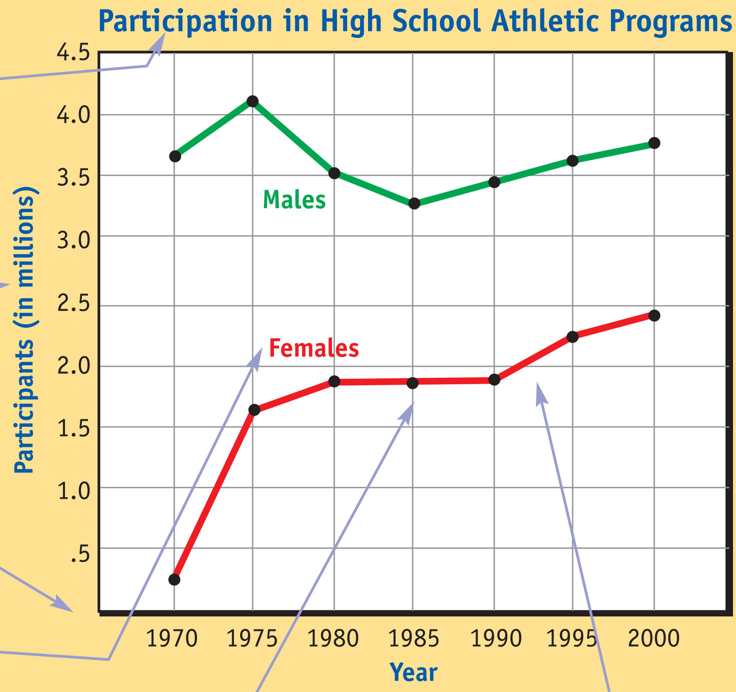
Using Line Graphs

A graph, like a picture, may present information in a more concise way than words. Line graphs are drawings that compare numerical values. They often are used to compare changes over time or differences between places, groups of items, or other related events.

Learning the Skill

Follow these steps to learn how to understand and use line graphs. Then answer the questions below.



1. Read the title of the graph. This should tell you what to expect or look for.
2. Note the information on the left side of the graph—the vertical axis. The information being compared usually appears on this axis.
3. Note the information along the bottom of the graph—the horizontal axis. Time often appears along this axis.
4. Determine what the line(s) or curve(s) symbolizes.
5. Select a point on the line, then note the date below this point on the horizontal axis and the quantity measured on the vertical axis.
6. Analyze the movement of the line (whether increasing or decreasing over time) or compare lines (if more than one are on the graph) to determine the point being made.

Practicing the Skill

1. About how many males participated in high school athletic programs in 1970? In 1997?
2. About how many females participated in high school athletic programs in 1970? In 1997?

Applying the Skill to Economics

1. What trends are shown on the graph?
2. How do you think these trends affected the manufacture and sale of sports-related products from the early to late 1990s?

Using Bar Graphs

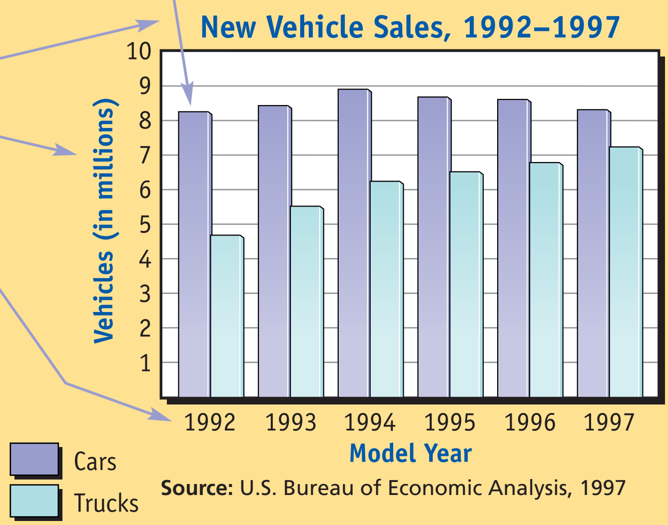
Learning the Skill

Follow these steps to learn how to understand and use bar graphs.

1. Read the title and labels. They tell you the topic, what is being compared, and how it is counted or measured.

2. Examine a bar on the graph. Note the date below the bar on the horizontal axis and the quantity measured on the vertical axis.

3. Analyze the change over time or compare bars to determine the point being made.



Source: U.S. Bureau of Economic Analysis, 1997

Practicing the Skill

1. What year had the highest new car sales?
2. About how many trucks sold in 1997?

Using Circle Graphs

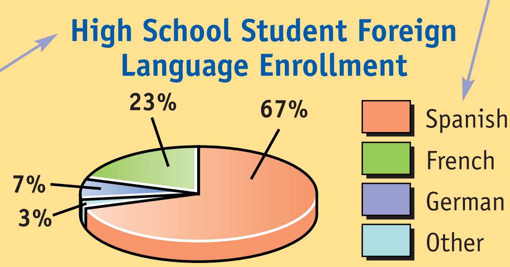
Learning the Skill

Follow these steps to learn how to understand and use circle graphs.

1. Examine the title to determine the subject.

2. Read the legend to see what each segment represents.

3. Compare the relative sizes of the circle segments, thus analyzing the relationship of the parts to the whole.



Source: *Statistical Abstract of the United States,* 1998

Practicing the Skill

1. What percent of foreign language students are studying German?
2. What foreign language has the greatest student enrollment?

Applying the Skill to Economics

1. Using the bar graph, what projection could you make about the future of new car sales?
2. Based on the circle graph, which foreign language textbooks probably have the greatest sales volume?

Using Tables and Charts

Tables and charts are often used to show comparisons between similar categories of information. Tables usually compare statistical or numerical data. Tabular data is presented in columns and rows. Charts often show a wider variety of information than tables.

Learning the Skill

Follow these steps to learn how to understand and use tables. Then answer the questions below.

Average Earnings of Full-Time Workers by Age and Education, 1996

Age and Sex	All Workers	Some High School	High School Graduate	Four-Year College Degree
Male	**$42,077**	**$25,283**	**$32,521**	**$63,127**
18–24	18,856	15,478	18,779	27,257
25–34	33,055	19,910	27,349	44,355
35–44	45,840	26,116	35,138	70,035
45–54	51,705	34,527	39,178	72,461
55–64	49,916	32,926	38,032	71,070
Female	**$28,363**	**$17,313**	**$21,893**	**$41,339**
18–24	17,002	12,512	15,219	24,980
25–34	26,119	16,826	19,526	34,132
35–44	30,879	18,261	23,134	46,923
45–54	31,222	18,007	23,833	45,012
55–64	27,629	19,039	23,179	41,342

Source: U.S. Bureau of the Census

1. Read the title of the table to learn what content is being presented.
2. Read the headings in the top row. They define the groups or categories of information to be compared.
3. Examine the labels in the left-hand column. They describe ranges or subgroups, and are often organized chronologically or alphabetically.
4. Note the source of the data. It may tell you about the reliability of the table.
5. Compare the data presented in the other columns. This is the body of the table.

Practicing the Skill

1. What are the average earnings for 25- to 34-year-old women with college degrees?
2. What are the average earnings for 18- to 24-year-old males without high school diplomas?

Applying the Skill to Economics

1. What age-related trends do you notice?
2. What conclusions could you draw from this data about the economic effect of education on earnings?

Reading Maps

Maps are visual tools that show to scale the relative size and location of specific geographic areas. There are political maps, which show human-made boundaries. There are physical maps, which show physical features of an area. There are also special purpose maps that can show historical change, cultural features, population, climate, land use, or resources. Regardless of type, all maps use symbols to convey information.

Learning the Skill

Follow these steps to learn how to understand and use maps. Then answer the questions below.

1. Read the title to determine the map's content.
2. Examine the map's scale, which indicates the ratio between the map's size and the actual area being represented.
3. Look for a compass rose or directional arrow to find the map's directions.
4. Examine the lines of latitude and longitude to find the absolute location of specific places.
5. Read the legend, or key, to interpret any shapes, colors, boundary lines, or symbols.

Practicing the Skill

1. What is the primary content shown on this map?
2. Which region of the United States has the heaviest concentration of manufacturing areas?

Applying the Skill to Economics

1. How could this map be a helpful reference if you were planning to buy ranch land to raise cattle?
2. What generalizations could you draw from this map about energy resources in the United States?

Understanding Percentages

If you shop, you probably like seeing the word *percent*. Stores often advertise sale prices as a percent of regular price. *Percent* means "parts per hundred." So, 30 percent means the same thing as 30/100 or 0.30. Expressing change as a percentage allows you to analyze the relative size of the change.

LEARNING THE SKILL

Follow these steps to learn how to calculate and use percentages. Then answer the questions below.

1. Suppose a pair of shoes is on sale for 30 percent off the regular price. Calculate the discount by multiplying the original price by the sale percentage. Change percent to a decimal before you multiply.

2. Find the sale price by subtracting the discount from the regular price.

Calculating Percent

Regular price of shoes	$57.00	Regular price	$57.00		$57.00
30%	× .30	Discount	−17.10	OR	× .70
Discount	$17.10	Sale price	$39.90		$39.90

3. Or, figure the sale price by multiplying the regular price by the percent you *will* pay. (Subtract the sale percentage from 100 to get the percent you will pay.) Change percent to a decimal before you multiply.

4. Calculate an increase in sales by subtracting the quantity sold last year from the quantity sold this year.

Arithmetic Change vs. Percentage Change

Arithmetic change	1.6 billion pounds of butter sold this year
	−1.5 billion pounds of butter sold last year
	.1 billion pounds
Percentage change	$\frac{0.1}{1.5} = .067 \times 100 = 6.7$ percent

5. Determine the percentage change by dividing the arithmetic difference by the original quantity. Multiply by 100 to change the decimal to percent.

PRACTICING THE SKILL

1. A store advertises a shirt at 25 percent off the original price of $44. What is the sale price?
2. What is the percentage increase in high school enrollment from 1,165 students to 1,320?

Applying the Skill to Economics

In 1997 about 32 percent of all music recordings sold were classified as rock music. That year about $12 billion was spent on all recordings. How much was spent on rock music?

Determining Averages: Mean and Median

The most commonly used summary statistic is the average. There are two ways to compute the average: by using the mean or the median. The *mean* is the average of a series of items. When your teacher computes the class average, he or she is really computing the mean. Sometimes using the mean to interpret statistics is misleading, however. This is especially true if one or two numbers in the series are much higher or lower than the others. The median can be more accurate. The *median* is the midpoint in any series of numbers arranged in order.

Learning the Skill

Follow these steps to learn how to determine and use averages. Then answer the questions below.

1. Suppose you want to find the mean weekly salary for a group of teenagers. First, add all the earnings together.

2. Divide the sum by the number of students to find the mean.

3. Locate the median by finding the midpoint in the series ($41). Compare the mean with the median. Determine which is the more useful statistic.

Students' Weekly Earnings From After-School Jobs

$ 20	
32	
34	
41	$420 ÷ 7 = $60
53	
65	
175	
$420	

Median Weekly Income of the Four Highest-Paid Students

$ 41	$ 53	
53	+ 65	
65	$118	$118 ÷ 2 = $59
175		

4. Suppose you want to calculate the median for the four highest-paid students. First, arrange the numbers in order.

5. When an even number of figures is in the series, the median is the mean of the two middle numbers. Follow steps 1 and 2 to find the mean.

Practicing the Skill

1. What is the median salary for all seven students?
2. What is the median salary for the four lowest-paid students?

Applying the Skill to Economics

Average Monthly Rent: 2-Bedroom Apartment

Atlanta, GA	$688	Dallas, TX	$ 718
Boston, MA	$906	San Jose, CA	$1,139

1. What is the mean monthly rent for these four cities?
2. What is the median monthly rent?

Understanding Nominal and Real Values

The rise in the economy's average price level is called inflation. To make comparisons between the prices of things in the past and those of today, you have to make the distinction between *nominal,* or current, and *real,* or adjusted for inflation, values. You can use the consumer price index (CPI), an index of average prices for consumer goods, to calculate real values. Then you can *accurately* compare changes in income and prices over time.

Learning the Skill

Follow these steps to learn how to understand and calculate nominal and real values. Then answer the questions below.

1. Suppose a family sells a house after living there for 10 years. To calculate whether they made any profit from the sale, they need to know the real sale price of their house. First, find the nominal price increase.

Purchase price of house in 1990: $50,000
Sale price of house in 2000: $100,000

CPI in 1990: 100
CPI in 2000: 200

$$\begin{array}{r} \$100{,}000 \\ -\ 50{,}000 \\ \hline \$\ 50{,}000 \end{array} \qquad \frac{\$50{,}000}{\$50{,}000} = 1 \times 100 = 100\% \qquad \begin{array}{r} 200 \\ -100 \\ \hline 100 \end{array} \qquad \frac{100}{100} = 1 \times 100 = 100\%$$

$$\begin{array}{r} 100\% \\ -100\% \\ \hline 0\% \end{array}$$

2. Calculate the nominal percentage increase in price. Divide the amount of increase by the original price and multiply by 100 to express the answer as a percent.

3. Determine the percentage increase in the consumer price index. First find the actual change in CPI. Then divide the amount of increase by the original CPI and multiply by 100.

4. Determine the percentage increase in real price. Subtract the percentage increase in CPI from the percentage increase in nominal price. Evaluate the sale in real values.

5. Suppose that last year you earned $10 per hour. You receive a 5 percent raise. The CPI is 3 percent higher than last year's CPI, which means there is a 3 percent inflation rate.

Earnings: $10 per hour
Raise: 5%
Inflation Rate: 3%

$$\begin{array}{r} 5\% \\ -3\% \\ \hline 2\% \end{array}$$

6. Calculate the real salary increase by subtracting the inflation rate from the nominal raise.

Practicing the Skill

1. What was the nominal price increase on the sale of the house?
2. How much money, in real dollars, was made on the house?
3. How much was the real value of the raise?

Applying the Skill to Economics

Between 1980 and 1997, the amount spent on advertising in the United States increased by 240 percent. How could you adjust this figure for inflation?

Understanding Interest Rates

When you deposit money in a savings account, the bank pays you interest for the use of your money. The amount of interest is expressed as a percent, such as 6 percent, for a time period, such as per year. Two types of interest exist: simple and compound. *Simple interest* is figured only on the principal, or original deposit, not on any interest earned. *Compound interest* is paid on the principal plus any interest that has been earned. Over time, there is a significant difference in earnings between simple and compound interest.

Learning the Skill

Follow these steps to learn how to understand and calculate interest rates. Then answer the questions below.

1. Suppose you deposit $100 in a savings account that earns 6 percent simple interest per year. Get ready to figure your earnings by converting 6 percent to a decimal.

2. To calculate the simple interest earned, multiply the principal by the interest rate.

3. Calculate the account balance for the first two years, assuming the bank pays the same interest rate each year. Add the principal, the first year's interest, and the second year's interest.

Simple Interest

6% = .06	$ 100	$100
	× .06	+ 6
	$6.00	6
		$112

4. Suppose you deposit $100 in a savings account that earns 6 percent compound interest per year. Calculate the interest earned the first year.

5. Find the bank balance for the end of the first year. Add the principal and first year's interest.

6. Determine the interest earned in the second year. Multiply the new balance by the interest rate.

7. Figure the total bank balance after two years. Add the second year's interest to the first year's balance.

Compound Interest

$ 100	$100	$ 106	$106.00
× .06	+ 6	× .06	+ 6.36
$6.00	$106	$6.36	$112.36

Practicing the Skill

1. What would be the difference in earnings between simple and compound interest if your initial balance was $1,000 rather than $100?
2. What would be the difference in earnings between simple and compound interest on your $100 savings after five years?

Applying the Skill to Economics

1. What would be the impact of compounding interest on a daily basis rather than an annual basis?
2. Banks often pay higher rates of interest on money you agree to keep in the bank for longer periods of time. Explain why this might be.

Reading the Financial Page

A stock market report alphabetically lists stocks and provides information about stock prices and trades. Every business day, shares of stock are bought and sold. At the beginning of each trading day, stocks open at the same prices they closed at the day before. Prices generally go up and down throughout the day as the conditions of supply and demand change. At the end of the day, each stock's closing price is recorded.

Learning the Skill

Follow these steps to learn how to understand and use the financial page. Then answer the questions below.

1. Locate the stock in the alphabetical list. Names are abbreviated.
2. Examine the stock's history over the last 52 weeks. The high and low prices for one share of stock appear.
3. Note the ticker symbol, or computer code, for the stock.
4. Evaluate the annual dividend. Stockholders receive this dividend, or payment, for each share of stock they own.
5. Review the yield. The yield is the return on investment per share of stock. It is calculated by dividing the dividend by the closing price.
6. Read the price/earnings ratio. Lower price/earnings ratios generally mean more earnings per share.
7. Note the volume, or number of shares of stock, traded that day. The number given represents hundreds of shares.
8. Examine the day's high, low, and closing stock price.
9. Examine how the day's closing stock price compares with the prior business day's closing price. Positive numbers indicate a price increase. Negative numbers mean a price drop.

Stock Quotations

52 Weeks Hi	52 Weeks Lo	Stock	Sym	Div	Yld %	PE	Vol 100s	Hi	Lo	Close	Net Chg
94.15	29.25	TxInstr	TXN	.17	.2	57	39008	80.80	77.55	79.60	+1.5
59.50	41	TexPacTr	TPL	.40	.9	28	23	44.25	43.85	44.25	+ .15
48	35.50	TX Util	TXU	2.30	6.2	13	17307	37.20	36.45	36.80	− .15

Practicing the Skill

1. How many shares of Texas Instruments stock were traded on the day shown?
2. What was the day's highest price for a share of Texas Utilities stock?
3. Which stock had the greatest increase in closing price from the previous day?

Applying the Skill to Economics

If you had purchased 100 shares of Texas Instruments stock at its lowest 52-week price and sold it at this day's closing price, how much money would you earn?

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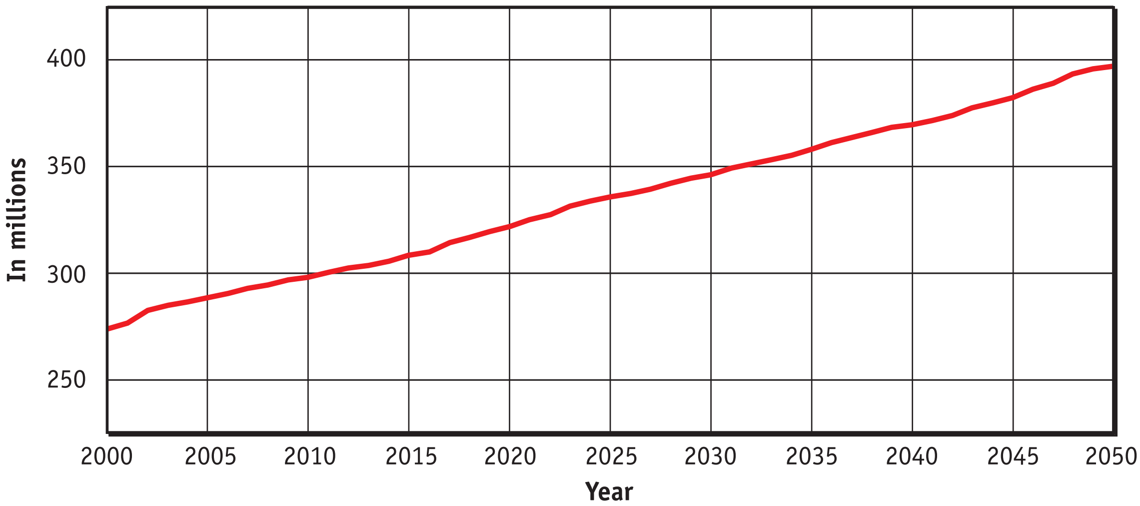
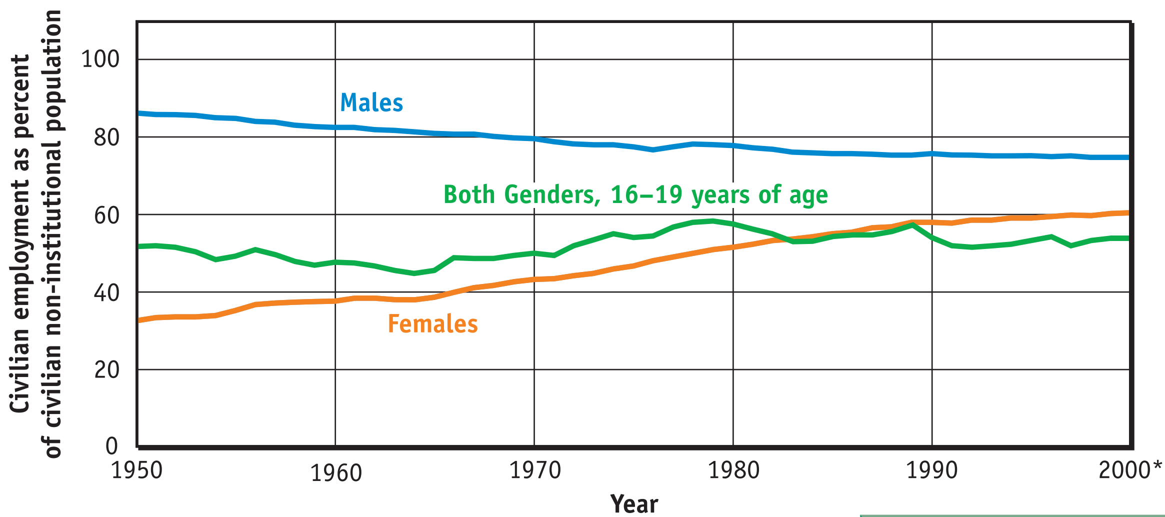


Source: U.S. Bureau of the Census

Civilian Labor Force, 1950–2000



Source: Department of Labor, Bureau of Labor Statistics
*Estimate

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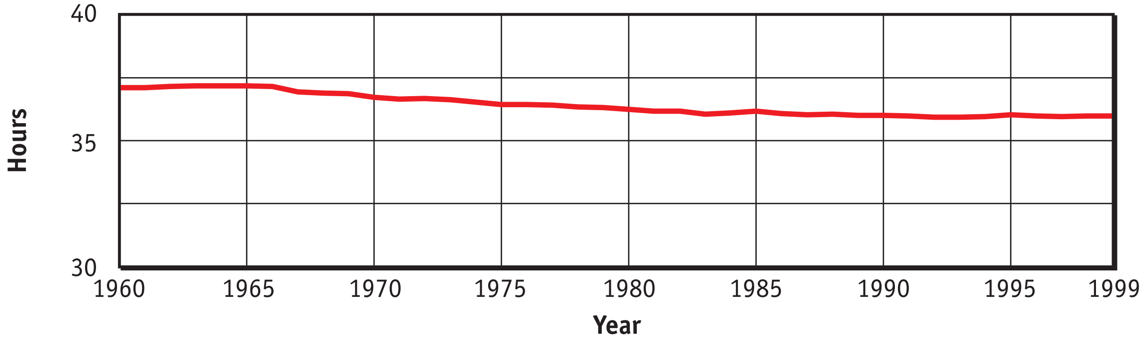
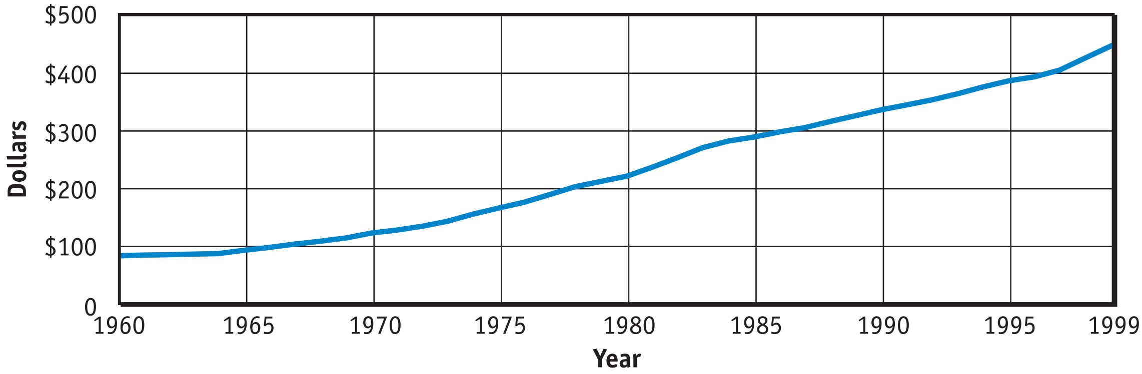
The American People

Hours and Earnings in Private Industries, 1960–1999

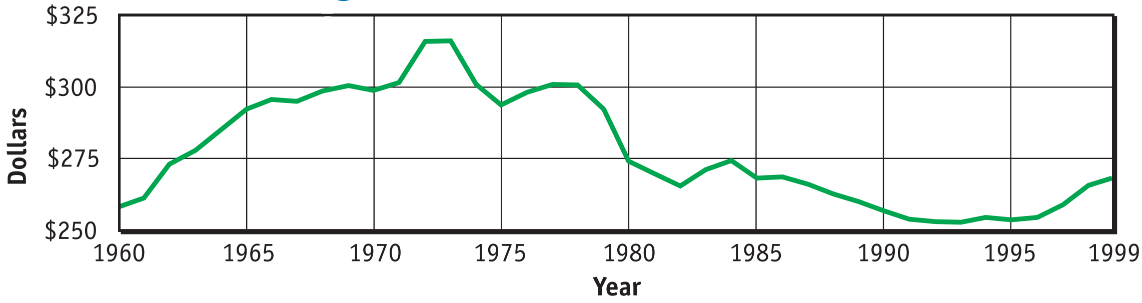
A Average Weekly Hours



B Average Weekly Earnings, Current Dollars



C Average Weekly Earnings, 1982 Dollars



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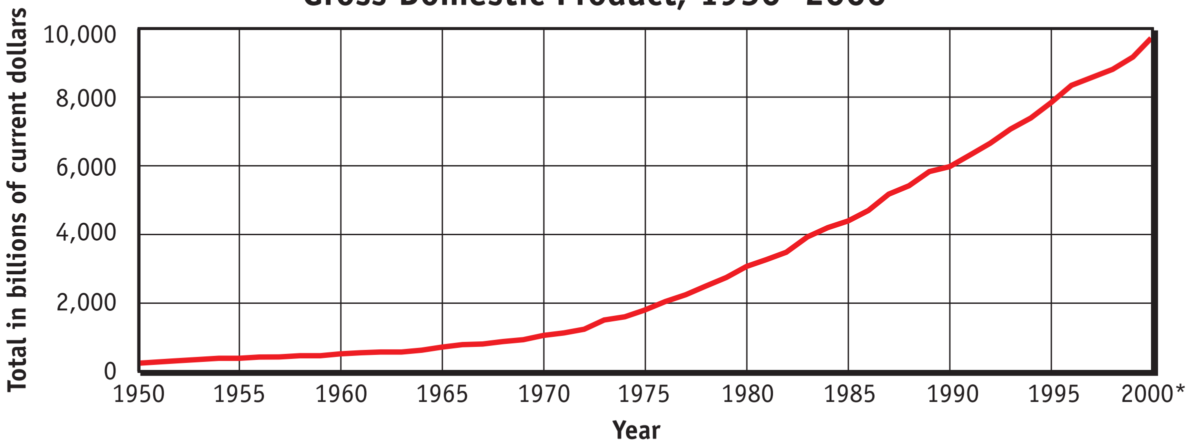
The U.S. Economy

Gross Domestic Product, 1950–2000



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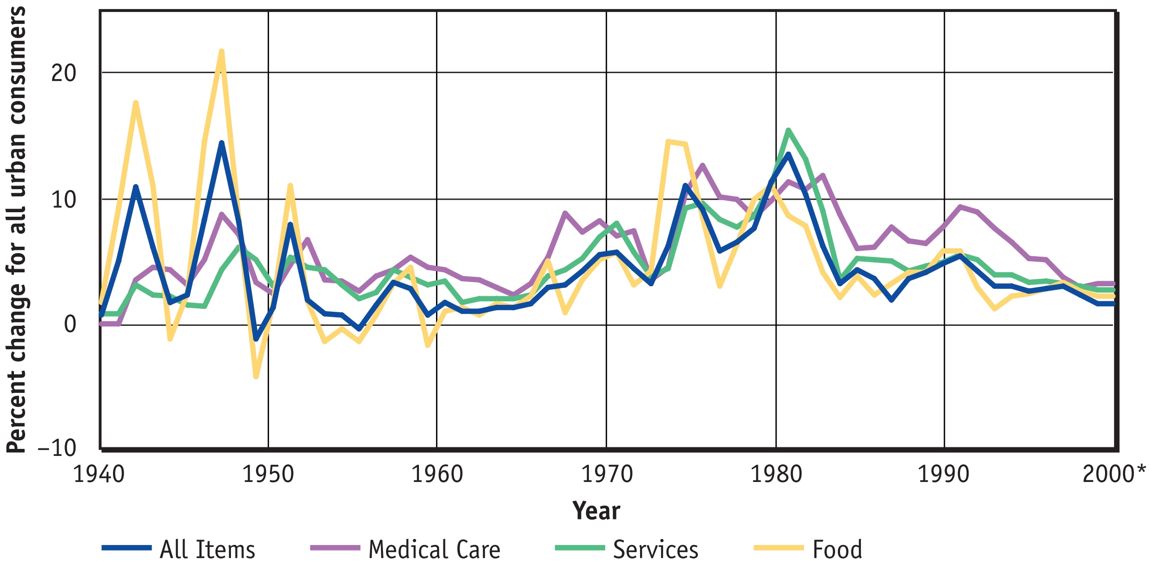

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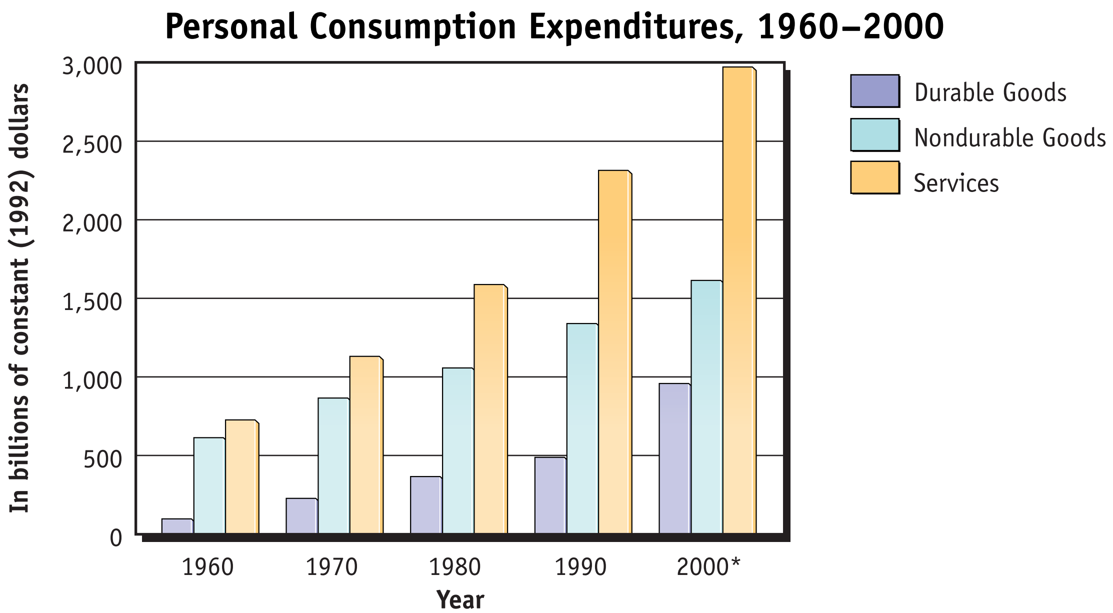
The U.S. Economy



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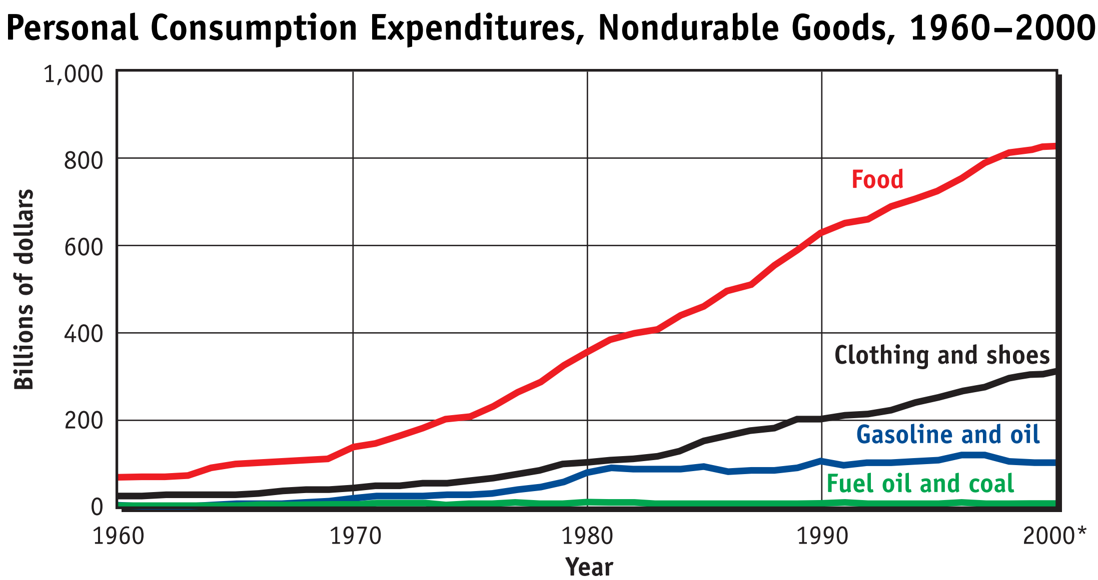

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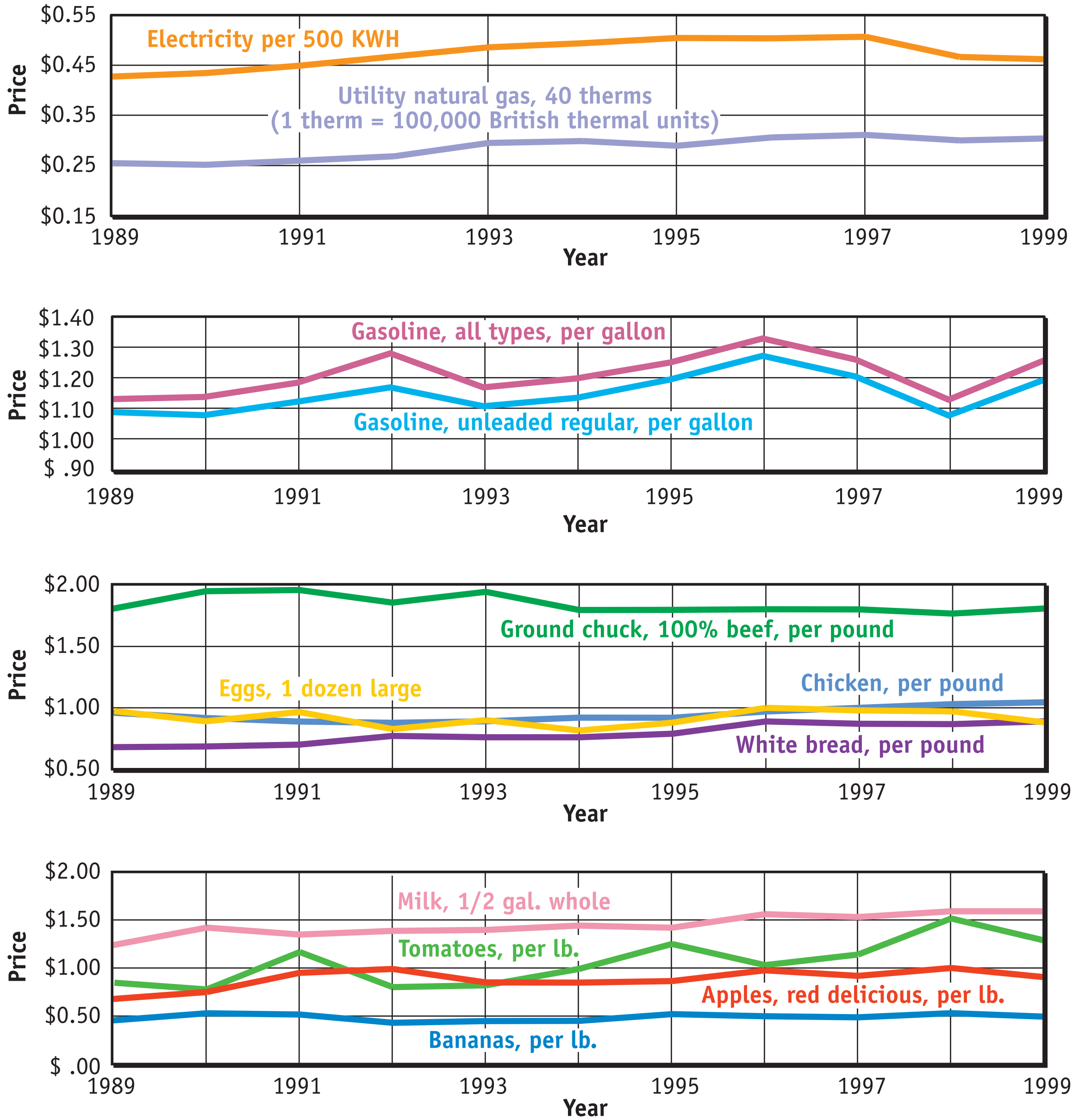

Source: Bureau of Labor Statistics
U.S. city average prices for July

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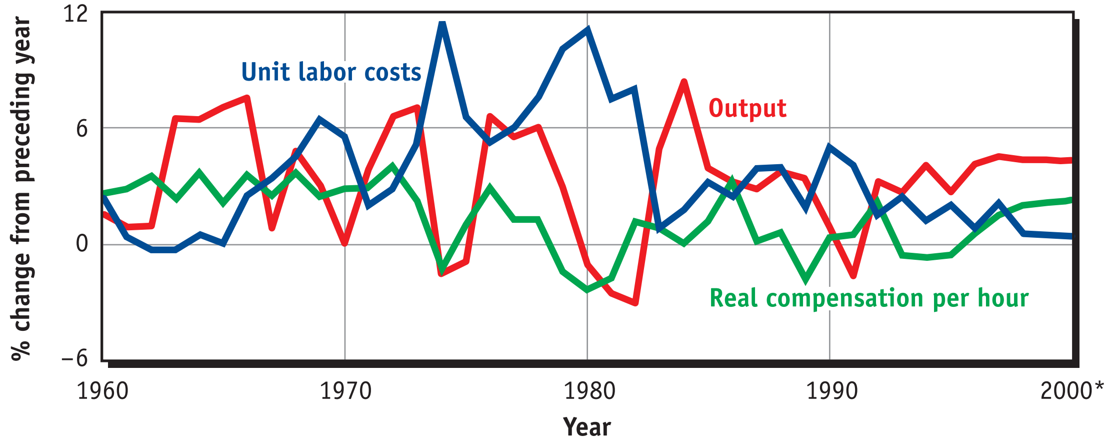

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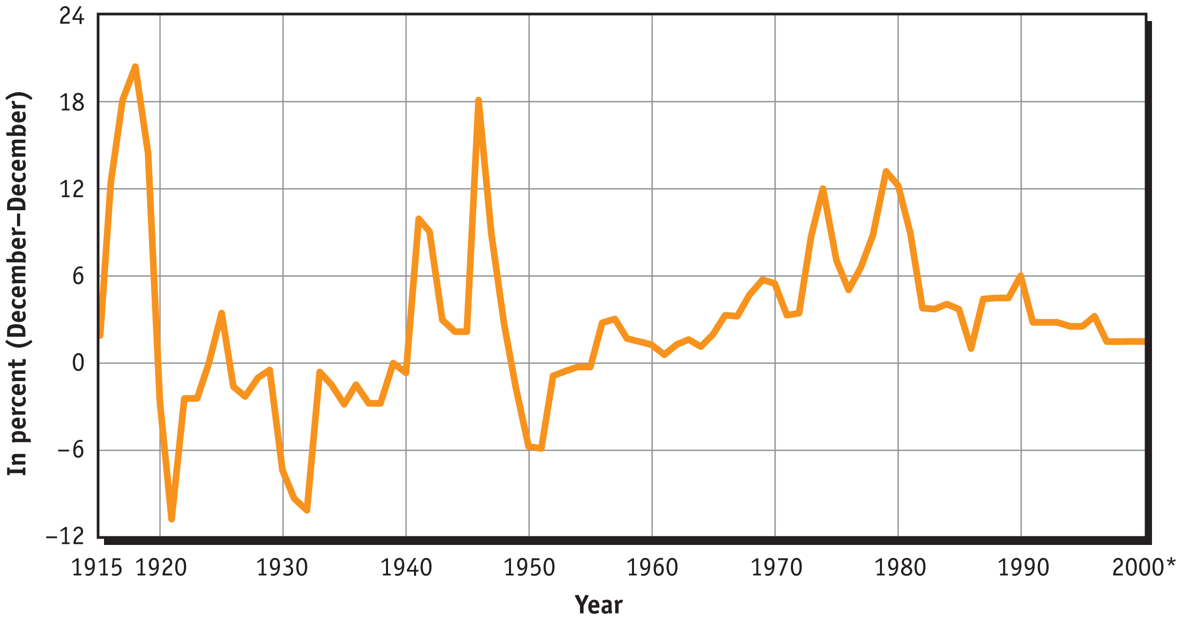

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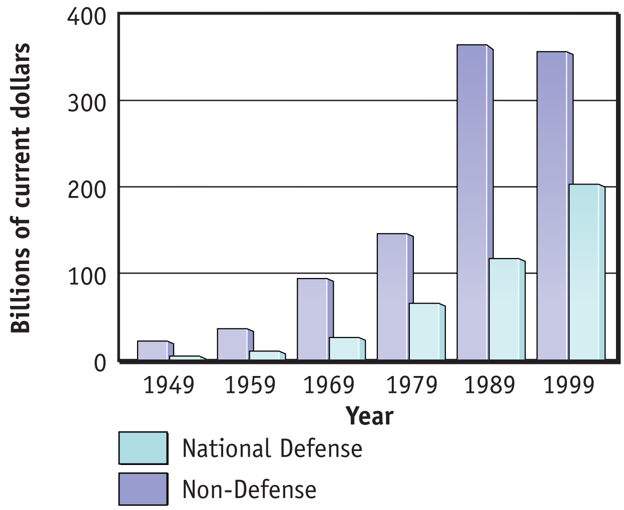

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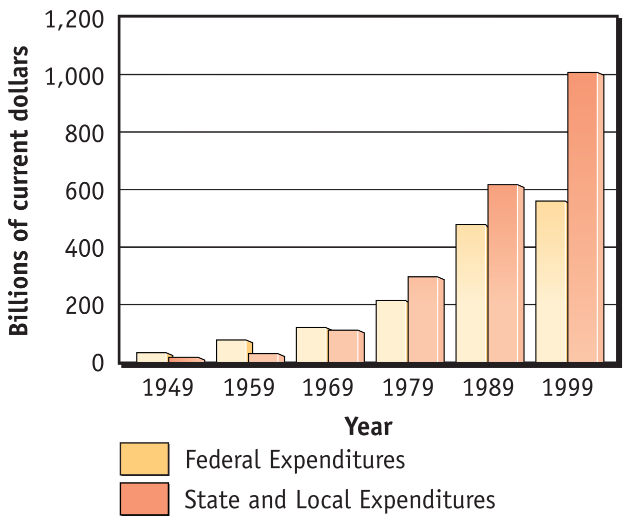
Total Government Expenditures, 1949–1999



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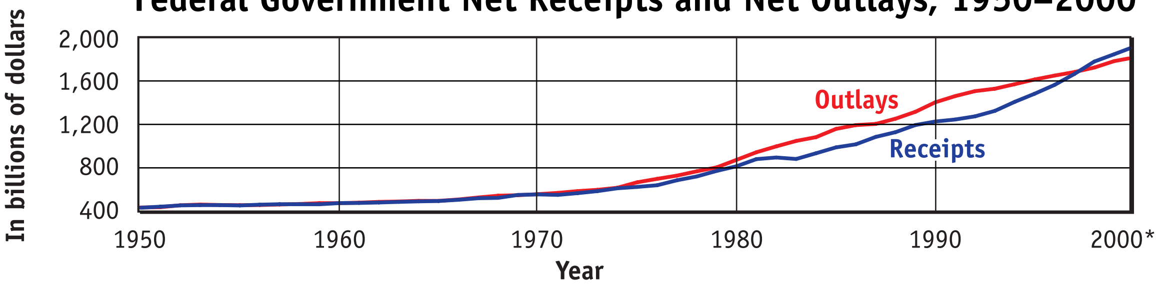
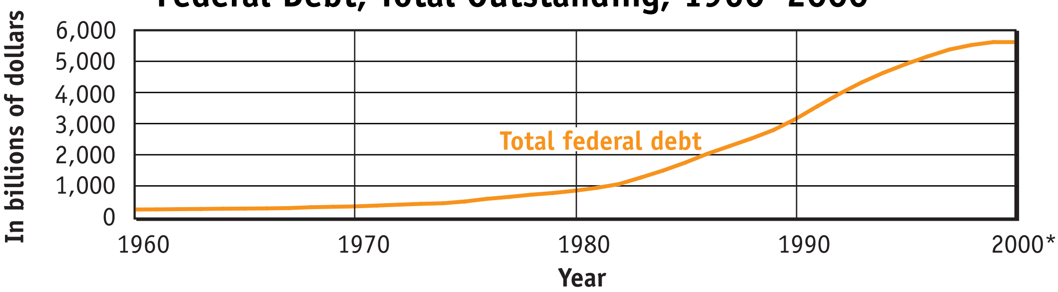


Source: *Economic Report of the President*, various editions
*Estimate

Federal Debt, Total Outstanding, 1960–2000**



Source: U.S. Bureau of the Census
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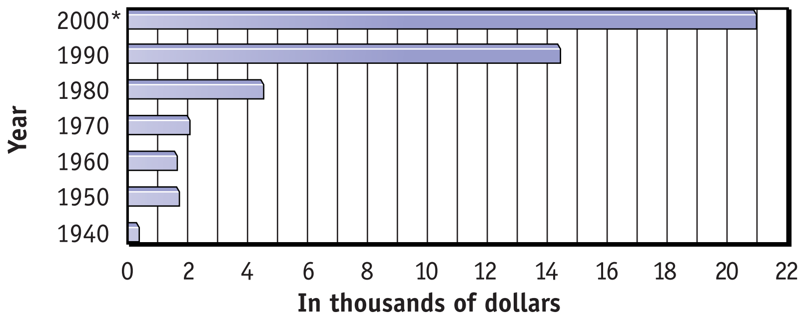
**Includes federal debt held by the public and by the federal government

National Debt Per Capita, 1940–2000**



Sources: U.S. Bureau of the Census; U.S. Bureau of Public Debt
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**Includes federal debt held by the public and by the federal government

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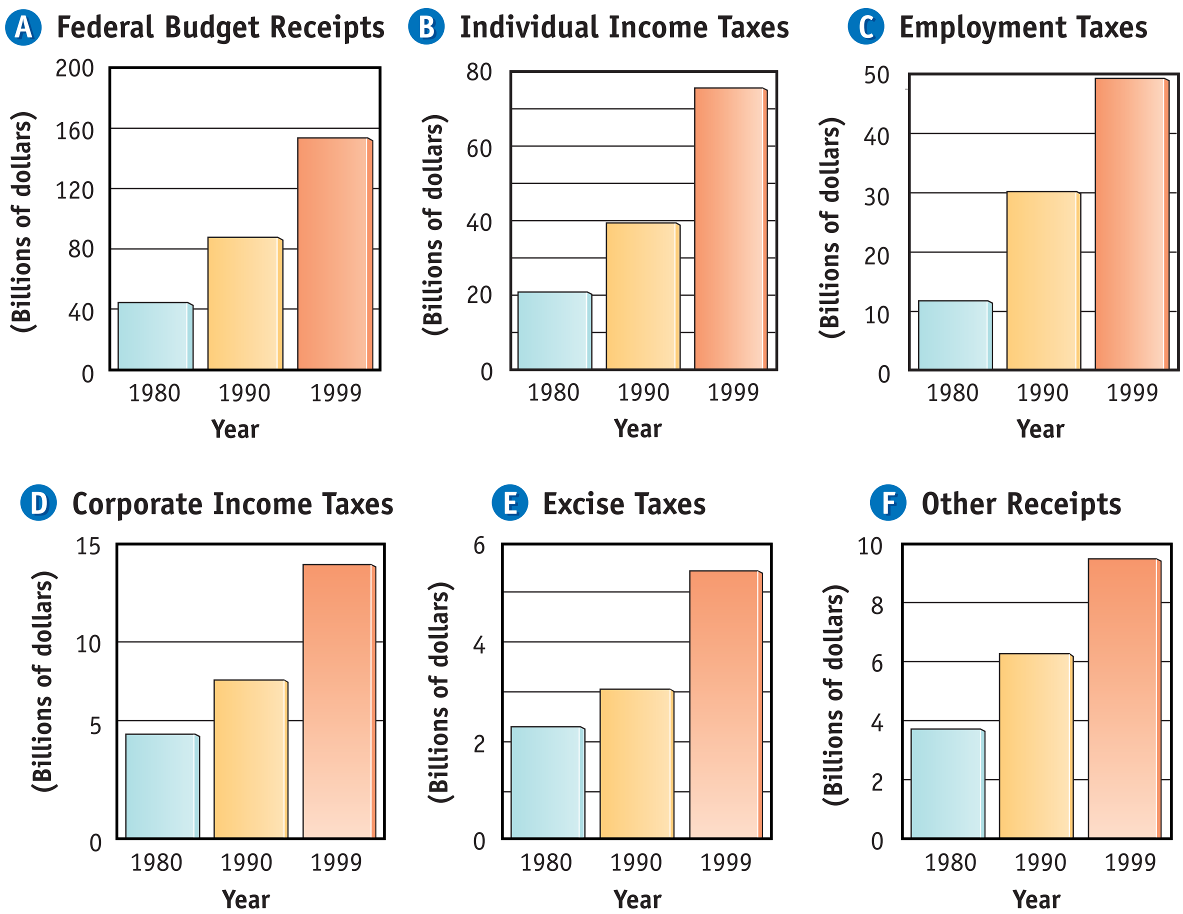
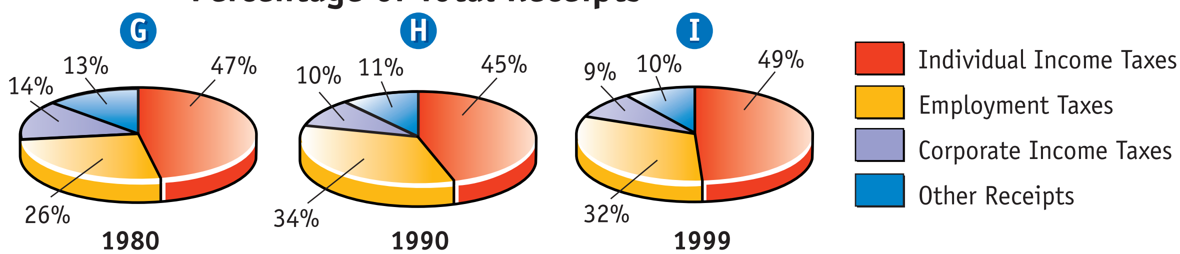
The Government Sector

Federal Budget Receipts, 1980–1999



Percentage of Total Receipts



Source: *Economic Report of the President,* various editions

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The Financial Sector

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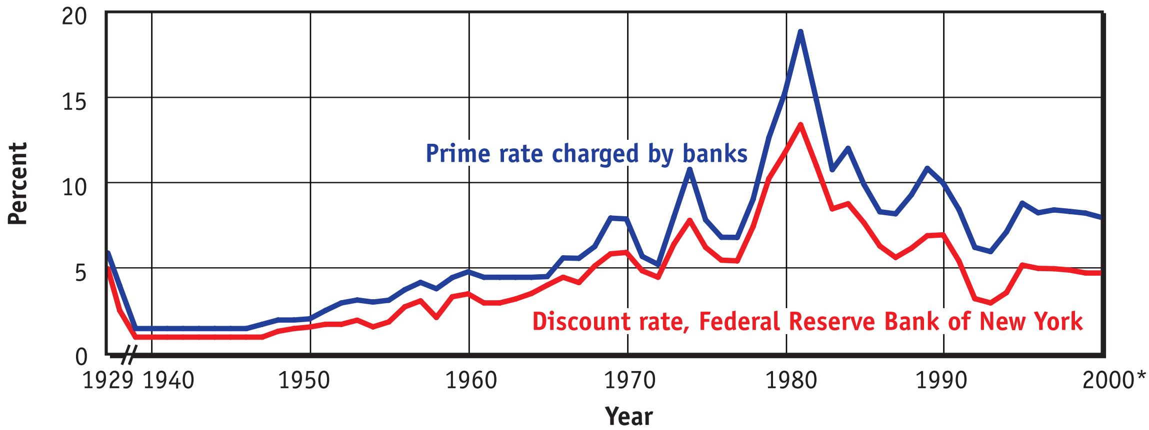
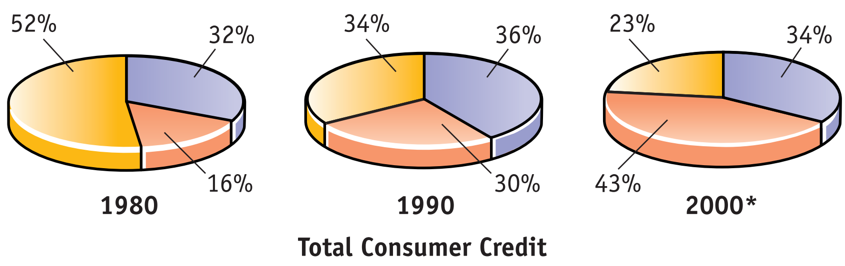


Sources: *Economic Report of the President*, 1999; The Financial Forecast Center
*Estimate

Consumer Credit Outstanding, 1980–2000

Total Consumer Credit	
1980	$350.1 billion
1990	$789.3 billion
2000*	$1,362.6 billion



Source: Board of Governors of the Federal Reserve System
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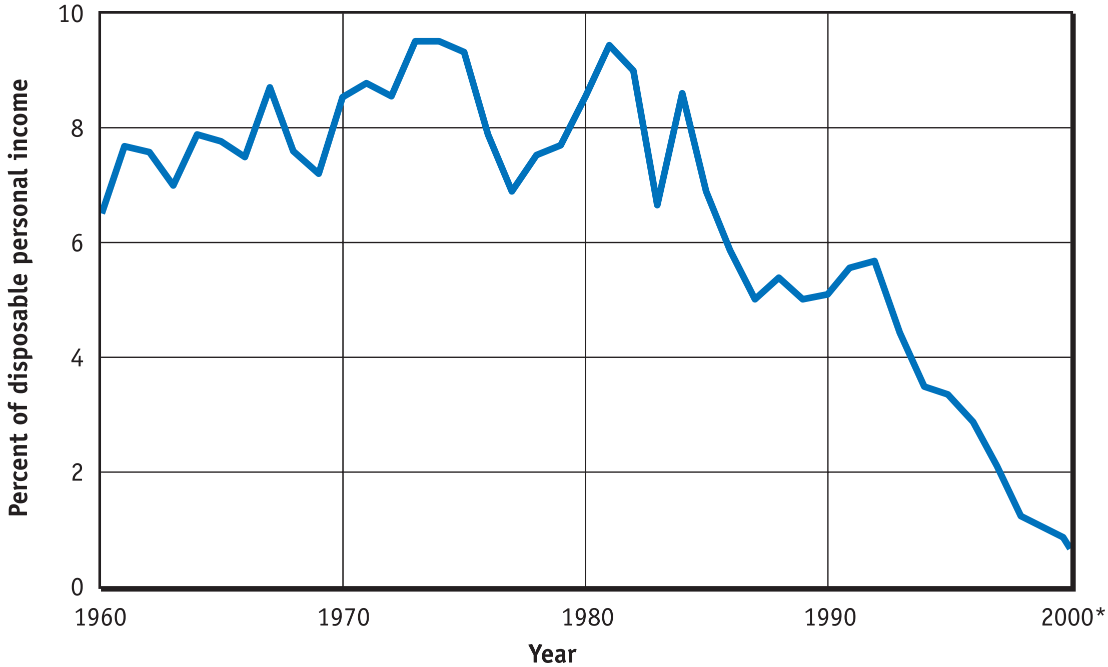

Source: U.S. Department of Commerce, Bureau of Economic Analysis
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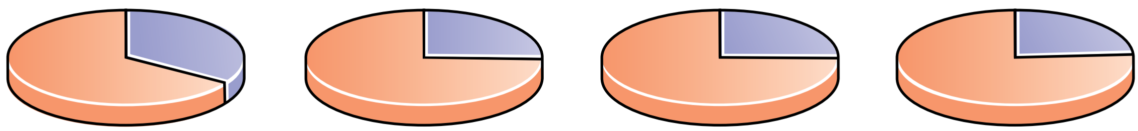

1970	1980	1990	2000*
M1 = $214.4	M1 = $408.9	M1 = $825.8	M1 = $1,108.6
M2 = $626.5	M2 = $1,601.1	M2 = $3,279.6	M2 = $4,627.7

In billions of dollars

M1 consists of all currency and checkable deposits.

M2 consists of M1 plus noncheckable savings accounts, money market deposit accounts, time deposits, and money market mutual funds.

Source: Board of Governors of the Federal Reserve System
*Estimate

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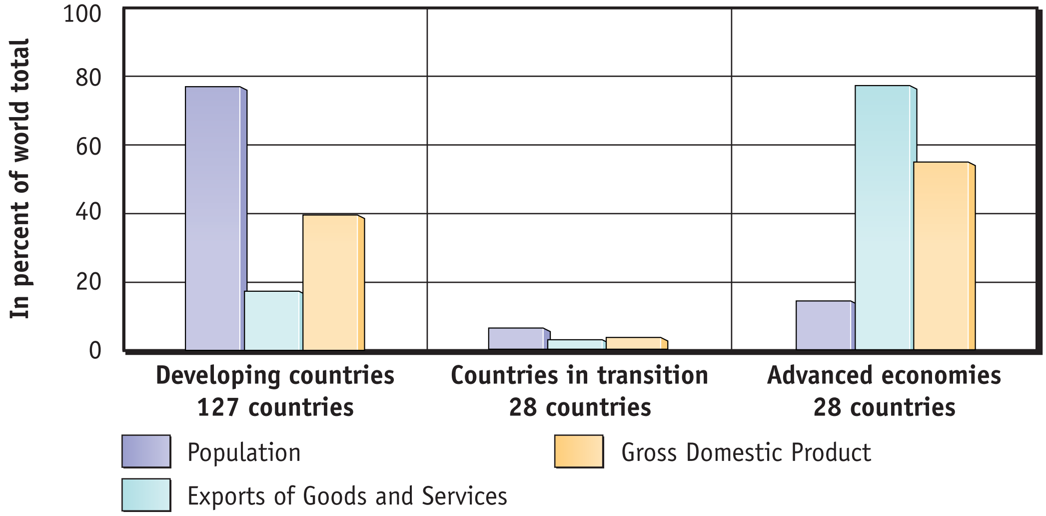
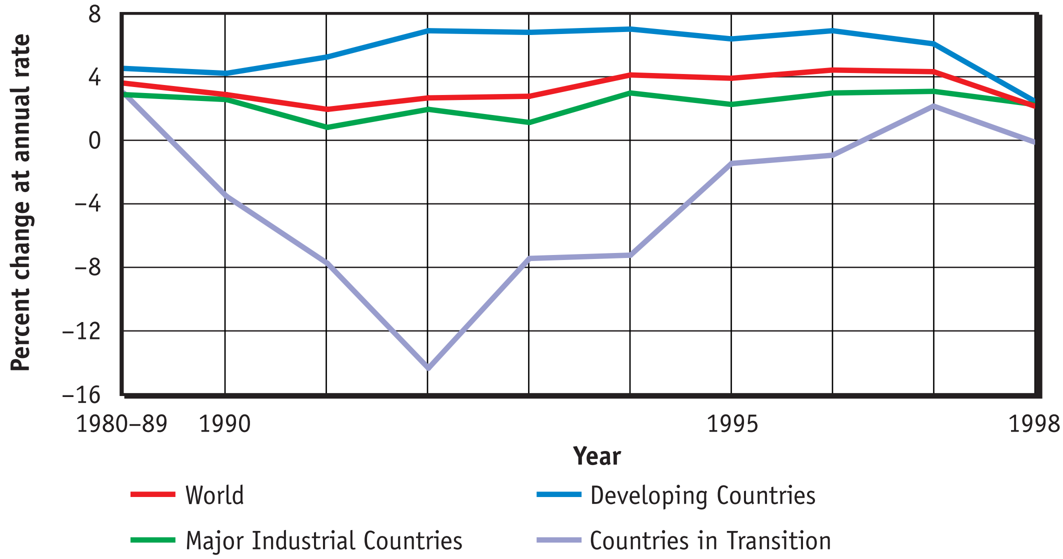
The Global Economy

Economic Groups: Population, Exports, and GDP, 1998



Source: International Monetary Fund

Growth Rates in Real GDP, 1980–1998



Source: International Monetary Fund

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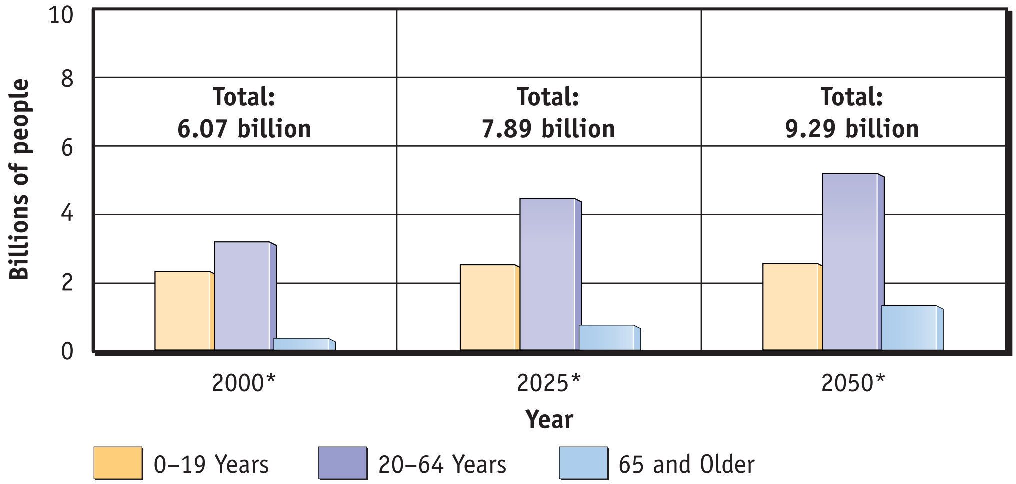
The Global Economy

World Population by Age, 2000–2050



Source: U.S. Bureau of the Census
*Estimate

Countries Ranked by Population, 2000 and 2050

Country	Year 2000* Population (in millions)	Year 2000* Rank	Year 2050* Population (in millions)	Year 2050* Rank
China	1,256	1	1,322	(2)
India	1,017	2	1,706	(1)
United States	274	3	394	(3)
Indonesia	219	4	330	(5)
Brazil	173	5	228	(7)
Russia	145	6	121	(13)
Pakistan	141	7	260	(6)
Bangladesh	129	8	211	(8)
Japan	126	9	101	(18)
Nigeria	117	10	337	(4)
Mexico	102	11	167	(10)

Source: U.S. Bureau of the Census
*Estimate

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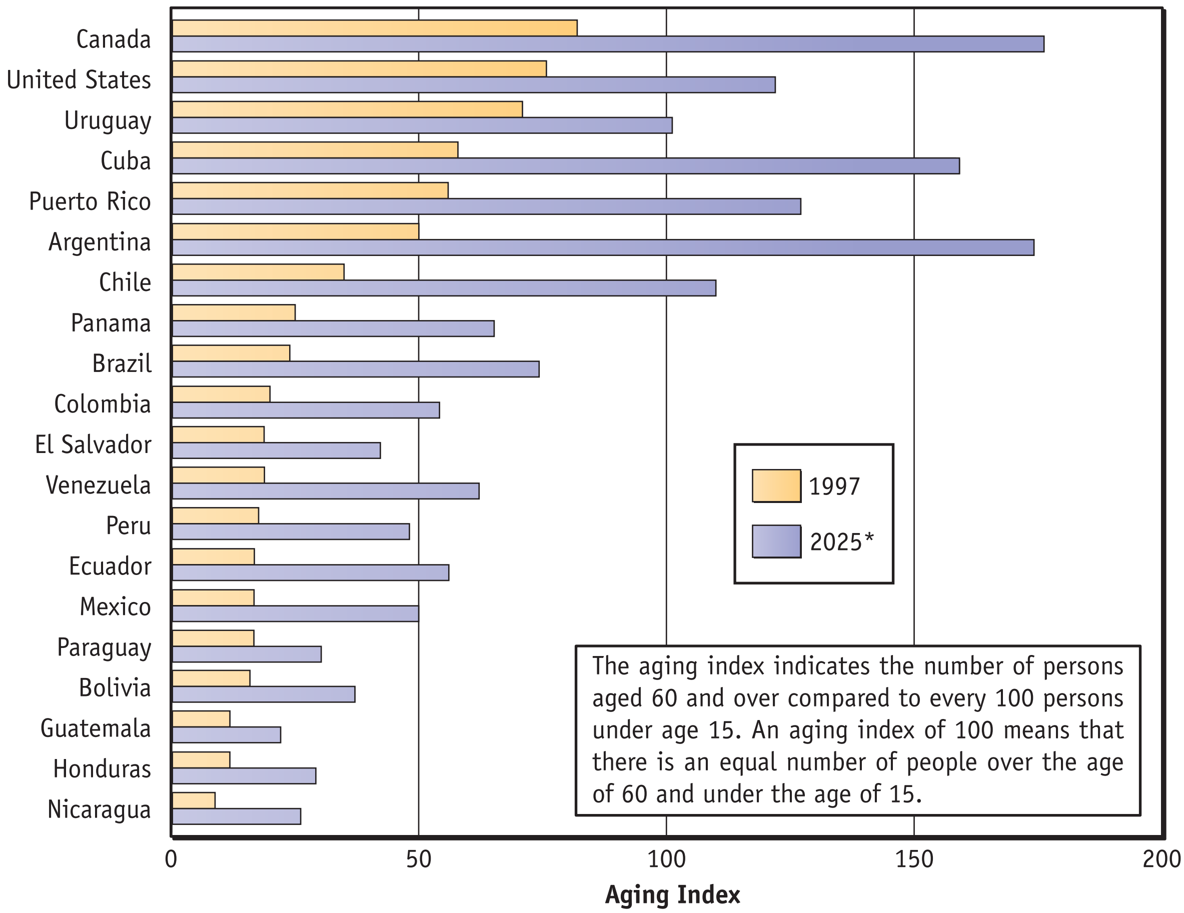

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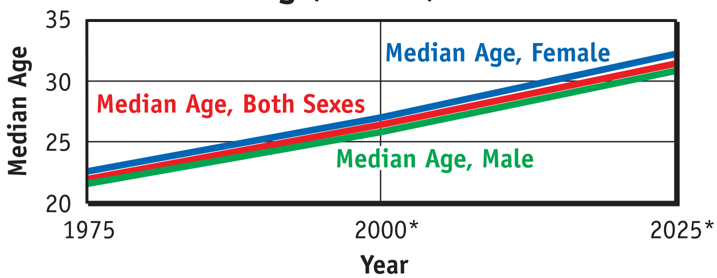

Source: U.S. Bureau of the Census
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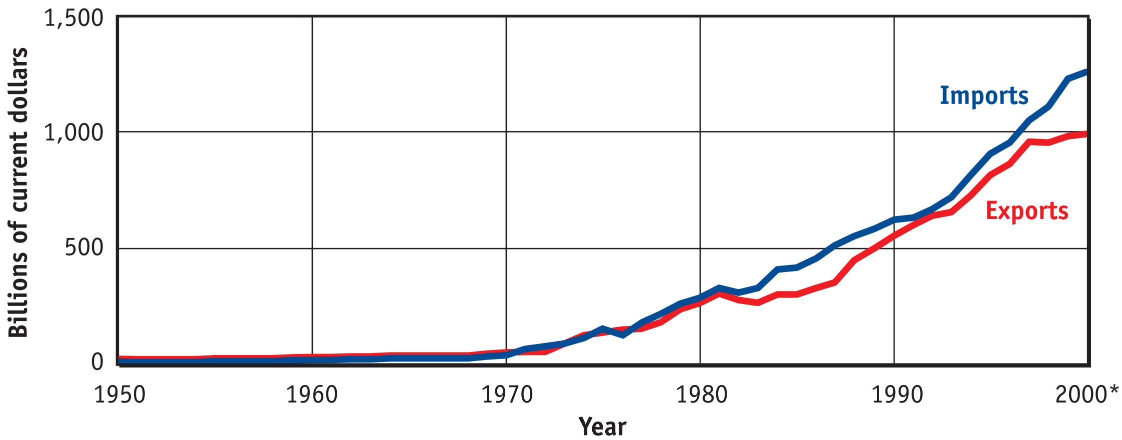

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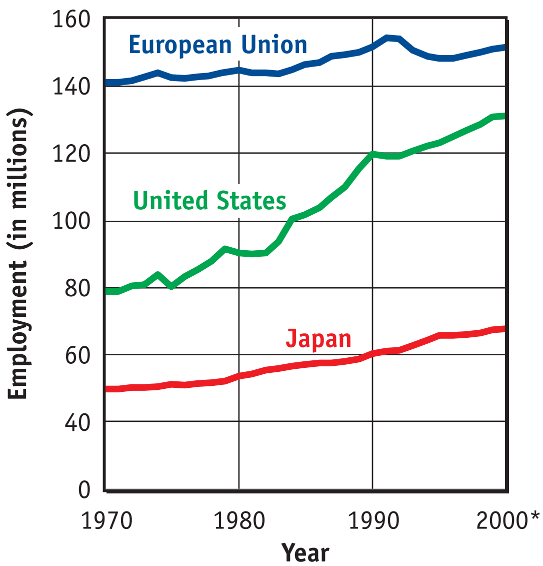

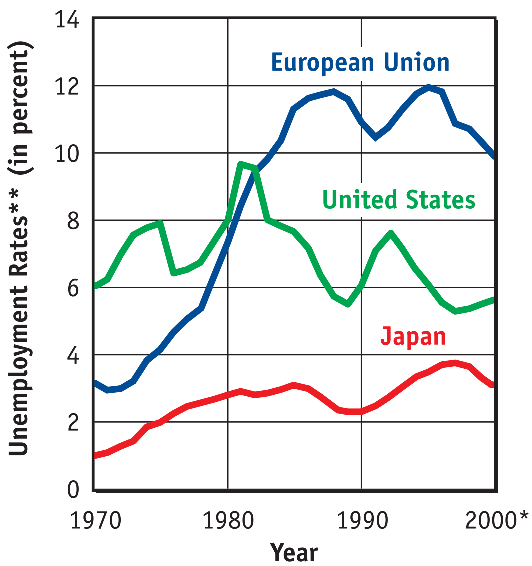

Source: International Monetary Fund
*Estimate
**Based on national definitions

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A

ability-to-pay principle of taxation belief that taxes should be paid according to level of income regardless of benefits received (p. 228)
absolute advantage country's ability to produce more of a given product than can another country (p. 469)
accelerated depreciation schedule that spreads depreciation over fewer years than normal to generate larger tax reductions (p. 245)
accelerator change in investment spending caused by a change in overall spending (p. 448)
acid rain pollution in form of rainwater mixed with sulfur dioxide, a mild form of sulfuric acid (p. 554)
agency shop arrangement under which non-union members must pay union dues (p. 201)
aggregate demand the total quantity of goods and services demanded at different price levels (p. 444)
aggregate demand curve hypothetical curve showing different levels of real GDP that could be purchased at various price levels (p. 444)
aggregate supply the total value of goods and services that all firms would produce in a specific period of time at various price levels (p. 442)
aggregate supply curve hypothetical curve showing different levels of real GDP that could be produced at various price levels (p. 443)
alternative minimum tax personal income tax rate that applies to cases where taxes would otherwise fall below a certain level (p. 245)
appropriations bill legislation earmarking funds for certain purposes (p. 261)
aquifer underground water-bearing rock formation (p. 550)
arbitration see voluntary arbitration and/or compulsory arbitration (p. 202)
ASEAN group of ten Southeast Asian nations working to promote regional cooperation, economic growth, and trade (p. 535)
assets properties, possessions and claims on others; usually listed as entries on a balance sheet (p. 416)
automatic stabilizer program that automatically provides benefits to offset a change in people's incomes; unemployment insurance, entitlement programs (p. 449)
automation production with mechanical or other processes that reduces the need for workers (p. 386)
average tax rate total taxes paid divided by the total taxable income (p. 229)

B

baby boom historically high birthrate years in the United States from 1946 to 1964 (p. 360)
balance of payments difference between money paid to, and received from, other nations in trade; balance on current account includes goods and services, merchandise trade balance counts only goods (p. 478)
balance sheet condensed statement showing assets, liabilities, and net worth of an economic unit (p. 416)
balanced budget annual budget in which expenditures equal revenues (p. 273)
balanced budget amendment constitutional amendment requiring government to spend no more than it collects in taxes and other revenues, excluding borrowing (p. 267)
bank holiday brief period during which all banks or depository institutions are closed to prevent bank runs (p. 301)
bankruptcy court-granted permission to an individual or business to cease or delay payment on some or all debts for a limited amount of time (p. 62)
barter economy moneyless economy that relies on trade or barter (p. 285)
base year year serving as point of comparison for other years in a price index or other statistical measure (p. 218, 351)
bear market period during which stock market prices move down for several months or years in a row (p. 332)
benefit principle of taxation belief that taxes should be paid according to benefits received regardless of income (p. 227)
Better Business Bureau business-sponsored nonprofit organization providing information on local companies to consumers (p. 78)
bill consolidation loan popular type of consumer loan used to pay off multiple existing loans (p. 315)
black market market in which economic products are sold illegally (p. 505)
bond formal contract to repay borrowed money and interest on the borrowed money at regular future intervals (p. 64)
boycott protest in the form of a refusal to buy, including attempts to convince others to join (p. 195)
break-even point production needed if the firm is to recover its costs; production level where total cost equals total revenue (p. 131)
bull market period during which stock market prices move up for several months or years in a row (p. 332)
business cycle systematic changes in real GDP marked by alternating periods of expansion and contraction (p. 375)
business fluctuation changes in real GDP marked by alternating periods of expansion and contraction that occur on a less than systematic basis (p. 375)

C

call option contract giving investors the option to buy commodities, equities, or financial assets at a specific future date using a price agreed upon today (p. 333)
capital tools, equipment, and factories used in the production of goods and services; one of four factors of production (p. 7)

capital flight legal or illegal export of a nation's currency and foreign exchange (p. 525)

capital gains profits from the sale of an asset held for 12 months (p. 246)

capital good tool, equipment, or other manufactured good used to produce other goods and services; a factor of production (p. 12)

capital-intensive production method requiring relatively large amounts of capital relative to labor (p. 510)

capital market market in which financial capital is loaned and/or borrowed for more than one year (p. 325)

capitalism economic system in which private citizens own and use the factors of production in order to generate profits (p. 46, 492)

capital-to-labor ratio measure obtained by dividing the total capital stock by the labor force (p. 367)

cartel group of sellers or producers acting together to raise prices by restricting availability of a product; OPEC (p. 536)

cash flow total amount of new funds the business generates from operations; broadest measure of profits for a firm, includes both net income and non-cash charges (p. 69)

cease and desist order ruling requiring a company to stop an unfair business practice that reduces or limits competition (p. 179)

census complete count of population, including place of residence (p. 356)

center of population point where the country would balance if it were flat and everyone weighed the same (p. 357)

central bank bank that can lend to other banks in times of need, a "bankers' bank" (p. 301)

certificate of deposit receipt showing that an investor has made an interest-bearing loan to a financial institution (p. 314)

chamber of commerce nonprofit organization of local businesses whose purpose is to promote their interests (p. 78)

change in demand consumers demand different amounts at every price, causing the demand curve to shift to the left or the right (p. 96)

change in quantity demanded movement along the demand curve showing that a different quantity is purchased in response to a change in price (p. 95)

change in quantity supplied change in amount offered for sale in response to a price change; movement along the supply curve (p. 115)

change in supply different amounts offered for sale at each and every possible price in the market; shift of the supply curve (p. 116)

charter written government approval to establish a corporation; includes company name, address, purpose of business, number of shares of stock, and other features of the business (p. 63)

civilian labor force non-institutionalized part of the population, aged 16 and over, either working or looking for a job (p. 193)

closed shop illegal arrangement under which workers must join a union before they are hired (p. 200)

coins metallic forms of money such as pennies, nickels, dimes, and quarters (p. 413)

collateral property or other security used to guarantee repayment of a loan (p. 511)

collective bargaining process of negotiation between union and management representatives over pay, benefits, and job-related matters (p. 77)

collective farm small farms in the former Soviet Union owned by the state, but operated by families who shared in some of the profits (p. 498)

collectivization forced common ownership of factors of production; used in the former Soviet Union in agriculture and manufacturing under Stalin (p. 497)

collusion agreements, usually illegal, among producers to fix prices, limit output, or divide markets (p. 168)

command economy economic system characterized by a central authority that makes most of the major economic decisions (p. 35)

commercial bank depository institution that, until the mid-1970s, had the exclusive right to offer checking accounts (p. 303)

commodity money money that has an alternative use as a commodity; gunpowder, flour, corn (p. 287)

communism economic and political system in which factors of production are collectively owned and directed by the state; theoretically classless society in which everyone works for the common good (p. 493)

company union union organized, supported, and even financed by an employer (p. 195)

comparable worth doctrine stating that equal pay should be given for jobs of comparable difficulty (p. 215)

comparative advantage country's ability to produce a given product relatively more efficiently than another country; production at a lower opportunity cost (p. 470)

competition the struggle among sellers to attract consumers while lowering costs (p. 48)

complements products that increase the value of other products; products related in such a way that an increase in the price of one reduces the demand for both (p. 98)

conglomerate firm with four or more businesses making unrelated products, with no single business responsible for a majority of its sales (p. 71)

constant dollars dollar amounts or prices that have been adjusted for inflation; same as real dollars (p. 218)

consumer good good intended for final use by consumers rather than businesses (p. 12)

consumer price index index used to measure price changes for a market basket of frequently used consumer items (p. 352)

consumer sovereignty role of consumer as ruler of the market when determining the types of goods and services produced (p. 50)
cooperative nonprofit association performing some kind of economic activity for the benefit of its members (p. 76)
corporate income tax tax on corporate profits (p. 235)
corporation form of business organization recognized by law as a separate legal entity with all the rights and responsibilities of an individual, including the right to buy and sell property, enter into legal contracts, sue and be sued (p. 62)
cost-benefit analysis way of thinking that compares the cost of an action to its benefits (p. 24)
Council of Economic Advisers three-member group that devises strategies and advises the President of the United States on economic matters (p. 460)
coupon stated interest on a corporate, municipal or government bond (p. 321)
craft union labor union whose workers perform the same kind of work; same as trade union (p. 194)
credit union nonprofit service cooperative that accepts deposits, makes loans, and provides other financial services (p. 76, 303)
creditor person or institution to whom money is owed (p. 305)
creeping inflation relatively low rate of inflation, usually 1 to 3 percent annually (p. 390)
crowding-out effect higher than normal interest rates and diminished access to financial capital faced by private investors when government increases its borrowing in financial markets (p. 277)
crude birthrate number of live births per 1,000 people (p. 524)
currency paper component of the money supply, today consisting of Federal Reserve notes (p. 413)
current dollars dollar amounts or prices that are not adjusted for inflation (p. 218)
current GDP Gross Domestic Product measured in current prices, unadjusted for inflation (p. 353)
current yield bond's annual coupon interest divided by purchase price; measure of a bond's return (p. 321)
customs duty tax on imported products (p. 236)
customs union group of countries that have agreed to reduce trade barriers (p. 535)
cyclical unemployment unemployment directly related to swings in the business cycle (p. 386)

D

default the act of not repaying borrowed money (p. 525)
deficiency payment cash payment making up the difference between the market price and the target price of an agricultural crop (p. 153)
deficit spending annual government spending in excess of taxes and other revenues (p. 272)
deflation decrease in the general level of the prices of goods and services (p. 390)
demand combination of desire, ability, and willingness to buy a product (p. 89)
demand curve graph showing the quantity demanded at each and every possible price that might prevail in the market at a given time (p. 91)
demand deposit account (DDA) account whose funds can be removed by writing a check and without having to gain prior approval from the depository institution (p. 303)
demand elasticity measure of responsiveness relating change in quantity demanded (dependent variable) to a change in price (independent variable) (p. 101)
demand schedule listing showing the quantity demanded at all possible prices that might prevail in the market at a given time (p. 90)
demographer person who studies growth, density, and other characteristics of the population (p. 358)
dependency ratio ratio of children and elderly per 100 persons who are in the 18–64 working age bracket (p. 361)
depreciation gradual wear on capital goods during production (p. 69)
depression state of the economy with large numbers of unemployed, declining real incomes, overcapacity in manufacturing plants, general economic hardship (p. 376)
depression scrip currency issued by towns, chambers of commerce, and other civic bodies during the Great Depression of the 1930s (p. 377)
deregulation relaxation or removal of government regulations on business activities (p. 304)
developing country country whose average per capita income is only a fraction of that in more industrialized countries (p. 521)
diminishing marginal utility decreasing satisfaction or usefulness as additional units of a product are acquired (p. 93)
diminishing returns stage of production where output increases at a decreasing rate as more units of variable input are added (p. 125)
discomfort index unofficial statistic that is the sum of monthly inflation and the unemployment rate; same as misery index (p. 438)
discount rate interest rate that the Federal Reserve System charges on loans to the nation's financial institutions (p. 422)
discretionary spending spending for federal programs that must receive annual authorization (p. 260)
disposable personal income personal income less individual income taxes; total income available to the consumer sector after income taxes (p. 346)

distribution of income way in which the nation's income is divided among families, individuals, or other designated groups (p. 258)

dividend check paid to stockholders, usually quarterly, representing portion of corporate profits (p. 63)

division of labor division of work into a number of separate tasks to be performed by different workers; same as specialization (p. 16)

DJIA see Dow-Jones Industrial Average (p. 331)

double taxation feature of taxation that allows stockholders' dividends to be taxed both as corporate profit and as personal income (p. 65)

Dow-Jones Industrial Average (DJIA) statistical series of 30 representative stocks used to monitor price changes on the New York Stock Exchange (p. 332)

E

easy money policy monetary policy resulting in lower interest rates and greater access to credit; associated with an expansion of the money supply (p. 419)

e-commerce electronic business or exchange conducted over the Internet (p. 129)

econometric model macroeconomic model using algebraic equations to describe how the economy behaves and is expected to perform in the future (p. 379)

economic growth sustained period during which a nation's total output of goods and services increases (p. 15)

economic interdependence economic activities in one part of the country or world affect what happens elsewhere (p. 17)

economic model set of assumptions in a table, graph, or equations used to describe or explain economic behavior (p. 143)

economic product good or service that is useful, relatively scarce, and transferable to others (p. 12)

economic system organized way a society provides for the wants and needs of its people (p. 33)

economics social science dealing with the study of how people satisfy seemingly unlimited and competing wants with the careful use of scarce resources (p. 6)

economies of scale increasingly efficient use of personnel, plant, and equipment as a firm becomes larger (p. 170)

economy see economic system (p. 33)

Efficient Market Hypothesis (EMH) argument that stocks are always priced about right, and that bargains are hard to find because they are closely watched by so many investors (p. 329)

elastic type of elasticity where the percentage change in the independent variable (usually price) causes a more than proportionate change in the dependent variable (usually quantity demanded or supplied) (p. 102)

elasticity a measure of responsiveness that tells us how a dependent variable such as quantity responds to a change in an independent variable such as price (p. 101)

embargo prohibition on the export or import of a product (p. 546)

entitlement program or benefit using established eligibility requirements to provide health, nutritional, or income supplements to individuals (p. 278)

entrepreneur risk-taking individual in search of profits; one of four factors of production (p. 8)

equilibrium price price where quantity supplied equals quantity demanded; price that clears the market (p. 144)

equilibrium wage rate wage rate leaving neither a surplus nor a shortage in the market (p. 207)

equities stocks that represent ownership shares in corporations (p. 328)

estate tax tax on the transfer of property when a person dies (p. 235)

euro single currency of European Union (p. 535)

European Union successor of the European Community established in 1993 by the Maastricht Treaty (p. 535)

excess reserves financial institution's cash, currency, and reserves not needed to back existing loans; potential source of new loans (p. 416)

excise tax general revenue tax levied on the manufacture or sale of selected items (p. 235)

expansion period of growth of real GDP; recovery from recession (p. 376)

exports the goods and services that a nation produces and then sells to other nations (p. 467)

expropriation government confiscation of private- or foreign-owned goods without compensation (p. 534)

external debt borrowed money that a country owes to foreign countries and banks (p. 525)

externality economic side effect that affects an uninvolved third party (p. 175)

F

fact-finding agreement between union and management to have a neutral third party collect facts about a dispute and present non-binding recommendations (p. 202)

factor market market where productive resources are bought and sold (p. 14)

factors of production productive resources that make up the four categories of land, capital, labor, and entrepreneurship (p. 7)

family two or more persons living together that are related by blood, marriage, or adoption (p. 346)

federal budget annual plan outlining proposed expenditures and anticipated revenues (p. 260)

federal budget deficit excess of federal expenditures over tax and revenue collections (p. 261)

federal budget surplus federal budget that shows a positive balance after expenditures are subtracted from revenues (p. 261)
federal debt total amount of money the federal government has borrowed from others (p. 273)
Federal Reserve note currency issued by the Fed that eventually replaced all other types of federal currency (p. 301)
Federal Reserve System privately owned, publicly controlled, central bank of the United States (p. 301)
fertility rate number of births that 1,000 women are expected to undergo in their lifetime (p. 358)
fiat money money by government decree; has no alternative value or use as a commodity (p. 287)
FICA Federal Insurance Contributions Act; tax levied on employers and employees to support Social Security and medicare (p. 233)
finance company firm that makes loans directly to consumers and specializes in buying installment contracts from merchants who sell on credit (p. 315)
financial asset document that represents a claim on the income and property of the borrower; CDs, bonds, Treasury bills, mortgages (p. 314)
financial capital money used to buy the tools and equipment used in production (p. 7)
financial intermediary institution that channels savings to investors; banks, insurance companies, savings and loan associations, credit unions (p. 314)
financial system network of savers, investors, and financial institutions that work together to transfer savings to investment uses (p. 314)
fiscal policy use of government spending and revenue collection measures to influence the economy (p. 447)
fiscal year 12-month financial planning period that may not coincide with the calendar year; October 1 to September 30 for the federal government (p. 260)
Five-Year Plan comprehensive centralized economic plan used by the Soviet Union and China to coordinate development of agriculture and industry (p. 497)
fixed cost cost of production that does not change when output changes (p. 127)
fixed exchange rate system under which the value of currencies were fixed in relation to one another; the exchange rate system in effect until 1971 (p. 482)
fixed income income that does not increase even though prices go up (p. 42)
flat tax proportional tax on individual income after a specified threshold has been reached (p. 248)
flexible exchange rate system that relies on supply and demand to determine the value of one currency in terms of another; exchange rate system in effect since 1971, same as floating exchange rate (p. 483)
floating exchange rate see flexible exchange rate (p. 483)
floor price see price floor (p. 152)
food stamps government-issued coupons that can be exchanged for food (p. 397)
foreign exchange foreign currencies used by countries to conduct international trade (p. 481)
foreign exchange rate price of one country's currency in terms of another currency (p. 482)
401(k) plan a tax-deferred investment and savings plan that acts as a personal pension fund for employees (p. 320)
fractional reserve system system requiring financial institutions to set aside a fraction of their deposits in the form of reserves (p. 415)
free enterprise economy in which competition is allowed to flourish with a minimum of government interference; term used to describe the American economy (p. 46)
free enterprise economy market economy in which privately owned businesses have the freedom to operate for a profit with limited government intervention; same as private enterprise economy (p. 24)
free-trade area group of countries that have agreed to reduce trade barriers among themselves, but lack a common tariff barrier for nonmembers (p. 535)
free trader individual who favors fewer or even no trade restrictions (p. 474)
frictional unemployment unemployment caused by workers changing jobs or waiting to go to new ones (p. 384)
fringe benefit benefit received by employees in addition to wages and salaries; includes paid vacations, sick leave, retirement, insurance (p. 57)
futures contracts to buy or sell commodities or financial assets at a specific future date, using a price agreed upon today (p. 333)
futures contract an agreement to buy or sell at a specific date in the future at a predetermined price (p. 333)
futures market market where futures contracts are bought and sold (p. 333)

G

galloping inflation relatively intense inflation, usually ranging from 100 to 300 percent annually (p. 390)
gasohol mixture of 90 percent unleaded gasoline and 10 percent grain alcohol (p. 549)
GDP gap difference between what the economy can and does produce; annual opportunity cost of unemployed resources (p. 438)
GDP in constant dollars Gross Domestic Product after adjustments for inflation; also called GDP in constant (chained) dollars; same as real GDP (p. 353)
general partnership see partnership (p. 60)
geographic monopoly market situation where a firm has a monopoly because of its location or the small size of the market (p. 170)

gift tax tax on donations of money or wealth that is paid by the donor (p. 235)
giveback wage, fringe benefit, or work rule given up when renegotiating a contract (p. 212)
glass ceiling seemingly invisible barrier hindering advancement of women and minorities in a male-dominated organization (p. 214)
glut substantial oversupply of a product (p. 553)
gold certificate paper currency backed by gold; issued in 1863 and popular until recalled in 1934 (p. 295)
gold standard monetary standard under which a country's currency is equivalent to, and can be exchanged for, a specified amount of gold (p. 296)
good tangible economic product that is useful, relatively scarce, transferable to others; used to satisfy wants and needs (p. 12)
Gosplan central planning authority in former Soviet Union that devised and directed Five-Year plans (p. 497)
government monopoly monopoly created and/or owned by the government (p. 170)
grant-in-aid transfer payment from one level of government to another not involving compensation (p. 257)
Great Depression greatest period of economic decline in United States history, lasting from approximately 1929 to 1939 (p. 196)
Great Leap Forward China's disastrous second five-year plan begun in 1958 that forced collectivization of agriculture and rapid industrialization (p. 506)
grievance procedure contractual provision outlining the way future disputes and grievance issues will be resolved (p. 202)
Gross Domestic Product (GDP) dollar value of all final goods, services, and structures produced within a country's national borders during a one-year period (p. 9, 341)
Gross National Product (GNP) total dollar value of all final goods, services, and structures produced in one year with labor and property supplied by a country's residents, regardless of where the production takes place; largest measure of a nation's income (p. 344)
growth triangle table showing the rates of growth of a statistical series between any two dates (p. 364)

H

horizontal merger combination of two or more firms producing the same kind of product (p. 71)
household basic unit of consumer sector consisting of all persons who occupy a house, apartment, or separate living quarters (p. 346)
human capital sum of peoples' skills, abilities, health, and motivation (p. 16)
hyperinflation abnormal inflation in excess of 500 percent per year; last stage of a monetary collapse (p. 390)

I

imperfect competition market structure where all conditions of pure competition are not met; monopolistic competition, oligopoly, and monopoly (p. 166)
implicit GDP price deflator index used to measure price changes in Gross Domestic Product (p. 353)
imports the goods and services that a nation buys from other nations (p. 468)
incidence of a tax final burden of a tax (p. 225)
income effect that portion of a change in quantity demanded caused by a change in a consumer's real income when the price of a product changes (p. 96)
income statement report showing a business's sales, expenses, and profits for a certain period, usually three months or a year (p. 68)
inconvertible fiat money standard fiat money that cannot be exchanged for gold or silver; Federal Reserve notes today (p. 297)
independent union labor union not affiliated with the AFL-CIO (p. 198)
index of leading indicators composite index of 11 economic series that move up and down in advance of changes in the overall economy; statistical series used to predict business cycle turning points (p. 380)
indexing adjustment of tax brackets to offset the effects of inflation (p. 233)
individual income tax tax levied on the wages, salaries, and other income of individuals (p. 226)
Individual Retirement Account (IRA) retirement account in the form of a long-term time deposit, with annual contributions of up to $2,000 per year not taxed until withdrawn during retirement (p. 324)
industrial union labor union whose workers perform different kinds of work (p. 195)
inelastic type of elasticity where the percentage change in the independent variable (usually price) causes a less than proportionate change in the dependent variable (usually quantity demanded or supplied) (p. 102)
infant industries argument argument that new and emerging industries should be protected from foreign competition until they are strong enough to compete (p. 474)
inflation rise in the general level of prices (p. 42, 350)
infrastructure the highways, mass transit, communications, power, water, sewerage and other public goods needed to support a population (p. 510)
injunction court order issued to prevent a company or union from taking action during a labor dispute (p. 203)
interest payment made for the use of borrowed money; usually paid at periodic intervals for long-term bonds or loans (p. 64)
intergovernmental expenditures funds that one level of government transfers to another level for spending (p. 268)

intergovernmental revenue funds one level of government receives from another level of government (p. 238)
intermediate products products directly excluded from GDP because they are components of other final products included in GDP; new tires and radios for use on new cars (p. 343)
Internal Revenue Service (IRS) branch of Treasury Department that collects taxes (p. 232)
International Bank for Reconstruction and Development see World Bank (p. 526)
International Monetary Fund (IMF) international organization that offers advice and financial assistance to nations so that their currencies can compete in open markets (p. 526)
inventory stock of goods held in reserve; includes finished goods waiting to be sold and raw materials to be used in production (p. 59)
investment tax credit tax credit given for purchase of equipment (p. 245)

K

keiretsu independently owned group of Japanese firms joined and governed by an external board of directors in order to regulate competition (p. 510)
Keynesian economics government spending and taxation policies suggested by John Maynard Keynes to stimulate the economy; synonymous with fiscal policies or demand-side economics (p. 448)

L

labor people with all their abilities and efforts; one of four factors of production, does not include the entrepreneur (p. 8)
labor mobility ability and willingness of labor to relocate, usually for higher wages (p. 209)
labor productivity growth rate of total output per unit of labor input; measure of productive efficiency (p. 368)
labor union organization that works for its members' interests concerning pay, working hours, health coverage, fringe benefits, other job related matters (p. 76)
Laffer curve graph showing that lower tax rates will supposedly stimulate higher tax revenues (p. 452)
laissez-faire philosophy that government should not interfere with business activity (p. 163)
land natural resources or "gifts of nature" not created by human effort; one of four factors of production (p. 7)
Law of Demand rule stating that more will be demanded at lower prices and less at higher prices; inverse relationship between price and quantity demanded (p. 91)
Law of Supply rule stating that more will be offered for sale at high prices than at lower prices (p. 113)
Law of Variable Proportions rule stating that short-run output will change as one input is varied while others are held constant (p. 122)
legal reserves currency and deposits used to meet the reserve requirement (p. 415)
legal tender fiat currency that must be accepted for payment by decree of government (p. 295)
liabilities debts and obligations owed to others; usually listed as entries on a balance sheet (p. 416)
life expectancy average remaining life span in years for persons who attain a given age (p. 358)
limited life situation in which a firm legally ceases to exist when an owner dies, quits, or a new owner is added; applies to sole proprietorships and partnerships (p. 59)
limited partnership form of partnership where one or more partners are not active in the daily running of the business, and whose liability for the partnership's debt is restricted to the amount invested in the business (p. 62)
line-item veto power to cancel specific budget items without rejecting the entire budget (p. 278)
liquidity potential for being readily convertible into cash or other financial assets (p. 417)
lockout management refusal to let employees work until company demands are met (p. 195)
long run production period long enough to change amount of variable and fixed inputs used in production (p. 122)
Lorenz curve curve showing how much the actual distribution of income differs from an equal distribution (p. 394)
luxury good good for which demand increases faster than income when income rises (p. 235)

M

M1 money supply components conforming to money's role as medium of exchange; coins, currency, checks, other demand deposits, traveler's checks (p. 429)
M2 money supply components conforming to money's role as a store of value; M1, savings deposits, time deposits (p. 430)
macroeconomic equilibrium level of real GDP consistent with a given price level; intersection of aggregate supply and aggregate demand (p. 445)
macroeconomics that part of economic theory dealing with the economy as a whole and decision making by large units such as governments and unions (p. 193)
mandatory spending federal spending authorized by law that continues without the need for annual approvals of Congress (p. 260)
margin requirement minimum deposits left with a stockbroker to be used as partial payment on other securities (p. 423)
marginal analysis decision making that compares the extra cost of doing something to the extra benefits gained (p. 131)

marginal cost extra cost of producing one additional unit of production (p. 129)
marginal product extra output due to the addition of one more unit of input (p. 124)
marginal revenue extra revenue from the sale of one additional unit of output (p. 130)
marginal tax rate tax rate that applies to the next dollar of taxable income (p. 229)
marginal utility satisfaction or usefulness obtained from acquiring one more unit of a product (p. 93)
market meeting place or mechanism allowing buyers and sellers of an economic product to come together; may be local, regional, national, or global (p. 14)
market basket representative collection of goods and services used to compile a price index (p. 351)
market demand curve demand curve that shows the quantities demanded by everyone who is interested in purchasing a product (p. 91)
market economy economic system in which supply, demand, and the price system help people make decisions and allocate resources; same as free enterprise economy (p. 36)
market equilibrium condition of price stability where the quantity demanded equals the quantity supplied (p. 143)
market failure market where any of the requirements for a competitive market–adequate competition, knowledge of prices and opportunities, mobility of resources, and competitive profits–are lacking (p. 174)
market structure market classification according to number and size of firms, type of product, and type of competition (p. 164)
market supply curve supply curve that shows the quantities offered at various prices by all firms that sell the product in a given market (p. 114)
maturity life of a bond or length of time funds are borrowed (p. 321)
measure of value one of the three functions of money that allows it to serve as a common denominator to measure value (p. 286)
mediation process of resolving a dispute by bringing in a neutral third party (p. 202)
medicaid joint federal-state medical insurance program for low-income people (p. 265)
medicare federal health-care program for senior citizens, regardless of income (p. 233)
medium of exchange money or other substance generally accepted in exchange; one of the three functions of money (p. 286)
member bank bank belonging to the Federal Reserve System (p. 407)
member bank reserves reserves kept by member banks at the Fed to satisfy reserve requirements (p. 418)
merger combination of two or more business enterprises to form a single firm (p. 68)
microeconomics branch of economic theory that deals with behavior and decision making by small units such as individuals and firms (p. 89)
minimum wage lowest legal wage that can be paid to most workers (p. 152, 216)
misery index unofficial statistic that is the sum of monthly inflation and the unemployment rate; same as discomfort index (p. 438)
mixed economy see modified private enterprise economy (p. 51)
modified free enterprise economy free enterprise system with some government involvement; same as modified private enterprise economy (p. 560)
modified private enterprise economy free enterprise market economy where people carry on their economic affairs freely, but are subject to some government intervention and regulation (p. 51)
modified union shop arrangement under which workers have the option to join a union after being hired (p. 201)
monetarism school of thought stressing the importance of stable monetary growth to control inflation and stimulate long-term economic growth (p. 453)
monetary policy actions by the Federal Reserve System to expand or contract the money supply in order to affect the cost and availability of credit (p. 415)
monetary standard mechanism that keeps a money supply durable, portable, divisible, and stable in value; gold standard, silver standard, fiat money standard (p. 292)
monetary unit standard unit of currency in a country's money supply; American dollar, British pound (p. 289)
monetize the debt process of creating enough additional money to offset federal borrowing so that interest rates remain unchanged (p. 427)
money anything that serves as a medium of exchange, a measure of value, and a store of value (p. 286)
money market market in which financial capital is loaned and/or borrowed for one year or less (p. 325)
monopolistic competition market structure having all conditions of pure competition except for identical products; form of imperfect competition (p. 166)
monopoly market structure characterized by a single producer; form of imperfect competition (p. 169)
moral suasion Federal Reserve System's use of persuasion to accomplish monetary policy; congressional testimony, press releases (p. 424)
most favored nation clause trade law allowing a third country to enjoy the same tariff reductions the United States negotiates with another country (p. 477)
multinational corporation producing and selling without regard to national boundaries and whose business activities are located in several different countries (p. 72)
multiplier change in overall spending caused by a change in investment spending (p. 448)

municipal bond bond, often tax exempt, issued by state and local governments; known as munis (p. 323)
mutual fund company that sells stock in itself and uses the proceeds to buy stocks and bonds issued by other companies (p. 316)
mutual savings bank depositor-owned savings institution operated for the benefit of depositors (p. 303)

N

NAFTA see North American Free Trade Agreement (p. 479)
national bank commercial bank chartered by the National Banking System; member of the Fed (p. 295)
National Bank note currency backed by government bonds, issued by national banks starting in 1863 and generally disappearing from circulation in the 1930s (p. 295)
national currency see National Bank note (p. 295)
national income net national product less indirect business taxes; measure of a nation's income (p. 345)
national income accounting system of accounts used to track the nation's production, consumption, savings, and income statistics (p. 341)
natural monopoly market where average costs are lowest when all output is produced by a single firm (p. 170)
need basic requirement for survival; includes food, clothing, and/or shelter (p. 6)
negative externality harmful side effect that affects an uninvolved third party; external cost (p. 175)
negative income tax tax system that would make cash payments in the form of tax refunds to individuals when their income falls below certain levels (p. 400)
Negotiable Order of Withdrawal (NOW) type of checking account that pays interest (p. 303)
net asset value (NAV) the market value of a mutual fund share determined by dividing the value of the fund by the number of shares issued (p. 316)
net exports of goods and services net expenditures by the output-expenditure model's foreign sector (p. 348)
net immigration net population change after accounting for those who leave as well as enter a country (p. 359)
net income measure of business profits determined by subtracting all expenses, including taxes, from revenues (p. 68)
net national product (NNP) Gross National Product minus depreciation charges for wear and tear on capital equipment; measure of net annual production generated with labor and property supplied by a country's citizens (p. 344)
net worth excess of assets over liabilities, usually listed as a separate summary on a balance sheet; measure of the value of a business (p. 416)
nominal GDP see current GDP (p. 353)
nonbank financial institution nondepository institution that channels savings to investors; finance companies, insurance companies, pension funds (p. 315)
noncompeting labor grades broad groups of unskilled, semiskilled, skilled, and professional workers who do not compete with one another (p. 206)
nonmarket transaction economic activity not taking place in the market and, therefore, not included in GDP; services of homemakers, work around the home (p. 343)
nonprice competition competition involving the advertising of a product's appearance, quality, or design, rather than its price (p. 166)
nonprofit organization economic institution that operates like a business but does not seek financial gain; schools, churches, community service organizations (p. 75)
nonrecourse loan agricultural loan that carries neither a penalty nor further obligation to repay if not paid back (p. 153)
nonrenewable resource resource that cannot be replenished once it is used (p. 546)
North American Free Trade Agreement (NAFTA) agreement signed in 1993 to reduce tariffs between the United States, Canada, and Mexico (p. 479)
NOW Account see Negotiable Order of Withdrawal (p. 303)

O

oligopoly market structure in which a few large sellers dominate and have the ability to affect prices in the industry; form of imperfect competition (p. 167)
open market operations monetary policy in the form of U.S. treasury bills or bond sales and purchases, or both (p. 420)
opportunity cost cost of the next best alternative use of money, time, or resources when one choice is made rather than another (p. 20)
option contract giving investors an option to buy or sell commodities, equities, or financial assets at a specific future date using a price agreed upon today (p. 333)
options markets markets where options, including put options and call options, are traded (p. 333)
output-expenditure model macroeconomic model describing aggregate demand by the consumer, investment, government, and foreign sectors; GDP = C + I + G + F (p. 348)
overhead broad category of fixed costs that includes interest, rent, taxes, and executive salaries (p. 127)
over-the-counter market (OTC) electronic marketplace for securities not listed on organized exchanges such as the New York Stock Exchange (p. 331)

P

par value principal of a bond or total amount borrowed (p. 321)

paradox of value apparent contradiction between the high value of nonessentials and low value of essentials (p. 13)
partnership unincorporated business owned and operated by two or more people who share the profits and have unlimited liability for the debts and obligations of the firm; same as general partnership (p. 60)
part-time worker worker who regularly works fewer than 35 hours per week (p. 216)
"pay-as-you-go" provision requirement that new spending proposals or tax cuts must be offset by reductions elsewhere (p. 277)
payroll tax tax on wages and salaries to finance Social Security and medicare costs (p. 233)
payroll withholding statement document attached to a paycheck summarizing pay and deductions (p. 242)
payroll withholding system system that automatically deducts income taxes from paychecks on a regular basis (p. 232)
peak point in time when real GDP stops expanding and begins to decline (p. 376)
pension regular allowance for someone who has worked a certain number of years, reached a certain age, or who has suffered from an injury (p. 316)
pension fund fund that collects and invests income until payments are made to eligible recipients (p. 316)
per capita per person basis; total divided by population (p. 255)
perestroika fundamental restructuring of the Soviet economy; policy introduced by Gorbachev (p. 499)
perfect competition market structure characterized by a large number of well-informed independent buyers and sellers who exchange identical products (p. 164)
personal income total amount of income going to the consumer sector before individual income taxes are paid (p. 345)
picket demonstration before a place of business to protest a company's actions (p. 195)
piecework compensation system that pays workers for units produced, rather than hours worked (p. 498)
pollution contamination of air, water, or soil by the discharge of a poisonous or noxious substance (p. 554)
pollution permit federal permit allowing a public utility to release pollutants into the air; a form of pollution control (p. 556)
population density number of people per square mile of land area (p. 536)
population pyramid diagram showing the breakdown of population by age and sex (p. 360)
portfolio diversification strategy of holding several investments to protect against risk (p. 329)
positive externality beneficial side effect that affects an uninvolved third party (p. 176)
premium monthly, quarterly, semiannual, or annual price paid for an insurance policy (p. 315)
price monetary value of a product as established by supply and demand (p. 137)
price ceiling maximum legal price that can be charged for a product (p. 151)
price discrimination illegal practice of charging customers different prices for the same product (p. 179)
price-fixing agreement, usually illegal, by firms to charge a uniform price for a product (p. 168)
price floor lowest legal price that can be charged for a product (p. 152)
price index statistical series used to measure changes in the price level over time (p. 351)
price level relative magnitude of prices at a given point in time as measured by a price index (p. 389)
primary market market in which only the original issuer will repurchase a financial asset; government savings bonds, IRAs, small CDs (p. 326)
prime rate best or lowest interest rate commercial banks charge their customers (p. 427)
primitive equilibrium first stage of economic development during which the economy is static (p. 528)
principal amount borrowed when getting a loan or issuing a bond (p. 64)
private enterprise economy see free enterprise economy (p. 24)
private property rights fundamental feature of capitalism, which allows individuals to own and control their possessions as they wish; includes both tangible and intangible property (p. 47)
private sector that part of the economy made up of private individuals and businesses (p. 256)
privatization conversion of state-owned factories and other property to private ownership (p. 502)
producer price index index used to measure prices received by domestic producers; formerly called the wholesale price index (p. 352)
product differentiation real or imagined differences between competing products in the same industry (p. 166)
product market market where goods and services are offered for sale (p. 14)
production process of creating goods and services with the combined use of land, capital, labor, and entrepreneurship (p. 8)
production function graphic portrayal showing how a change in the amount of a single variable input affects total output (p. 123)
production possibilities frontier diagram representing maximum combinations of goods and/or services an economy can produce when all productive resources are fully employed (p. 21)
productivity degree to which productive resources are used efficiently; normally refers to labor, but can apply to all factors of production (p. 15)

professional association nonprofit organization of professional or specialized workers seeking to improve working conditions, skill levels, and public perceptions of its profession (p. 77)
professional labor workers with a high level of professional and managerial skills (p. 206)
profit extent to which persons or organizations are better off at the end of a period than they were at the beginning; usually measured in dollars (p. 48)
profit-maximizing quantity of output level of production where marginal cost is equal to marginal revenue (p. 131)
profit motive driving force that encourages people and organizations to improve their material well-being; characteristic of capitalism and free enterprise (p. 48)
progressive tax tax where percentage of income paid in tax rises as level of income rises (p. 229)
property tax tax on tangible and intangible possessions such as real estate, buildings, furniture, stocks, bonds, and bank accounts (p. 241)
proportional tax tax in which percentage of income paid in tax is the same regardless of the level of income (p. 229)
proprietorship see sole proprietorship (p. 57)
protectionist person who would protect domestic producers with tariffs, quotas, and other trade barriers (p. 474)
protective tariff tax on an imported product designed to protect less efficient domestic producers (p. 472)
public disclosure requirement forcing a business to reveal information about its products or its operations to the public (p. 181)
public good economic product that is consumed collectively; highways, national defense, police and fire protection (p. 176)
public sector that part of the economy made up of the local, state, and federal governments (p. 255)
public utility company providing essential services such as water and electricity to consumers, usually subject to some government regulations (p. 79)
put option contract giving investors the option to sell commodities, equities, or financial assets at a specific future date using a price agreed upon today (p. 333)

Q

quantity supplied amount offered for sale at a given price; point on the supply curve (p. 115)
quantity theory of money hypothesis that the supply of money directly affects the price level over the long run (p. 427)
quota limit on the amount of a good that can be allowed into a country (p. 472)

R

ration coupon certificate allowing holder to receive a given amount of a rationed product (p. 139)
rationing system of allocating goods and services without prices (p. 139)
raw materials unprocessed natural resources used in production (p. 123)
real dollars see constant dollars (p. 218)
real estate investment trust (REIT) company organized to make loans to homebuilders (p. 316)
real GDP Gross Domestic Product after adjustments for inflation; same as GDP in constant dollars (p. 353)
real GDP per capita Gross Domestic Product adjusted for inflation and divided by the total population; total dollar amount of all final output produced for every person in the country after compensating for inflation (p. 363)
real rate of interest the market rate of interest minus the rate of inflation (p. 428)
rebate partial refund of the original price of a product (p. 140)
recession decline in real GDP lasting at least two quarters or more (p. 376)
regressive tax tax where percentage of income paid in tax goes down as income rises (p. 229)
Regulation Z provision extending truth-in-lending disclosures to consumers (p. 411)
renewable resources natural resources that can be replenished for future use (p. 366)
reserve requirement formula used to compute the amount of a depository institution's required reserves (p. 415)
revenue tariff tax placed on imported goods to raise revenue (p. 473)
right-to-work law state law making it illegal to require a worker to join a union (p. 197)
risk situation in which the outcome is not certain, but the probabilities can be estimated (p. 318)
Roth IRA individual retirement account in which contributions are made after taxes so that no taxes are taken out at maturity (p. 325)
run on the bank sudden rush by depositors to withdraw all deposited funds, generally in anticipation of bank failure or closure (p. 301)
rural population those persons not living in urban areas (p. 357)

S

S&P 500 see Standard & Poor's 500 (p. 332)
sales tax general state or city tax levied on a product at the time of sale (p. 226)
saving absence of spending that frees resources for use in other activities or investments (p. 313)

savings the dollars that become available for investors to use when others save (p. 313)
savings account interest-bearing deposit not requiring prior notice before making a withdrawal (p. 417)
savings and loan association (S&L) depository institution that historically invested the majority of its funds in home mortgages (p. 303)
savings bank publicly-held depository institution that competes with other banks for customer deposits (p. 303)
savings bond low-denomination, non-transferable bond issued by the federal government, usually through payroll-savings plans (p. 323)
scarcity fundamental economic problem facing all societies that results from a combination of scarce resources and people's virtually unlimited wants (p. 5)
seasonal unemployment unemployment caused by annual changes in the weather or other conditions that prevail at certain times of the year (p. 386)
seat membership in a stock exchange such as the New York Stock Exchange (p. 330)
secondary market market in which all financial assets can be sold to someone other than the original issuer; corporate bonds, government bonds (p. 326)
secondhand sales sales of used goods; category of activity not included in GDP computation (p. 343)
securities exchange physical place where buyers and sellers meet to exchange securities (p. 329)
seizure temporary government takeover of a company to keep it running during a labor-management dispute (p. 203)
selective credit controls rules pertaining to loans for specific commodities or purchases such as margin requirements for common stock (p. 424)
semiskilled labor workers who can operate machines requiring a minimum amount of training (p. 206)
seniority length of time a person has been on a job (p. 208)
service work or labor performed for someone; economic product that includes haircuts, home repairs, forms of entertainment (p. 13)
set-aside contract guaranteed contract or portion thereof reserved for a targeted, usually minority, group (p. 215)
share draft account checking account offered by a credit union (p. 303)
shareholder see stockholder (p. 63)
short run production period so short that only variable inputs can be changed (p. 122)
shortage situation where quantity supplied is less than quantity demanded at a given price (p. 144)
signaling theory theory that employers are willing to pay more for people with certificates, diplomas, degrees, and other indicators of superior ability (p. 208)
silver certificate paper currency backed by, and redeemable for, silver from 1886 to 1968 (p. 295)
sin tax relatively high tax designed to raise revenue and discourage consumption of a socially undesirable product (p. 224)
skilled labor workers who can operate complex equipment and require little supervision (p. 206)
Social Security federal program of disability and retirement benefits that covers most working people (p. 42)
socialism economic system in which government owns some factors of production and has a role in determining what and how goods are produced (p. 492)
soft loan loan that may never be paid back; usually involves loan to developing countries (p. 535)
sole proprietorship unincorporated business owned and run by a single person who has rights to all profits and unlimited liability for all debts of the firm; most common form of business organization in the United States (p. 57)
Solidarity independent Polish labor union founded in 1980 by Lech Walesa (p. 504)
specialization assignment of tasks so that each worker performs fewer functions more frequently; same as division of labor (p. 16)
specie money in the form of gold or silver coins (p. 288)
spending cap limits on annual discretionary spending (p. 278)
spot market market in which a transaction is made immediately at the prevailing price (p. 332)
stages of production phases of production–increasing, decreasing, and negative returns (p. 125)
stagflation combination of stagnant economic growth and inflation (p. 437)
Standard & Poor's 500 (S&P 500) statistical series of 500 stocks used to monitor prices on the NYSE, American Stock Exchange, and OTC market (p. 332)
standard of living quality of life based on ownership of necessities and luxuries that make life easier (p. 24, 365)
state bank bank that receives its charter from the state in which it operates (p. 293)
state farm large farms owned and operated by the state in the former Soviet Union (p. 497)
stock certificate of ownership in a corporation; common or preferred stock (p. 63)
stock certificate see stock (p. 63)
stockbroker person who buys or sells securities for investors (p. 329)
stockholder person who owns a share or shares of stock in a corporation; same as shareholders (p. 63)
store of value one of the three functions of money allowing people to preserve value for future use (p. 286)
storming Soviet practice of rushing production at month's end to fulfill quotas, often resulting in production of shoddy goods (p. 498)
strike union organized work stoppage designed to gain concessions from an employer (p. 195)

structural unemployment unemployment caused by a fundamental change in the economy that reduces the demand for some workers (p. 385)
structures category in the national income and product accounts that includes residential structures, apartments, and commercial buildings (p. 341)
subsidy government payment to encourage or protect a certain economic activity (p. 117)
subsistence state in which a society produces barely enough to support itself (p. 546)
substitutes competing products that can be used in place of one another; products related in such a way that an increase in the price of one increases the demand for the other (p. 98)
substitution effect that portion of a change in quantity demanded due to a change in the relative price of the product (p. 96)
supply schedule of quantities offered for sale at all possible prices in a market (p. 113)
supply curve graphical representation of the quantities produced at each and every possible price in the market (p. 114)
supply elasticity responsiveness of quantity supplied to a change in price (p. 118)
supply schedule tabular listing showing the quantities produced or offered for sale at each and every possible price in the market (p. 114)
supply-side economics economic policies designed to increase aggregate supply or shift the aggregate supply curve to the right (p. 451)
surcharge additional tax or charge added to other charges already in place (p. 245)
surplus situation where quantity supplied is greater than quantity demanded at a given price (p. 144)

T

takeoff third stage of economic development during which barriers of primitive equilibrium are overcome (p. 528)
target price agricultural floor price set by the government to stabilize farm incomes (p. 153)
tariff tax placed on an imported product (p. 472)
tax assessor person who examines and values property for tax purposes (p. 241)
tax base incomes and properties that are potentially subject to tax by local, state, or federal governments (p. 366)
tax-exempt income from a bond or other investment not subject to tax by federal or state governments (p. 323)
tax loophole exception or oversight in the tax law allowing taxpayer to avoid taxes (p. 226)
tax return annual report filed with local, state, or federal government detailing income earned and taxes owed (p. 232)
technological monopoly market situation where a firm has a monopoly because it owns or controls a manufacturing method, process, or other scientific advance (p. 170)
technological unemployment unemployment caused by technological developments or automation that make some worker's skills obsolete (p. 386)
theory of negotiated wages explanation of wage rates based on the bargaining strength of organized labor (p. 208)
theory of production theory dealing with the relationship between the factors of production and the output of goods and services (p. 122)
thrift institution savings & loan associations, mutual savings banks, and other depository institutions historically catering to savers (p. 303)
tight money policy monetary policy resulting in higher interest rates and restricted access to credit; associated with a contraction of the money supply (p. 419)
time deposit interest-bearing deposit requiring prior notice before a withdrawal can be made, even though the requirement may not always be enforced (p. 417)
total cost variable plus fixed cost; all costs associated with production (p. 128)
total product total output or production by a firm (p. 123)
total revenue total receipts; price of goods sold times quantity sold (p. 130)
trade deficit balance of payments outcome when spending on imports exceeds revenues received from exports (p. 484)
trade-offs alternatives that must be given up when one is chosen rather than another (p. 19)
trade surplus situation occurring when the value of a nation's exports exceeds the value of its imports (p. 484)
trade union see craft union (p. 195)
trade-weighted value of the dollar index showing strength of the United States dollar against a market basket of other foreign currencies (p. 484)
traditional economy economic system in which the allocation of scarce resources and other economic activity is the result of ritual, habit, or custom (p. 34)
traditional theory of wage determination explanation of wage rates relying on theory of supply and demand (p. 207)
transfer payment payment for which the government receives neither goods nor services in return (p. 257)
transparency making business dealings more visible to everyone, especially government regulators (p. 512)
Treasury bill short-term United States government obligation with a maturity of one year or under in denominations of $10,000 (p. 324)
Treasury bond United States government bond with maturity of 10 to 30 years (p. 324)
Treasury coin note paper currency printed from 1890 to 1893, redeemable in both gold and silver (p. 296)
Treasury note United States government obligation with a maturity of 2 to 10 years (p. 324)

trend line growth path the economy would follow if it were not interrupted by alternating periods of recession and recovery (p. 376)
trough point in time when real GDP stops declining and begins to expand (p. 376)
trust illegal combination of corporations or companies organized to hinder competition (p. 178)
trust fund special account used to hold revenues designated for a specific expenditure such as Social Security, medicare, or highways (p. 275)
two-tier wage system wage scale paying newer workers a lower wage than others already on the job (p. 212)

U

underground economy unreported legal and illegal activities that do not show up in GDP statistics (p. 343)
unemployed state of working for less than one hour per week for pay or profit in a non-family owned business, while being available and having made an effort to find a job during the past month (p. 382)
unemployment insurance government program providing payments to the unemployed; an automatic stabilizer (p. 449)
unemployment rate ratio of unemployed individuals divided by total number of persons in the civilian labor force, expressed as a percentage (p. 383)
union shop arrangement under which workers must join a union after being hired (p. 201)
unit elastic elasticity where a change in the independent variable (usually price) generates a proportional change of the dependent variable (quantity demanded or supplied) (p. 103)
United States note paper currency with no backing, first printed by the United States government in 1862 to finance the Civil War (p. 295)
unlimited liability requirement that an owner is personally and fully responsible for all losses and debts of a business; applies to proprietorships, general partnerships (p. 58)
unrelated individual person living alone or with nonrelatives even though that person may have relatives living elsewhere (p. 346)
unskilled labor workers not trained to operate specialized machines and equipment (p. 205)
urban population those persons living in incorporated cities, towns, and villages with 2,500 or more inhabitants (p. 357)
user fee fee paid for the use of good or service; form of a benefit tax (p. 236)
utility ability or capacity of a good or service to be useful and give satisfaction to someone (p. 13)

V

value worth of a good or service as determined by the market (p. 13)
value-added tax tax on the value added at every stage of the production process (p. 246)
variable cost production cost that varies as output changes; labor, energy, raw materials (p. 128)
vertical merger combination of firms involved in different steps of manufacturing or marketing (p. 71)
voluntary arbitration see arbitration (p. 202)
voluntary exchange act of buyers and sellers freely and willingly engaging in market transactions; characteristic of capitalism and free enterprise (p. 47)

W

wage-price controls policies and regulations making it illegal for firms to give raises or raise prices (p. 454)
wage rate prevailing pay scale for work performed in a given area or region (p. 207)
want way of expressing or communicating a need; a broader classification than needs (p. 6)
wealth sum of tangible economic goods that are scarce, useful, and transferable from one person to another; excludes services (p. 14)
welfare government or private agency programs that provide general economic and social assistance to needy individuals (p. 397)
wholesale price index see producer price index (p. 352)
workfare program requiring welfare recipients to provide labor in exchange for benefits (p. 398)
World Bank international agency that makes loans to developing countries; formally the International Bank for Reconstruction and Development (p. 526)
World Trade Organization (WTO) international agency that administers trade agreements, settles trade disputes between governments, organizes trade negotiations, and provides technical assistance and training for developing countries (p. 477)

Z

zero population growth condition in which the average number of births and deaths balance so that population size is unchanged (p. 524)

Reading for Information

Think about your textbook as a tool that helps you learn more about the world around you. It is an example of nonfiction writing—it describes real-life events, people, ideas, and places. Here is a menu of reading strategies that will help you become a better textbook reader. As you come to passages in your textbook that you don't understand, refer to these reading strategies for help.

✓ BEFORE YOU READ

Set a Purpose

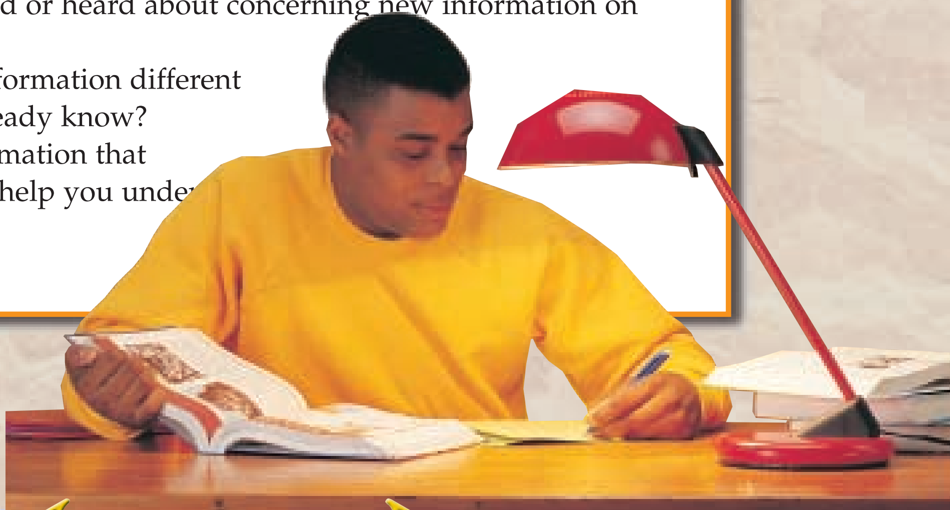
- Why are you reading the textbook?
- How does the subject relate to your life?
- How might you be able to use what you learn in your own life?

Preview

- Read the chapter title to find what the topic will be.
- Read the subtitles to see what you will learn about the topic.
- Skim the photos, charts, graphs, or maps. How do they support the topic?
- Look for vocabulary words that are boldfaced. How are they defined?

Draw From Your Own Background

- What have you read or heard about concerning new information on the topic?
- How is the new information different from what you already know?
- How will the information that you already know help you unde information?



CONTENTS

AS YOU READ

Question

- What is the main idea?
- How do the photos, charts, graphs, and maps support the main idea?

Connect

- Think about people, places, and events in your own life. Are there any similarities with those in your textbook?
- Can you relate the textbook information to other areas of your life?

Predict

- Predict events or outcomes by using clues and information that you already know.
- Change your predictions as you read and gather new information.

Visualize

- Pay careful attention to details and descriptions.
- Create graphic organizers to show relationships that you find in the information.

LOOK FOR CLUES AS YOU READ

- **Comparison-and-Contrast Sentences:**

  Look for clue words and phrases that signal comparison, such as *similarly, just as, both, in common, also,* and *too.*

  Look for clue words and phrases that signal contrast, such as *on the other hand, in contrast to, however, different, instead of, rather than, but,* and *unlike.*

- **Cause-and-Effect Sentences:**

  Look for clue words and phrases such as *because, as a result, therefore, that is why, since, so, for this reason,* and *consequently.*

- **Chronological Sentences:**

  Look for clue words and phrases such as *after, before, first, next, last, during, finally, earlier, later, since,* and *then.*

AFTER YOU READ

Summarize

- Describe the main idea and how the details support it.
- Use your own words to explain what you have read.

Assess

- What was the main idea?
- Did the text clearly support the main idea?
- Did you learn anything new from the material?
- Can you use this new information in other school subjects or at home?
- What other sources could you use to find more information about the topic?

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