chapter 6

Trade Regulations and Industrial Policies

Previous chapters have examined the benefits and costs of tariff and nontariff trade barriers. This chapter discusses the major trade policies of the United States. It also considers the role of the World Trade Organization in the global trading system, the industrial policies implemented by nations to enhance the competitiveness of their producers, and the nature and effects of international economic sanctions used to pursue foreign policy objectives.

U.S. Tariff Policies Before 1930

As Table 6.1 makes clear, U.S. tariff history has been marked by fluctuations. The dominant motive behind the early tariff laws of the United States was to provide the government an important source of tax revenue. This *revenue objective* was the main reason Congress passed the first tariff law in 1789 and followed it up with 12 more tariff laws by 1812. But as the U.S. economy diversified and developed alternative sources of tax revenue, justification for the revenue argument was weakened. The tariffs collected by the federal government today are about 1 percent of total federal revenues, a negligible amount.

As the revenue argument weakened, the *protective argument* for tariffs developed strength. In 1791, Alexander Hamilton presented to Congress his famous "Report on Manufacturers," which proposed that the young industries of the United States be granted import protection until they could grow and prosper—the *infant-industry* argument. Although Hamilton's writings did not initially have a legislative impact, by the 1820s protectionist sentiments in the United States were well established. During the 1920s, the average level of tariffs on U.S. imports was three to four times the 8 percent levels of 1789.

The surging protectionist movement reached its high point in 1828 with the passage of the so-called Tariff of Abominations. This measure increased duties to an average level of 45 percent, the highest in the years prior to the Civil War, and provoked the South, which wanted low duties for its imported manufactured goods. The South's opposition to this tariff led to the passage of the Compromise Tariff of 1833, providing

TABLE 6.1

U.S. Tariff History: Average Tariff Rates

Tariff Laws and Dates	Average Tariff Rate* (%)
McKinley Law, 1890	48.4%
Wilson Law, 1894	41.3
Dingley Law, 1897	46.5
Payne–Aldrich Law, 1909	40.8
Underwood Law, 1913	27.0
Fordney–McCumber Law, 1922	38.5
Smoot–Hawley Law, 1930	53.0
1930–1949	33.9
1950–1969	11.9
1970–1989	6.4
1990–1999	5.2
2003	4.4

*Ratio of duties collected to FOB value on dutiable imports.

Source: U.S. Census Bureau, *Statistical Abstract of the United States* (Washington, DC: U.S. Government Printing Office, various issues). See also World Trade Organization, *Annual Report*, various issues.

for a downsizing of the tariff protection afforded U.S. manufacturers. During the 1840s and 1850s, the U.S. government found that it faced an excess of tax receipts over expenditures. Therefore, the government passed the Walker Tariffs, which cut duties to an average level of 23 percent in order to eliminate the budget surplus. Further tariff cuts took place in 1857, bringing the average tariff levels to their lowest level since 1816, around 16 percent.

During the Civil War era, tariffs were again raised with the passage of the Morill Tariffs of 1861, 1862, and 1864. These measures were primarily intended as a means of paying for the Civil War. By 1970, protection climbed back to the heights of the 1840s; however, this time the tariff levels would not be reduced. During the latter part of the 1800s, U.S. policy makers were impressed by the arguments of American labor and business leaders who complained that *cheap foreign labor* was causing goods to flow into the United States. The enactment of the McKinley and Dingley Tariffs largely rested upon this argument. By 1897, tariffs on protected imports averaged 46 percent.

Although the Payne–Aldrich Tariff of 1909 marked the turning point against rising protectionism, it was the enactment of the Underwood Tariff of 1913 that reduced duties to 27 percent on average. Trade liberalization might have remained on a more permanent basis had it not been for the outbreak of World War I. Protectionist pressures built up during the war years and maintained momentum after the war's conclusion. During the early 1920s, the *scientific tariff concept* was influential, and in 1922 the Fordney–McCumber Tariff contained, among other provisions, one that allowed the president to increase tariff levels if foreign production costs were below those of the United States. Average tariff rates climbed to 38 percent under the Fordney–McCumber law.

Smoot–Hawley Act

The high point of U.S. protectionism occurred with the passage of the **Smoot–Hawley Act** in 1930, under which U.S. average tariffs were raised to 53 percent on protected imports. As the Smoot–Hawley bill moved through the U.S. Congress, formal protests from foreign nations flooded Washington, eventually adding up to a document of some 200 pages. Nevertheless, both the House of Representatives and the Senate approved the bill. Although about a thousand U.S. economists beseeched President Herbert Hoover to veto the legislation, he did not do so, and the tariff was signed into law on June 17, 1930. Simply put, the Smoot–Hawley Act tried to divert national demand away from imports and toward domestically produced goods.

The legislation provoked retaliation by 25 trading partners of the United States. Spain implemented the Wais tariff in reaction to U.S. tariffs on cork, oranges, and grapes. Switzerland boycotted U.S. exports to protest new tariffs on watches and shoes. Canada increased its tariffs threefold in reaction to U.S. tariffs on timber, logs, and many food products. Italy retaliated against tariffs on olive oil and hats with tariffs on U.S. automobiles. Mexico, Cuba, Australia, and New Zealand also participated in tariff wars. Other beggar-thy-neighbor policies, such as foreign-exchange controls and currency depreciations, were also implemented. The effort by several nations to run a trade surplus by reducing imports

led to a breakdown of the international trading system. Within two years after the Smoot–Hawley Act, U.S. exports decreased by nearly two-thirds. Figure 6.1 shows the decline of world trade as the global economy fell into the Great Depression.

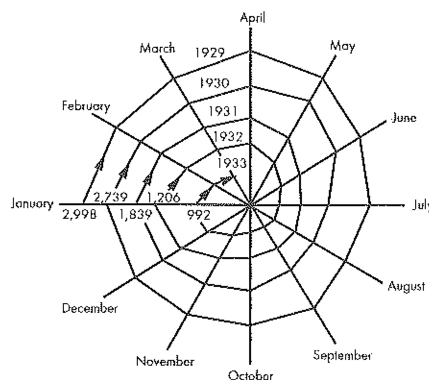
How did President Hoover fall into such a protectionist trap? The president felt compelled to honor the 1928 Republican platform calling for tariffs to aid the weakening farm economy. The stock market crash of 1929 and the imminent Great Depression further led to a crisis atmosphere. Republicans had been sympathetic to protectionism for decades. Now they viewed import tariffs as a method of fulfilling demands that government should initiate positive steps to combat domestic unemployment.

President Hoover felt bound to tradition and to the platform of the Republican party. Henry Ford spent an evening with Hoover requesting a presidential veto of what he referred to as "economic stupidity." Other auto executives sided with Ford. However, tariff legislation had never before been vetoed by a president, and Hoover was not about to set a precedent. Hoover remarked that "with returning normal conditions, our foreign trade will continue to expand."

By 1932, U.S. trade with other nations had collapsed. Presidential challenger Franklin Roosevelt denounced the trade legislation as ruinous. Hoover responded that Roosevelt would have U.S. workers compete with peasant labor overseas. Following Hoover's defeat in the presidential election of 1932, the Democrats dismantled the Smoot–Hawley legislation. But they used caution, relying on reciprocal trade agreements instead of across-the-board tariff concessions by the United States. Sam Rayburn, the Speaker of the House of Representatives, insisted that any party member who wanted to be a member of the House Ways and Means Committee had to support trade reciprocity instead of protectionism. The Smoot–Hawley approach was discredited, and the United States pursued trade liberalization via reciprocal trade agreements.

FIGURE 6.1

Smoot–Hawley Protectionism and World Trade, 1929–1933 (Millions of Dollars)



The figure shows the pattern of world trade from 1929 to 1933. Following the Smoot–Hawley Tariff Act of 1930, which raised U.S. tariffs to an average level of 53 percent, other nations retaliated by increasing their own import restrictions, and the volume of world trade decreased as the global economy fell into the Great Depression.

Source: Data taken from League of Nations, *Monthly Bulletin of Statistics*, February, 1934. See also Charles Kindleberger, *The World in Depression* (Berkeley, CA: University of California Press, 1973), p. 170.

Reciprocal Trade Agreements Act

The combined impact on U.S. exports of the Great Depression and the foreign retaliatory tariffs imposed in reaction to the Smoot–Hawley Act resulted in a reversal of U.S. trade policy. In 1934, Congress passed the **Reciprocal Trade Agreements Act**, which set the stage for a wave of *trade liberalization*. Specifically aimed at tariff reduction, the act contained two features: (1) negotiating authority and (2) generalized reductions.

Under this law, the president was given the unprecedented authority to negotiate bilateral tariff-reduction agreements with foreign governments (for example, between the United States and Sweden). Without congressional approval, the president could lower tariffs by up to 50 percent of the existing level. Enactment of any tariff reductions was dependent on the willingness of other nations to reciprocally lower their tariffs on U.S. goods. From 1934 to 1947, the United States entered into 32 bilateral tariff agreements, and over this period the average level of tariffs on protected products fell to about half of the 1934 levels.

The Reciprocal Trade Agreements Act also provided for generalized tariff reductions through the **most-favored-nation (MFN) clause.** This clause is an agreement between two nations to apply tariffs to each other at rates as low as those applied to any other nation. For example, if the United States extends MFN treatment to Brazil and then grants a low tariff on imports of machinery from France, the United States is obligated to provide the identical low-tariff treatment on imports of machinery from Brazil. Brazil thus receives the same treatment as the initially most-favored nation, France. The advantage to Brazil of MFN status is that it can investigate all of the tariff policies of the United States concerning imported machinery to see if treatment to some nation is more favorable than that granted to it; if any more favorable terms are found, Brazil can call for equal treatment. In 1998, the U.S. government replaced the term *most-favored nation* with **normal trade relations**, which will be used throughout the rest of this textbook.

According to the provisions of the World Trade Organization (see next section), there are two exceptions to the normal trade relations clause: (1) Industrial nations can grant preferential tariffs to imports from developing nations that are not granted to imports from other industrial nations; and (2) Nations belonging to a regional trading arrangement (for example, the North American Free Trade Agreement) can eliminate tariffs applied to imports of goods coming from other members while maintaining tariffs on imports from nonmembers.

Granting normal trade relation status or imposing differential tariffs has been used as an instrument of foreign policy. For example, a nation may punish unfriendly nations with high import tariffs on their goods and reward friendly nations with low tariffs. The United States has granted normal trade relation status to most of the nations with which it trades. As of 2002, the United States did not grant normal trade relation status to the following countries: Afghanistan, Cuba, Laos, North Korea, and Vietnam. U.S. tariffs on imports from these countries are often three or four (or more) times as high as those on comparable imports from nations receiving normal trade relation status, as seen in Table 6.2.

TABLE 6.2

U.S. Tariffs on Imports from Nations Granted, and Not Granted, Normal Trade Relation Status: Selected Examples

	Tariff (Percent)	
Product	With Normal Trade Relation Status	Without Normal Trade Relation Status
Hams	1.2 cents/kg	7.2 cents /kg
Sour cream	3.2 cents/liter	15 cents/liter
Butter	12.3 cents/liter	30.9 cents/liter
Fish	3% ad valorem	25% ad valorem
Saws	4% ad valorem	30% ad valorem
Cauliflower	10% ad valorem	50% ad valorem
Coffee	10% ad valorem	20% ad valorem
Woven fabrics	15.7% ad valorem	81% ad valorem
Babies' shirts	20.2% ad valorem	90% ad valorem
Gold necklaces	5% ad valorem	80% ad valorem

Source: U.S. International Trade Commission, *Harmonized Tariff Schedule of the United States* (Washington, DC: U.S. Government Printing Office, 2003).

General Agreement on Tariffs and Trade

Partly in response to trade disruptions during the Great Depression, the United States and some of its allies sought to impose order on trade flows after World War II. The first major postwar step toward liberalization of world trade was the **General Agreement on Tariffs and Trade (GATT)**, signed in 1947. GATT was crafted as an agreement among contracting parties, the member nations, to decrease trade barriers and to place all nations on an equal footing in trading relationships. GATT was never intended to become an organization; instead, it was a set of bilateral agreements among countries around the world to reduce trade barriers.

In 1995, GATT was transformed into the **World Trade Organization (WTO)**. The WTO embodies the main provisions of GATT, but its role was expanded to include a mechanism intended to improve GATT's process for resolving trade disputes among member nations. Let us first discuss the operation of the original GATT system.

The GATT System

GATT was based on several principles designed to foster more liberalized trade. One was *nondiscrimination*, embodying the principles of normal trade relations and *national treatment*. Under the normal trade relations principle, all member nations are bound to grant to each other treatment as favorable as they give to any nation with regard to trade matters. This allows comparative advantage to be the main determinant of trade patterns, which promotes global efficiency. There have been exceptions to the normal trade relations principle; for example, regional trade blocs (European Union, North American Free Trade Agreement) have been allowed. Under the national-treatment principle, member nations must treat other nations' industries no less favorably than they do their own domestic industries, once foreign goods have entered the domestic market; thus, in principle, domestic regulations and taxes cannot be biased against foreign products.

The GATT principle of nondiscrimination made trade liberalization a *public good*: What was produced by one nation in negotiation with another was available to all. This gave rise to the coordination problem shared by all public goods: that of getting each party to participate rather than sit back and let others do the liberalizing, thus free-riding on their efforts. A weakness of GATT trade negotiations from the 1940s to the 1970s was the limited number of nations that were actively negotiating participants; many nations—especially the developing nations—remained on the sidelines as free riders on others' liberalizations: They maintained protectionist policies to support domestic producers while realizing benefits from trade liberalization abroad.

Another aspect of GATT was its role in the settlement of trade disputes. Historically, trade disputes consisted of matters strictly between the disputants; no third party was available to which they might appeal for a favorable remedy. As a result, conflicts often remained unresolved for years, and when they were settled the stronger country generally won at the expense of the weaker country. GATT improved the dispute-resolution process by formulating complaint procedures and providing a conciliation panel to which a victimized country could express its grievance. GATT's dispute-settlement process, however, did not include the authority to enforce the conciliation panel's recommendations—a weakness that inspired the formation of the World Trade Organization.

GATT also obligated its members to use tariffs rather than quotas to protect their domestic industry. GATT's presumption was that quotas were inherently more trade distorting than tariffs because they allowed the user to discriminate between suppliers, were not predictable and transparent to the exporter, and imposed a maximum ceiling on imports. Here, too, there were exceptions to GATT's prohibition of quotas. Member nations could use quotas to safeguard their balance of payments, promote economic development, and allow the operation of domestic agricultural-support programs. Voluntary export-restraint agreements, which used quotas, also fell outside the quota restrictions of GATT because the agreements were voluntary.

Multilateral Trade Negotiations

GATT has also sponsored a series of negotiations, or rounds, to reduce tariffs and nontariff trade barriers, as summarized in Table 6.3. The first round of GATT negotiations, completed in 1947, achieved tariff reductions averaging 21 percent. However, tariff reductions were much smaller in the GATT rounds of the late 1940s and 1950s. During this period, protectionist pressures intensified in the United States as the war-damaged industries of Japan and Europe were reconstructed. Moreover, GATT negotiations emphasized *bilateral* bargaining (for example, between Canada and France) for tariff cuts on particular products, carried out concurrently by all of the participating nations. The process was slow and tedious, and nations often were unwilling to consider tariff cuts on many goods. A new approach to trade negotiations was thus considered desirable.

During the period 1964–1967, GATT members participated in the so-called **Kennedy Round** of trade negotiations, named after U.S. President John F. Kennedy, who issued an initiative calling for the negotiations. A *multilateral* meeting of GATT participants occurred at which the form of negotiations shifted from a product-by-product format to an across-the-board format. Tariffs were negotiated on broad categories of goods, and a given rate reduction applied to the entire group—a more streamlined approach. The Kennedy Round cut tariffs on manufactured goods by an average of 35 percent, to an average ad valorem level of 10.3 percent.

The GATT rounds from the 1940s to the 1960s focused almost entirely on tariff reduction. As average tariff rates in industrial nations decreased during the postwar period, the importance of nontariff barriers increased. In response to these changes, negotiators shifted emphasis to the issue of nontariff distortions in international trade.

At the **Tokyo Round** of 1973 to 1979, signatory nations agreed to tariff cuts that took the across-the-board form initiated in the Kennedy Round. The average tariff on manufactured goods of the nine major industrial countries was cut from 7.0 percent to 4.7 percent, a 40 percent decrease. Tariff reductions on finished products were deeper than those on raw materials, thus tending to decrease the extent of tariff escalation. After the Tokyo Round, tariffs were so low that they were not a significant barrier to trade in industrial countries. A second accomplishment of the Tokyo Round was the agreement to remove or

TABLE 6.3

GATT Negotiating Rounds

Negotiating Round and Coverage	Dates	Number of Participants	Tariff Cut Achieved (Percent)
Addressed Tariffs			
Geneva	1947	23	21%
Annecy	1949	13	2
Torquay	1951	38	3
Geneva	1956	26	4
Dillon Round	1960–1961	26	2
Kennedy Round	1964–1967	62	35
Addressed Tariff and Nontariff Barriers			
Tokyo Round	1973–1979	99	33
Uruguay Round	1986–1993	125	34
Doha Round	2002–	148	—

lessen many nontariff barriers. Codes of conduct were established in six areas: customs valuation, import licensing, government procurement, technical barriers to trade (such as product standards), antidumping procedures, and countervailing duties.

In spite of the trade liberalization efforts of the Tokyo Round, during the 1980s, world leaders felt that the GATT system was weakening. GATT members had increasingly used bilateral arrangements, such as voluntary export restraints, and other trade-distorting actions, such as subsidies, that stemmed from protectionist domestic policies. World leaders also felt that GATT needed to encompass additional areas, such as trade in intellectual property, services, and agriculture. They also wanted GATT to give increasing attention to the developing countries, who had felt bypassed by previous GATT rounds of trade negotiations.

These concerns led to the **Uruguay Round** from 1986 to 1993. As seen in Table 6.4, the Uruguay Round achieved across-the-board tariff cuts for industrial countries averaging 40 percent. Tariffs were eliminated entirely in several sectors, including steel, medical equipment, construction equipment, pharmaceuticals, and paper. Also, many nations agreed for the first time to bind, or cap, a significant portion of their tariffs, giving up the possibility of future rate increases above the bound levels. Significant progress was also made by the Uruguay Round in decreasing or eliminating nontariff barriers. The government-procurement code opened a wider range of markets for signatory nations. The Uruguay Round tightened up on antidumping activity and made extensive efforts to eliminate quotas on agricultural products and required nations to rely instead on tariffs. In the apparel and textile sector, various bilateral quotas were to be phased out by 2005. The safeguards agreement prohibited the use of voluntary export restraints. Moreover, the Uruguay Round called for the transformation of GATT into a permanent international institution, the World Trade Organization, responsible for governing the conduct of trade relations among its members (see next section).

Although completion of the Uruguay Round was a notable achievement, many serious trade problems remained. The pact did not explicitly address the interface of trade policies with environmental and labor standards or the trade effects of domestic policies, such as competition and investment policy. Moreover, there was the tendency for the global economy to become segregated into three major trading blocs: the European Union; the North American Free Trade Area; and a bloc that included Southeast Asian countries, Japan, and possibly Australia. Although regional trading blocs promote free trade among member countries, potentially they can lead to additional bilateral deals and interbloc trade disputes.

TABLE 6.4

Uruguay Round Tariff Reductions on Industrial Products by Selected Countries

	Average Tariff Rate (Percent)	
Country	Pre–Uruguay Round	Post–Uruguay Round
Industrial Countries		
Australia	20.1%	12.2%
Canada	9.0	4.8
European Union	5.7	3.6
Japan	3.9	1.7
United States	5.4	3.5
Developing Countries		
Argentina	38.2	30.9
Brazil	40.7	27.0
Chile	34.9	24.9
Colombia	44.3	35.3
India	71.4	32.4

Source: "Uruguay Round Outcome Strengthens Framework for Trade Relations," *IMF Survey*, November 14, 1994, p. 355.

World Trade Organization

On January 1, 1995, the day on which the Uruguay Round took effect, GATT was transformed into the World Trade Organization. This transformation turned GATT from a trade accord into a membership organization, responsible for governing the conduct of trade relations among its members. GATT obligations remain at the core of the WTO. However, the WTO agreement requires that its members adhere not only to GATT rules, but also to the broad range of trade pacts that have been negotiated under GATT auspices in recent decades. This undertaking ends the free ride of many GATT members (especially developing countries) that benefited from, but refused to join, new agreements negotiated in GATT since the 1970s.

How different is the WTO from the old GATT? The WTO is a full-fledged international organization, headquartered in Geneva, Switzerland; the old GATT was basically a provisional treaty serviced by an ad hoc secretariat. The WTO has a far wider scope than the old GATT, bringing into the multilateral trading system, for the first time, trade in services, intellectual property, and investment. The WTO also administers a unified package of agreements to which all members are committed; in contrast, the GATT framework included many side agreements (for example, antidumping measures and subsidies) whose membership was limited to a few nations. Moreover, the WTO reverses policies of protection in certain "sensitive" areas (for example, agriculture and textiles) that were more or less tolerated in the old GATT. The WTO is not a government; individual nations remain free to set their own appropriate levels of environment, labor, health, and safety protections.

Through various councils and committees, the WTO administers the many agreements contained in the Uruguay Round, plus agreements on government procurement and civil aircraft. It oversees the implementation of the tariff cuts and reduction of nontariff measures agreed to in the negotiations. It is also a watchdog of international trade, regularly examining the trade regimes of individual members. In its various bodies, members flag proposed or draft measures by others that can cause trade conflicts. Members are also required to update various trade measures and statistics, which are maintained by the WTO in a large database.

Settling Trade Disputes

A major objective of the WTO was strengthening the GATT mechanism for settling trade disputes. The old GATT dispute mechanism suffered from long delays, the ability of accused parties to block decisions of GATT panels that went against them, and inadequate enforcement. The dispute-settlement mechanism of the WTO addresses each of these weaknesses. It guarantees the formation of a dispute panel once a case is brought and sets time limits for each stage of the process. The decision of the panel may be taken to a newly created appellate body, but the accused party can no longer block the final decision. The dispute-settlement issue was especially important to the United States because this nation was the most frequent user of the GATT dispute mechanism.

The first case settled by the WTO involved a dispute between the United States and several other countries.[1] In 1994, the U.S. government adopted a regulation imposing certain conditions on the quality of the gasoline sold in the United States. The aim of this resolution, established by the Environmental Protection Agency (EPA) under the Clean Air Act, was to improve air quality by reducing pollution caused by gasoline emissions. The regulation set different pollution standards for domestic and imported gasolines. It was challenged before the WTO by Venezuela and later by Brazil.

[1]Drawn from World Trade Organization, *Solving Trade Disputes*, Geneva, Switzerland, 1999.

According to Venezuelan officials, there was a violation of the WTO's principle of national treatment, which suggests that once imported gasoline is on the U.S. market it cannot receive treatment less favorable than domestically produced gasoline. Venezuela argued that its gasoline was being submitted to controls and standards much more rigorous than those imposed on gasoline produced in the United States.

The United States argued that this discrimination was justified under WTO rules. The United States maintained that clean air is an exhaustible resource and that it was justified under WTO rules to preserve it. It also claimed that its pollution regulations were necessary to protect human health, which is also allowed by the WTO. The major condition is that these provisions should not be protectionism in disguise.

Venezuela refuted that argument. Venezuela was in no way questioning the right of the United States to impose high environmental standards. But it said that if the United States wanted clean gasoline then it should have submitted both the domestic and imported gasolines to the same high standards.

The new regulations put in place by the United States had an important impact for Venezuela and for its gasoline producers. Venezuela maintained that producing the gasoline according to the EPA's double standard was much more expensive than if Venezuela had followed the same specifications as American producers. Moreover, the U.S. market was critically important for Venezuela because two-thirds of Venezuela's gasoline exports were sold to the United States.

When Venezuela realized that the discriminatory aspects of the American gasoline regime would not be modified by the United States, it brought the case to the WTO. Brazil also complained about the discriminatory aspect of U.S. regulation. The two complaints were heard by a WTO panel, which ruled in 1996 that the United States unjustly discriminated against imported gasoline. When the United States appealed this ruling, a WTO appellate board confirmed the findings of the panel. The United States agreed to cease its discriminatory actions against imported gasoline by revising its environmental laws. Venezuela and Brazil were satisfied by the action of the United States.

Does the WTO Reduce National Sovereignty?

Do WTO rules or dispute settlements reduce the sovereignty of the United States or other countries? The United States benefits from WTO dispute settlement by having a set of rules to hold other countries accountable for their trade actions. At the same time, the U.S. government was careful to structure the WTO dispute-settlement rules to preserve the rights of Americans. Nevertheless, critics on both the left and right, such as Ralph Nader and Patrick Buchanan, contend that by participating in the WTO the United States has seriously undermined its sovereignty.

However proponents note that the findings of a WTO dispute-settlement panel cannot force the United States to change its laws. Only the United States determines exactly how it will respond to the recommendations of a WTO panel, if at all. If a U.S. measure is found to be in violation of a WTO provision, the United States may on its own decide to change the law; compensate a foreign country by lowering our trade barriers of equivalent amount in another sector; or do nothing and possibly undergo retaliation by the affected country in the form of increased barriers to U.S. exports of an equivalent amount. But the United States retains full sovereignty in its decision of whether or not to implement a panel recommendation. Simply put, WTO agreements do not preclude the United States from establishing and maintaining its own laws or limit the ability of the United States to set its environmental, labor, health, and safety standards at the level it considers appropriate. However, the WTO does not allow a nation to use trade restrictions to enforce its own environmental, labor, health, and safety standards when they have selective and discriminatory effects against foreign producers.

Most trade-dispute rulings of the WTO are resolved amicably, without resorting to retaliatory trade barriers. However, retaliation is sometimes used. For example, in 1999 the United States won its hormone-treated beef and banana cases in which the WTO ruled that the European Union unfairly restricted imports of these products. The WTO thus authorized the U.S. government to raise tariffs on European exports to the United States. After a prolonged struggle, the banana dispute was resolved, but the European Union has steadfastly refused to revise its policy on hormone-treated beef. The chance that the European Union will accept U.S. hormone-treated beef appears dim.

Economists generally agree that the real issue raised by the WTO is not whether it decreases national sovereignty, but whether the specific obligations that it imposes on a nation are greater or less than the benefits the nation receives from applying the same requirements to others (along with itself). According to this standard, the benefits of the United States of joining the WTO greatly exceed the costs. By granting the United States the status of normal trade relations with all 148 members, the agreement improves U.S. access to foreign markets. Moreover, it reduces the ability of other nations to impose restrictions to limit access to their markets. If the United States withdrew from the WTO, it would lose the ability to use the WTO mechanism to induce other nations to decrease their own trade barriers, and thus would harm U.S. exporting firms and their workers. Simply put, economists generally contend that the WTO puts some constraints on the decision making of the private and public sectors. But the costs of these constraints are outweighed by the economic benefits that citizens derive from freer trade.

Should Retaliatory Tariffs Be Used for WTO Enforcement?

However, critics contend that the WTO's dispute-settlement system based on tariff retaliation places smaller countries, without much market power, at a disadvantage. Suppose that Ecuador, a small country, receives WTO authorization to retaliate against unfair trade practices of the United States, a large country. With competitive conditions, if Ecuador applies a higher tariff to imports from the United States, its national welfare will decrease, as explained in Chapter 4. Therefore, Ecuador may be reluctant to impose a retaliatory tariff even though it has the approval of the WTO.

However, for countries large enough to affect prices in world markets, the issue is less clear. This is because a retaliatory tariff may improve a large country's terms of trade, thus enhancing its national welfare. If the United States raises a tariff barrier, it reduces the demand for the product on world markets. The decreased demand makes imports less expensive for the United States so that to pay for these imports, the United States can export less. The terms of trade (ratio of export prices to import prices) thus improves for the United States. This offsets at least some of the welfare reductions that take place through less efficiency due to increasing the tariff.

Simply put, although a small country could decide to impose retaliatory tariffs to teach a larger trading partner a lesson, it will find such behavior relatively more costly to initiate than its larger trading partner because it cannot obtain favorable movements in its terms of trade. The limited market power of small countries thus makes them less likely to induce compliance to WTO rulings through retaliation. However, the problems smaller nations face in retaliating are the opposite of the special benefits they gain in obtaining WTO tariff concessions without being required to make reciprocal concessions.

Some maintain that the WTO's current dispute-settlement system should be modified. For example, free traders object to retaliatory tariffs on the grounds that the WTO's purpose is to reduce trade barriers. Instead, they propose that offending countries should be assessed monetary fines. A system of fines has the advantage of avoiding additional trade protection and not placing smaller countries at a disadvantage. However, this system encounters the problem of deciding how to place a monetary value on violations. Also, fines might be difficult to collect because the offending country's government would have to initiate specific budgetary authorization. Moreover, the notion of accepting an obligation to allow foreigners to levy monetary fines on a nation such as the United States would likely be criticized as taxation without representation, and the

WTO would be attacked as undermining national sovereignty.

U.S. export subsidies provide an example of retaliatory tariffs authorized by the WTO. From 1984 to 2004, the U.S. tax code provided a tax benefit that enabled American exporters to exempt between 15 percent and 30 percent of their export income from U.S. taxes. In 1998, the European Union lodged a complaint with the WTO, arguing that the U.S. tax benefit was an export subsidy in violation of WTO agreements. This led to the WTO's ruling in 2003 that the tax benefit was illegal and that the European Union could immediately impose $4 billion in punitive duties on U.S. exports to Europe. Although the European Union gave the U.S. government time to eliminate its export subsidy program, inertia resulted in continuation of the program. Therefore, the Europeans began implementing retaliatory tariffs in 2004. A 5 percent penalty tariff was levied on U.S. exports such as jewelry and refrigerators, toys, and paper. The penalty climbed by 1 percentage point for each month that U.S. lawmakers failed to bring U.S. tax laws in line with the WTO ruling. This marked the first time that the United States came under WTO penalties for failure to adhere to its rulings. Although some in Congress resisted surrendering to the WTO on anything, the pressure provided by the tariffs convinced Congress to repeal the export subsidies.

Does the WTO Harm the Environment?

In recent years, the debate has intensified on the links between trade and the environment, and the role the WTO should play in promoting environment-friendly trade. A central concern of those who have raised the profile of this issue in the WTO is that there are circumstances where trade and the pursuit of trade liberalization may have harmful environmental effects. Indeed, these concerns were voiced when thousands of environmentalists descended on the World Trade Organization summit in Seattle in 1999. They protested the WTO's influence on everything from marine destruction to global warming. Let us consider the opposing views on the links between trade and the environment.[2]

Harming the Environment

Two main arguments are forwarded as to how trade liberalization may harm the environment. First, trade liberalization leads to a "race to the bottom" in environmental standards. If some countries have low environmental standards, industry is likely to shift production of environment-intensive or highly polluting products to such pollution havens. Trade liberalization can make the shift of smokestack industries across borders to pollution havens even more attractive. If these industries then create pollution with global adverse effects, trade liberalization can, indirectly, promote environmental degradation. Worse, trade-induced competitive pressure may force countries to lower their environmental standards, thus encouraging trade in products creating global pollution.

Why would developing nations adopt less stringent environmental policies than industrial nations? Poorer nations may place a higher priority on the benefits of production (more jobs and income) relative to the benefits of environmental quality than wealthy nations. Moreover, developing nations may have greater environmental capacities to reduce pollutants by natural processes (such as Latin America's rain-forest capacity to reduce carbon dioxide in the air) than do industrial nations that suffer from the effects of past pollution. Developing nations can thus tolerate higher levels of emissions without increasing pollution levels. Finally, the introduction of a polluting industry into a sparsely populated developing nation will likely have less impact on the capacity of the environment to reduce pollution by natural processes than it would have in a densely populated industrial nation.

A second concern of environmentalists about the role of trade relates to social preferences. Some practices may simply be unacceptable for certain people or societies, so they oppose trade in products that encourage such practices. These can include killing dolphins in the process of catching tuna and using leghold traps for catching animals for their furs. During the 1990s, relations between environmentalists and the WTO clashed when the WTO ruled against a U.S. ban on imports of shrimp from countries using nets that trap turtles, after complaints by India, Malaysia, Pakistan, and Thailand. Also, the United States was found guilty of violating world trade law when it banned imports of Mexican tuna caught in ways that drown dolphins. Indeed, critics maintained that the free-trade policies of the WTO contradicted the goal of environmental quality.

To most economists, any measure that liberalizes trade enhances productivity and growth, puts downward pressure on inflation by increasing competition, and creates jobs. In Japan, tariffs are so high on imported finished-wood products that U.S. firms don't have much market there. High local prices limit domestic demand in Japan. But if tariffs were abolished, demand for lumber products from the United States could surge, creating additional logging jobs in the United States and additional import-related jobs in Japan.

But environmentalists view the tariff elimination differently. Their main concern is that a non-tariff market, which would result in lower prices, will stimulate so much demand that logging will intensify in the world's remaining ancient forests, which they say serve as habitat for complex ecosystems that otherwise cannot survive intact in forests that have been cut into fragments. Such old forests still exist across much of Alaska, Canada, and Russia's Siberian region. Environmentalists note that in Pennsylvania, New York, and other states in the Northeast, the forests have been so chopped up that many large predators have been driven from the land, leaving virtually no check on the deer population. Therefore, deer are in a state of overpopulation.

However, trade liberalization proponents play down the adverse impacts, arguing that reduced tariffs would boost world economies by decreasing the cost of housing, paper, and other products made from wood, while actually helping forest conditions. For example, timber officials in the United States say they could go into a country like Indonesia and persuade local firms to adopt more conservation-minded techniques.

Improving the Environment

On the other hand, it is argued that trade liberalization may improve the quality of the environment rather than promote degradation. First, trade stimulates economic growth, and growing prosperity is one of the key factors in societies' demand for a cleaner environment. As people get richer, they want a cleaner environment—and they acquire the means to pay for it. Granted, trade can increase the cost of the wrong environmental policies. If farmers freely pollute rivers, for instance, higher agricultural exports will increase pollution. But the solution to this is not to shut off exports: It is to impose tougher environmental laws that make polluters pay.

Second, trade and growth can encourage the development and dissemination of environment-friendly production techniques as the demand for cleaner products grows and trade increases the size of markets. International companies may also contribute to a cleaner environment by using the most modern and environmentally clean technology in all their operations. This is less costly than using differentiated technology based on the location of production and helps companies to maintain a good reputation.

Although there is no dispute that in theory intensified competition could give rise to pollution havens, the empirical evidence suggests that it has not happened on a significant scale. The main reason is that the costs imposed by environmental regulation are small relative to other cost considerations, so this factor is unlikely to be at the basis of relocation decisions. The U.S. Census Bureau finds that even the most polluting industries spend no more than 2 percent of their revenues on abating pollution. Other factors such as labor costs, transportation costs, and the adequacy of infrastructure are much more important. For all the talk of a race to the bottom, there is no evidence for a race to the bottom—a competitive lowering of environmental standards.

[2]World Trade Organization, *Annual Report*, Geneva, Switzerland, 1998, pp. 54–55, and "Greens Target WTO's Plan for Lumber," *The Wall Street Journal*, November 24, 1999, pp. A2 and A4.

WTO Rulings Outrage Environmentalists

The protection of dolphins and sea turtles, which are playful and harmless, has received much sympathy in the United States. However, protecting these creatures has threatened the methods used to catch tuna and shrimp. Let's see how the environmentalists' goal of protecting dolphins and sea turtles clashed with the free-trade goal of the WTO.

For many years, fisheries in the Eastern Tropical Pacific have found tuna by looking for dolphins—surface-swimming dolphins that travel above schools of tuna. A net drawn around the dolphins catches the tuna and the dolphins. However, as the nets draw tight underwater, the dolphins, being mammals, drown.

To environmentalists, saving the dolphins is a matter of environmental and moral consciousness. As a result, the United States passed the Marine Mammals Protection Act of 1972. The act outlawed the setting of nets on dolphins by U.S. tuna fisheries anywhere in the world; it also outlawed this method for foreign fisheries in U.S. waters, out to a 200-mile limit. However, the law did not apply to foreigners catching tuna outside U.S. waters.

Across the border in Mexico, saving dolphins meant losing business and jobs for tuna fisheries. They maintained that they had to catch enough tuna to justify a fishing expedition. To do so required them to use the most efficient methods of fishing, even if they were unsafe for dolphins. Mexican fisheries were thus unwilling to refrain from setting nets on dolphins.

To convince Mexico to use dolphin-safe methods of catching tuna, the U.S. government pressured three major tuna retailing firms in the United States (Bumble Bee, Chicken of the Sea, and StarKist) to refuse to purchase tuna from fisheries using dolphin-unsafe methods. These tuna retailers responded with "dolphin-safe" tuna labels to steer concerned shoppers to tuna caught without setting nets on dolphins. But the force of the marketplace, said environmentalists, wasn't enough. They insisted on the force of law.

In 1991, the U.S. government slapped an embargo on tuna imports from Mexico and four other countries. Mexico immediately complained to the WTO (then known as GATT). The U.S. embargo, Mexico argued, violated the WTO agreement against restricting trade through discriminatory action. Application of the embargo was against the free-trade principles of the WTO, according to Mexico. But the United States denied that the tuna embargo discriminated against Mexico. Even though the United States was embargoing certain countries, and not embargoing others, the United States was embargoing on objective criteria that applied to all countries, according to the United States.

In 1991, the WTO decided in favor of Mexico and upheld its prohibition of policies that exclude imports according to how they are produced. The WTO ruled that the United States, by levying an embargo only against Mexico and four other countries, was in the breach of the rule of nondiscrimination. The embargo, said the WTO, hurt not only the tuna industry but the ultimate beneficiary of free trade, the consumer, as well. Simply put, WTO does not allow a nation to use trade restrictions to enforce its own environmental laws when they have selective and discriminatory effects on foreign producers.

Another case involves sea turtles, an endangered specie. Nations such as Thailand, Malaysia, India, and Pakistan have often caught shrimp with nets that trap and kill an estimated 150,000 sea turtles each year. The U.S. Endangered Species Act, passed in 1989, mandated that shrimpers in U.S. waters include devices in their nets to exclude turtles; it also placed embargoes on imports of shrimp from nations that do not protect sea turtles from deadly entrapment in nets. Four Asian nations, who were unwilling to equip their nets, filed a complaint with the WTO in 1997 that claimed that the U.S. Endangered Species Act was an illegal trade barrier. Ruling in favor of these nations, the WTO said that the United States could not use trade policy to force other nations to adopt environmental policies to protect endangered species. Following this decision, the United States reached agreements with these nations to use turtle-excluding nets, and the United States provided financial and technical assistance in how to use them.

Indeed, environmentalists have been outraged by some decisions of the WTO. They maintain that too often the WTO is blindly for free trade at any cost.

Is the Kyoto Protocol a Lot of "Hot Air"?

As we have learned, global warming is a highly controversial issue. Although the earth does undergo periodic warming and cooling trends, environmentalists are concerned that the current warming trend seems to have progressed much more quickly than previous warming trends. They hypothesize that the increased warming rate is due to a larger amount of carbon dioxide that has been emitted into the atmosphere in the past 200 years. Combustion of fossil fuels, such as coal and oil, paired with deforestation are the main reasons for so much carbon dioxide in the atmosphere. Environmentalists estimate that as a result of the increase in the combustion of fossil fuels, carbon dioxide levels in the atmosphere will double in the next 25 years, causing the earth's temperature to increase by 2 to 4 degrees. One of the most feared consequences of a global warming is a rise in sea level that could flood low-lying areas and damage the economy of coastal nations.

In 1997, representatives from almost 180 nations met in Kyoto, Japan, to discuss a global strategy for a reduction in the emission of greenhouse gases. The intent of the treaty was that although the costs of unabated climate change may be difficult to quantify, it is necessary to provide a meaningful incentive for countries to lower their emissions of carbon dioxide and other greenhouse gases. The logic was that the effort must be global in nature, as otherwise individual nations would not have the proper motivation for lowering their consumption of fossil fuels.

The representatives agreed to a 5.2 percent average reduction from 1990 global pollution levels by the year 2012, subject to ratification by their governments. Because the United States has been the largest contributor of global emissions, the treaty would commit the United States to a target of reducing greenhouse gases by 7 percent below 1990 levels.

Although 84 countries had signed the Kyoto Protocol by 2001, the treaty takes effect only after ratification by countries that produced 55 percent of the included industrialized nations' greenhouse gas emissions in 1990. The United States, the world's biggest polluter, rejected the treaty: It is responsible for about one-fourth of the world's greenhouse gasses—chiefly carbon dioxide from cars, power plants, and factories. The United States indicated that it favored a different approach to controlling emissions based on voluntary measures and market mechanisms. President George W. Bush noted that as the world proceeds on a path of ever-greater energy efficiency, and as low-cost fuels become depleted and thus more costly, increases in the global level of carbon dioxide will moderate. Therefore, global temperature forecasts of environmentalists are exaggerated. Moreover, it is not certain that meeting the targets of the Kyoto Protocol would reduce greenhouse emissions by an amount necessary to prevent further global warming.

Of particular concern to the United States was sharply higher prices for energy and electricity that would occur because of the Kyoto Protocol. As the United States reduced emissions to meet the target

of the treaty, gasoline prices would rise by an estimated 65 cents per gallon, and industrial gas and electricity prices would double. The United States would lose more than 2.4 million jobs in energy-intensive industries such as autos, steel, paper, and chemicals, and family income would fall by an average of $2,700. Put simply, the Kyoto Protocol would impose a heavy burden on every U.S. household and industry, including agriculture.

Also, the Kyoto Protocol would give developing countries a competitive advantage over the United States and other industrial countries. This is because none of the developing countries, including those with large and growing emissions such as India and China, are required to limit their emissions. As a result, energy and energy-related costs would become much higher in the United States than in countries that do not adhere to the same emission limits. This would increase the costs of companies in the United States relative to their foreign competitors, thus promoting competitive disadvantage.

Moreover, even if the United States sharply reduced its emissions unilaterally without an international agreement limiting emissions abroad, emissions from developing countries will grow as they realize increases in population and economic growth. As countries like India and China bring dozens of new coal-fired power plants on line each year, their emissions of carbon dioxide will grow greater and greater. By not holding developing countries accountable for their emissions, the goals of the Kyoto Protocol may not be achieved.

The Doha Round of Trade Negotiations

Although the WTO attempts to foster trade liberalization, achieving it can be difficult. Let us see why.

In 1998, members of the WTO accepted President Bill Clinton's invitation to come to Seattle, Washington, and kick off a new round of trade negotiations for a new century. The participants attempted to establish an agenda for negotiations that included trade in agriculture, intellectual property rights, labor and environmental matters, and help for the lesser-developed countries. However, the Seattle meetings marked the debut of the developing nations as highly organized and assertive participants pursuing their own trade agendas. Believing that they had been taken to the cleaners in previous rounds of trade negotiations, the developing nations were determined not to allow that to occur again. Disagreements among developing countries and industrial countries were a major factor that resulted in a breakdown of the meetings. The meeting became known as "The Battle in Seattle" because of the rioting and disruption that took place in the streets during the meeting.

Although trade liberalization proponents were discouraged by the collapse of the Seattle meeting, they continued to press for another round of trade talks. The result was a WTO summit meeting of 2001, which took place in Doha, Qatar. The meeting resulted in trade ministers' agreeing to launch a new round of talks that could keep the global economy on track toward freer trade and investment.

The rhetoric of the Doha summit was elaborate: Doha would decrease trade-distorting farm support, cut tariffs on farm goods, and eliminate agricultural-export subsidies; it would slash industrial tariffs, especially in areas that poor countries cared about, such as textiles; it would free up trade in services; and it would negotiate global rules in four new areas—in competition, investment, transparency in government procurement, and trade facilitation. Table 6.5 summarizes the major provisions of the Doha summit.

The Doha round was formally called the "Doha development agenda." This is because the majority of the WTO's 148 members rank as medium-to-low income, developing countries. These nations have the highest trade barriers and the most difficulty meeting existing obligations of the WTO. The developing countries would benefit significantly from liberalization of remaining trade barriers in the United States, Japan, and Europe, as well as reform of their own trade restrictions. By characterizing the talks in this manner, however, officials created the impression that the negotiations were solely about what the developed countries should do for developing ones, and not what developing countries needed to do to promote their own economic development. The emphasis on development inspired many developing countries to justify their demands for new concessions by arguing that they had paid too much in previous trade talks and had gotten nothing in return; now it was payback time.

TABLE 6.5

Likely Winners and Losers from a Successful Completion of the Doha Agenda

The agreement of 148 countries in Doha, Qatar, to start a new round of global trade negotiations is still years away. Here's an early look at the potential impact.

Trade Issue	Winners	Losers
Public health trumps patents	AIDS patients in Africa	Drug companies of the United States and Europe
Agricultural subsidies to be phased out	Farmers in developing countries	European and Japanese farmers
U.S. refuses to import more textiles from developing countries	U.S. textile companies	Pakistani textile producers
U.S. antidumping laws up for negotiation	Foreign steelmakers	U.S. steelmakers

In 2003, WTO participants convened in Cancun, Mexico, to consider principles for taking the Doha agenda forward. From the start, countries disowned major portions of the agenda. The European Union, for example, denied it had ever promised to get rid of export subsidies. Led by India, many poor countries denied that they ever signed up for talks on new rules regarding intellectual property and competition policy. Other poor countries spent more time complaining about their grievances over earlier trade rounds than they did in negotiating the new one. Several rich countries showed little interest in compromise. Japan, for example, appeared content simply to reject any cuts in rice tariffs. This kind of posturing resulted in self-imposed deadlines being missed and all tough political decisions regarding opening economies to trade being put off.

Agriculture cropped up as an especially "hot potato" for trade negotiators. Although average tariffs on manufactured goods have decreased from 40 percent to 4 percent over the past 50 years, agricultural tariffs have remained at about 40 percent. Australia and Argentina, with comparative advantages in many agricultural products, want free trade in farming. However, it is the European Union and Japan, with many small, highly subsidized and massively inefficient farmers, that find every step to freer farm trade distasteful. Even the United States, which publically advocates freer trade in agriculture, provides considerable protection for farmers. The developing countries demanded that rich countries, as the most dominant subsidizers of agricultural products, should slash subsidies and free farm trade. However, Europe, Japan, and the United States were unwilling to roll back their agricultural subsidies.

Another sticking point of the Cancun meetings was Europe's obsession with trade and the environment. Although Europeans say that they simply want to clarify the existing environmental rules of the WTO, the United States fears that Europe may press for more stringent rules that impose harsh costs on the U.S. economy. Moreover, developing countries worry that the Europeans want to use environmental issues as a back door to protectionism. If Europe is obliged to lower agricultural trade barriers, it will simply keep out food products by finding some "green" objection to them.

The failure of the Cancun meetings did not necessarily mean that the Doha trade round is dead. The Uruguay Round took eight years before it succeeded in 1993. However, achieving a final agreement on these contentious issues will be difficult. But if a multilateral agreement cannot be reached under the auspices of the WTO, the alternative is regional and bilateral agreements that are easier to achieve, but offer far less scope. Following the Cancun meetings, the United States, China, Japan, and India hinted that they would likely engage more aggressively in negotiating regional trade agreements, a topic that will be further discussed in Chapter 8 of this text.

Trade Promotion Authority (Fast-Track Authority)

If international trade agreements were subject to congressional amendments, achieving such pacts would be arduous, if not hopeless. The provisions that had been negotiated by the president would soon be modified by a deluge of congressional amendments, which would quickly meet the disapproval of the trading partner, or partners, that had accepted the original terms.

To prevent this scenario, the mechanism of **trade promotion authority** (also known as **fast-track authority**) was devised in 1974. Under this provision, the president must formally notify Congress of his or her intent to enter trade negotiations with another country. This notification starts a clock in which Congress has 60 legislative days to permit or deny "fast-track" authority. If fast-track authority is approved, the president has a limited time period in which to complete the trade negotiations; extensions of this time period are permissible with congressional approval. Once the negotiations are completed, their outcome is subject only to a straight up-or-down vote (without amendment) in both houses of the Congress within 90 legislative days of submission. In return, the president agrees to consult actively with Congress and the private sector throughout the negotiation of the trade agreement.

Fast-track authority was instrumental in negotiating and implementing major trade agreements such as the Uruguay Round Agreements Act of 1994 and the North American Free Trade Agreement of 1993. Most analysts contend that the implementation of future trade agreements will require fast-track authority for the president. Efforts to renew fast-track authority have faced stiff opposition, largely due to congressional concerns about delegating too much discretionary authority to the president and disagreements over the goals of U.S. trade negotiations. In particular, labor unions and environmentalists have sought to ensure that trade agreements will address their concerns. They believe that high labor and environmental standards in the United States put American producers at a competitive disadvantage and that increased trade with countries with lax standards may lead to pressure to lower U.S. standards. If other countries are to trade with the United States, shouldn't they have similar labor and environmental standards?

Supporters of fast-track authority have generally argued that, although labor and environmental standards are important, they do not belong in a trade agreement. Instead, these issues should be negotiated through secondary agreements that accompany a trade agreement. However, labor leaders and environmentalists contend that past secondary agreements have lacked enforcement provisions and thus have done little to improve the quality of life abroad.

The Escape Clause (Safeguards)

In addition to the WTO's addressing unfair trade practices, the United States itself has adopted a series of **trade remedy laws** designed to produce a fair trading environment for all parties engaging in international business. These laws include the escape clause, countervailing duties, antidumping duties, and unfair trading practices. Table 6.6 summarizes the provisions of the U.S. trade remedy laws, which are discussed in the following sections.

The **escape clause** is intended to provide **safeguards** (relief) to U.S. firms and workers desiring protection from surges in imports. In an escape-clause case, it makes no difference whether the imports are fairly or unfairly traded. All that matters is whether imports are a substantial cause of serious injury (or threat thereof) to the domestic industry. The escape clause allows the president to terminate or make modifications in trade concessions granted foreign nations and to levy restrictions on surging imports. Safeguards provided by the escape clause are temporary: Trade restrictions can be enacted for a 3-year period and are to be phased down over this period in the transition to open markets. The idea is to give the domestic industry time to adjust, after which competition will be allowed to resume.

An escape-clause action is initiated by a petition from an American industry or the president of the United States to the U.S. International Trade Commission (USITC), which investigates and recommends a response to the president. An affirmative decision by the USITC is reported to the president, who determines what remedy, if any, is in the national interest. Table 6.7 on page 192 provides examples of safeguards granted to U.S. businesses under the escape clause.

TABLE 6.6

Trade Remedy Law Provisions

Statute	Focus	Criteria for Action	Response
Fair trade (escape clause)	Increasing imports	Increasing imports are substantial cause of injury	Duties, quotas, tariff-rate quotas, orderly marketing arrangements, adjustment assistance
Subsidized imports (countervailing duty)	Manufacturing production, or export subsidies	Material injury or threat of material injury	Duties
Dumped imports (antidumping duty)	Imports sold below cost of production or below foreign market price	Material injury or threat of material injury	Duties
Unfair trade (Section 301)	Foreign practices violating a trade agreement or injurious to U.S. trade	Unjustifiable, unreasonable, or discriminatory practices, burdensome to U.S. commerce	All appropriate and feasible action

Countervailing Duties

As consumers, we tend to appreciate the low prices of foreign subsidized steel. But foreign export subsidies are resented by import-competing producers, who must charge higher prices because they do not receive such subsidies. From their point of view, the export subsidies give foreign producers an unfair competitive advantage.

As viewed by the World Trade Organization, export subsidies constitute unfair competition. Importing countries can retaliate by levying a **countervailing duty**. The size of the duty is limited to the amount of the foreign export subsidy. Its purpose is to increase the price of the imported good to its fair market value.

Upon receipt of a petition by a U.S. industry or firm, the U.S. Department of Commerce conducts a preliminary investigation as to whether or not an export subsidy was given to a foreign supplier. If the preliminary investigation finds a reasonable indication of an export subsidy, U.S. importers must immediately pay a special tariff

TABLE 6.7

Safeguard Relief Granted Under the Escape Clause: Selected Examples

Product	Type of Relief
Porcelain-on-steel cooking ware	Additional duties imposed for 4 years of 20 cents, 20 cents, 15 cents, and 10 cents per pound in the first, second, third, and fourth years, respectively
Prepared or preserved mushrooms	Additional duties imposed for 3 years of 20%, 15%, and 10% ad valorem in the first, second, and third years, respectively
High-carbon ferrochromium	Temporary duty increase
Color TV receivers	Orderly marketing agreements with Taiwan and Korea
Footwear	Orderly marketing agreements with Taiwan and Korea

Source: *Annual Report of the President of the United States on the Trade Agreements Program* (Washington, DC: U.S. Government Printing Office, various issues).

(equal to the estimated subsidy margin) on all imports of the product in question. The Commerce Department then conducts a final investigation to determine whether an export subsidy was in fact granted, as well as the amount of the subsidy. If it determines that there was no export subsidy, the special tariff is rebated to the U.S. importers. Otherwise, the case is investigated by the U.S. International Trade Commission, which determines if the import-competing industry suffered material injury as a result of the subsidy.[3] If both the Commerce Department and the International Trade Commission rule in favor of the subsidy petition, a permanent countervailing duty is imposed that equals the size of the subsidy margin calculated by the Commerce Department in its final investigation. Once the foreign nation stops subsidizing exports of that product, the countervailing duty is removed.

[3]For those nations that are signatories to the WTO Subsidy Code, the International Trade Commission must determine that their export subsidies have injured U.S. producers before countervailing duties are imposed. The export subsidies of nonsignatory nations are subject to countervailing duties immediately following the Commerce Department's determination of their occurrence; the International Trade Commission does not have to make an injury determination.

Lumber Quotas Hammer Home Buyers

Let us consider a countervailing-duty case involving the U.S. lumber industry. During the 1980s and 1990s, the United States and Canada quarreled over softwood lumber. The stakes were enormous: Canadian firms exported more than $7 billion worth of lumber annually to U.S. customers. This dollar value of U.S. lumber imports from Canada almost equaled that of its steel imports from the rest of the world!

The lumber dispute followed a repetitive pattern. First, some U.S. lumber producers accused their Canadian rivals of receiving government subsidies. In particular, they alleged that the Canadians paid unfairly low tree-cutting fees to harvest timber from lands owned by the Canadian government. In the United States, companies bid years in advance for the right to cut trees in government forests. Because the tree-cutting fees are fixed, the companies must forecast their prices accurately in order to ensure profitability. By contrast, Canadian regulations permit provincial governments to reduce their tree-cutting fees when lumber prices decline so as to keep their sawmills profitable. U.S. sawmill operators maintain that this practice subsidizes the Canadian lumber mills. However, the Canadians responded that their timber-pricing policies were not market-distorting, and they generally won on the technical merits. Despite losing those battles, the American lumber lobby usually ended up winning the war: Their relentless political pressure forced Canada to accept some form of trade restraint just to ensure commercial peace.

For example, in 1996, the Coalition for Fair Lumber Imports, a group of U.S. sawmill companies, filed a countervailing-duty petition with the U.S. government charging that domestic producers were hurt by subsidized lumber exports from Canada. The complaint ultimately led to the Softwood Lumber Agreement of 1996, which established a tariff-rate quota to protect U.S. producers. Up to 14.7 billion board feet of Canadian softwood lumber exports from Canada to the United States could enter duty free. The next 0.65 billion board feet of exports was subject to a tariff of $50 per thousand board feet. The Canadian government also agreed to raise the tree-cutting fees it charged provincial producers. As a result of the trade agreement, lumber imports to the United States fell about 14 percent.

Proponents of the accord maintained that it created a "level playing field" in which American lumber companies and Canadian lumber companies could compete. However, critics argued that the trade pact failed to take into account the interests of American lumber users in the lumber-dealing, homebuilding, and home-furnishing industries. It also overlooked the interests of American buyers of new homes and home furnishings according to the critics.

In the United States, a coalition of lumber users—including Home Depot, the National Association of Home Builders, and the National Lumber and Building Material Dealers Association—banded together to protest the lumber quotas. They noted that the trade restrictions increased the price of lumber between 20 percent and 35 percent, or $50–$80 per thousand board feet. Therefore, the cost of the average new home increased between $800 and $1,300 because of the restrictions. Moreover, every $1,000 increase in housing prices means that an additional 300,000 families are unable to buy a home. The lumber quotas thus served as a tax that kept the dream of home ownership out of reach for many lower-income Americans.

Critics acknowledged that barriers against Canadian lumber imports would benefit some U.S. lumber producers and their workers. But in 2000, there were only 217,000 American jobs in logging and sawmills. That figure compared to 510,000 jobs in lumber-using manufacturing industries; 744,000 jobs in the wholesale and retail lumber trade; and more than 4.7 million jobs in homebuilding. Lumber-using workers thus outnumbered lumber-producing workers by more than 25 to 1.[4] Simply put, critics maintained that workers in the lumber-using industries stood to lose far more than workers in the lumber-producing industries would gain.

Following the imposition of quotas on lumber imports, trade tensions continued to fester between the United States and Canada. In 2002, the U.S. government determined that Canada continued to subsidize its lumber industry by charging low fees to log public lands, thus allowing its producers to sell their lumber in the United States at below-market prices. As a result, the U.S. government set a 19 percent duty to punish Canada for the subsidies and a second tariff averaging 9 percent for dumping. The Canadians were outraged by the policy, contending that their lumber is cheaper because of productive efficiency rather than unfair trade practices.

Antidumping Duties

The objective of U.S. antidumping policy is to offset two unfair trading practices by foreign nations: (1) export sales in the United States at prices below the average total cost of production; and (2) price discrimination, in which foreign firms sell in the United States at a price less than that charged in the exporter's home market. Both

[4]Brink Lindsey, Mark Groombridge, and Prakash Loungani, *Nailing the Homeowner: The Economic Impact of Trade Protection of the Softwood Lumber Industry*, CATO Institute, July 6, 2000, pp. 5–8.

U.S. Steel Companies Lose an Unfair Trade Case and Still Win

For years, the U.S. steel industry has dominated at the complaint department of the U.S. International Trade Commission (USITC). During the 1980s and 1990s, it accounted for almost half of the nation's unfair-trade complaints, even though steel constituted less than 5 percent of U.S. imports. Year after year, the steel industry swamped the USITC with petitions alleging that foreign steel was being subsidized or dumped into the U.S. market. However, the steel industry was not very successful in its petitions against cheap imports. During the 1990s, for example, it lost more than half its cases.

To the steel industry, however, winning isn't everything. Filing and arguing its cases is part of the competitive strategy of the Big Steel consortium—U.S. Steel, Bethlehem, AK Steel, LTV Corp., Inland Steel Industries Inc., and National Steel. The consortium knows that it can use the trade laws to influence the supply of steel in the marketplace and thus limit foreign competition. Whenever the market gets weak, for whatever reason, the consortium files an unfair trade case.

Here's how the strategy works. The market gets soft, and the consortium files trade cases alleging foreign subsidization or dumping, and then imports from the target companies decrease. The case proceeds for a year or so, allowing domestic steelmakers to increase market share and raise prices. Even if the USITC rules against the case, the market gets time to recover.

Once a case is filed, it takes months to proceed through a 4-stage legal process, and time benefits domestic steelmakers. U.S. steelmakers usually win the first round, in which the industry has to show the USITC a "reasonable indication" of harm from imports. Armed with that finding, the U.S. Department of Commerce can set preliminary duties on the imports. Importers must post a financial bond to cover those duties. Then, the Commerce Department determines the final duties, based on the extent of foreign subsidization or dumping, and the case goes back to the USITC for a final determination of injury. If the U.S. companies lose, the duty is never collected, and the bond is lifted. If they win, however, the importer may be liable for the full amount.

During this process, U.S. importers have the right to continue importing. They might continue to import if they feel strongly that the U.S. steelmakers will lose the case. However, the USITC is a political body, with some of its presidentially appointed commissioners free-traders and others more protectionist. Because U.S. importers realize that they run a big risk if they are wrong, the response is usually to stop importing when a case is filed.

In 1997, Trinidad was hit with a complaint on steel wire rod, which is used to make wire. Wire-rod producers in Trinidad cut their U.S. shipments by 40 percent after the preliminary ruling, even though Trinidad's steelmakers eventually won the case.

Put simply, just by filing unfair trade cases, the U.S. steel industry may win. Whatever they spend on legal fees, they may recoup many times over in extra revenue. That's the great thing about filing: Even if you lose, you win.

Source: "U.S. Steelmakers Win Even When They Lose an Unfair-Trade Case," *The Wall Street Journal*, March 27, 1998, pp. A1, A6.

practices can inflict economic hardship on U.S. import-competing producers; by reducing the price of the foreign export in the U.S. market, they encourage U.S. consumers to buy a smaller quantity of the domestically produced good.

Antidumping investigations are initiated upon a written request by the import-competing industry that includes evidence of (1) dumping; (2) material injury, such as lost sales, profits, or jobs; and (3) a link between the dumped imports and the alleged injury. Antidumping investigations commonly involve requests that foreign exporters and domestic importers fill out detailed questionnaires. Parties that elect not to complete questionnaires can be put at a disadvantage with respect to case decisions; findings are made on the best information available, which may simply be information supplied by the domestic industry in support of the dumping allegation.

If investigators determine that dumping is occurring and is causing material injury to the domestic industry, then the U.S. response is to impose an antidumping duty (tariff) on dumped imports equal to the margin of dumping. The effect of the duty is to offset the extent to which the dumped goods' prices fall below average total cost, or below the price at which they are sold in the exporter's home market.

An antidumping case can be terminated prior to conclusion of the investigation if the exporter of the product to the United States agrees to cease dumping, to stop exporting the product to the United States, to increase the price to eliminate the dumping, or to negotiate some other agreement that will decrease the quantity of imports. Indeed, the mere threat of an antidumping investigation may induce foreign companies to increase their export prices and thus to stop any dumping they were practicing.

The major targets of U.S. antidumping action have included Japan, China, Taiwan, South Korea, Canada, Brazil, Italy, and Germany. Antidumping duties have been applied to a wide range of U.S. imports, such as paper clips, fresh garlic, cellular phones, cement, forklift trucks, stainless steel, wire rod, and cement. Canada and Mexico have been the most frequent initiators of antidumping orders against the United States.

Remedies Against Dumped and Subsidized Imports

Recall that the direct effect of dumping and subsidizing imports is to lower import prices, an effect that provides benefits and costs for the importing country. There are benefits to consumers if imports are finished goods and to consuming industries that use imports as intermediate inputs into their own production (*downstream* industry). Conversely, there are costs to the import-competing industry, its workers, and other domestic industries selling intermediate inputs to production of the import-competing industry (*upstream* industry). Dumping at prices below fair market value and subsidizing exports are considered unfair trade practices under international trade law; they can be neutralized by the imposition of antidumping or countervailing duties on dumped or subsidized imports.

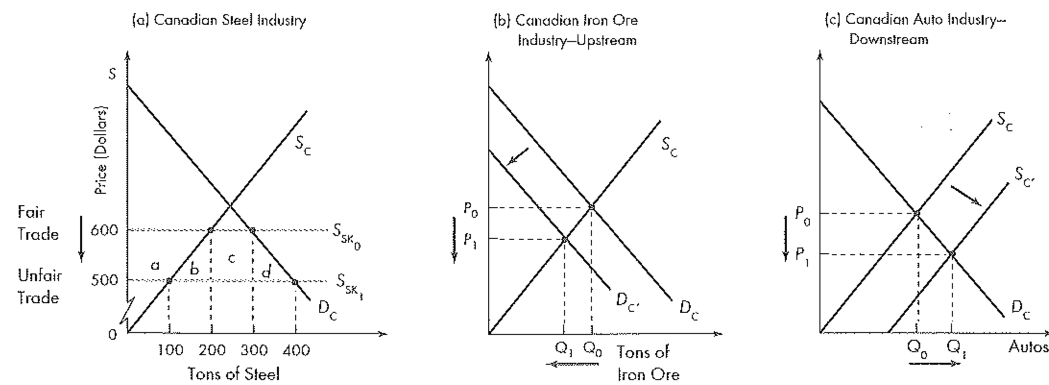
Figure 6.2 on page 196 illustrates the effects of unfair trade practices on Canada, a nation too small to influence the foreign price of steel; for simplicity, the figure assumes that Canada's steel, iron ore, and auto companies operate in competitive markets. In Figure 6.2(a), S_C and D_C represent the Canadian supply and demand for steel. Suppose that South Korea, which has a comparative advantage in steel, supplies steel to Canada at the fair-trade price of $600 per ton. At this price, Canadian production equals 200 tons, Canadian consumption equals 300 tons, and imports equal 100 tons.

Now suppose that as a result of South Korean dumping and subsidizing practices, Canada imports steel at a price of $500 per ton; the margin of dumping and subsidization thus equals $100 ($600 – $500 = $100). The unfair trade practice reduces Canadian production from 200 tons to 100 tons, increases Canadian consumption from 300 tons to 400 tons, and increases Canadian imports from 100 tons to 300 tons. Falling prices and quantities, in turn, lead to falling investment and employment in the Canadian steel industry. Although the producer surplus of Canadian steelmakers decreases by area a due to unfair trade, Canadian buyers find their consumer surplus rising by area $a + b + c + d$. The Canadian steel market as a whole benefits from unfair trade because the gains to its consumers exceed the losses to its producers by area $b + c + d$!

Unfair trade also affects Canada's upstream and downstream industries. If the Canadian iron-ore industry (upstream) supplies mainly to Canadian steelmakers, the demand for Canadian iron ore will decrease as their customers' output falls due to competition from cheaper imported steel. As illustrated in Figure 6.2(b), without unfair trade, the quantity of iron ore demanded by Canadian steelmakers is Q_0 tons at a price of P_0 per ton. Because of unfair trade in the steel industry, the demand for iron ore decreases from D_C to $D_{C'}$; production thus falls as do revenues and employment in this industry. In autos (downstream), production will increase as manufacturing costs decrease because of the availability of cheaper imported steel. As illustrated in Figure 6.2(c),

FIGURE 6.2

Effects of Dumped and Subsidized Imports and Their Remedies



Dumped or subsidized imports provide benefits to consumers if imports are finished goods and to consuming industries that use the imports as intermediate inputs into their own production; they inflict costs on the import-competing domestic industry, its workers, and other domestic industries selling intermediate inputs to the import-competing industry. An antidumping or countervailing duty inflicts costs on consumers if imports are finished goods and on consuming industries that use the imports as intermediate inputs into their own production; benefits are provided to the import-competing domestic industry, its workers, and other domestic industries selling intermediate inputs to the protected industry.

Canadian auto production increases from Q_0 units to Q_1 units, as the supply curve shifts downward from S_C to $S_{C'}$, with accompanying positive effects on revenues and employment; the decrease in production costs also improves the Canadian auto industry's competitiveness in international markets.

Suppose that unfair trade in steel results in the imposition by the Canadian government of an antidumping duty or countervailing duty on imported steel equal to the margin of dumping or subsidization ($100). The effect of an exactly offsetting duty in the steel industry is a regaining of the initial prices and quantities in Canada's steel, iron-ore, and auto industries, as seen in Figure 6.2. The duty raises the import price of unfairly traded steel in Canada, leading to increased steel production by Canadian steelmakers; this results in increased demand, and therefore higher prices, for Canadian iron ore, but also implies increased production costs, higher prices, and lower sales for Canadian automakers. With the import duty, the decrease in consumer surplus more than offsets the increase in producer surplus in the Canadian steel market.

The U.S. International Trade Commission estimated the economic effects of antidumping duties and countervailing duties for U.S. petitioning industries and their upstream suppliers and downstream consumers for the year 1991. The study concluded that these duties typically benefited successful petitioning industries by raising prices and improving output and employment. However, the costs to the rest of the economy were far greater. The study estimated that the U.S. economy would have experienced a net welfare gain of $1.59 billion in the year 1991 had U.S. antidumping duties and countervailing duties *not* been in effect. In other words, these duties imposed costs on consumers, downstream industries, and the economy as a whole at least $1.59 billion greater than the benefits enjoyed by the successful petitioning industries and their employees.[5] Remember, however, that the purpose of antidumping and countervailing duty laws is not to protect consumers, but rather to discourage unfairly traded imports that cause harm to competing domestic industries and workers.

[5]U.S. International Trade Commission, *The Economic Effects of Antidumping and Countervailing Duty Orders and Suspension Agreements* (Washington, DC: International Trade Commission, June 1995), Chapter 10.

Section 301: Unfair Trading Practices

Section 301 of the Trade Act of 1974 gives the United States trade representative (USTR) authority, subject to the approval of the president, and means to respond to unfair trading practices by foreign nations. Included among these unfair practices are foreign-trade restrictions that hinder U.S. exports and foreign subsidies that hinder U.S. exports to third-country markets. The USTR responds when he or she determines that such practices result in "unreasonable" or "discriminatory" burdens on U.S. exporters. The legislation was primarily a congressional response to dissatisfaction with GATT's ineffectiveness in resolving trade disputes. Table 6.8 provides examples of Section 301 cases.

Section 301 investigations are usually initiated on the basis of petitions by adversely affected U.S. companies and labor unions; they also can be initiated by the president. If, after investigation, it is determined that a foreign nation is engaging in unfair trading practices, the USTR is empowered to (1) impose tariffs or other import restrictions on products and services and (2) deny the foreign country the benefits of trade-agreement concessions.

Although the ultimate sanction available to the United States is retaliatory import restrictions, the purpose of Section 301 is to obtain successful resolution of conflicts. In a large majority of cases, Section 301 has been used to convince foreign nations to modify or eliminate what the United States has considered to be unfair trading practices; only in a small minority of cases has the United States retaliated against foreign producers by means of tariffs or quotas. However, foreign nations have often likened Section 301 to a "crowbar" approach for resolving trade disputes, which invites retaliatory trade restrictions. At least two reasons have been advanced for the limitations of this approach to opening foreign markets to U.S. exports: (1) Nationalism unites the people of a foreign nation against U.S. threats of trade restrictions; (2) The foreign nation reorients its economy toward trading partners other than the United States.

Europe Slips in Banana Dispute

An example of a Section 301 case is the banana dispute between the United States and Europe. In

TABLE 6.8

Section 301 Investigations of Unfair Trading Practices: Selected Examples

U.S. Petitioner	Product	Unfair Trading Practice
Heilman Brewing Co.	Beer	Canadian import restrictions
Amtech Co.	Electronics	Norwegian government procurement code
Great Western Sugar Co.	Sugar	European Union subsidies
National Soybean Producers Association	Soybeans	Brazilian subsidies
Association of American Vintners	Wine	South Korean import restrictions

Source: U.S. International Trade Commission, *Operation of the Trade Agreements Program* (Washington, DC: U.S. Government Printing Office, various issues).

1993, the European Union (EU) implemented a single EU-wide regime on banana imports. The regime gave preferential entry to bananas from EU's former colonies, including parts of the Caribbean, Africa, and Asia. They also restricted entry from other countries, including several in Latin America where U.S. companies predominate.

The EU implemented the banana regime as part of its move toward a single, unified market that was inaugurated in 1992. Before the regime, individual countries imported bananas under an assortment of national practices. For example, Spain imported bananas exclusively from the Canary Islands; other EU countries imposed a 20 percent tariff on banana imports; and Germany allowed tariff-free entry. The banana regime was also justified on the grounds that European nations were obligated by treaty to protect their former colonies' banana industries from foreign competition.

The banana regime entered into force in 1993 and resulted in a maze of import quotas, licenses, and preferential tariffs that favored bananas from former European colonies. Under the banana regime, a modest tariff was applied to EU banana imports from its former colonies while substantial tariff and nontariff restrictions were applied to imports from other suppliers in Latin America. The root of the problem of the banana regime was that producers in the former Caribbean colonies of the EU were too small to compete on equal terms with the vast plantations of Latin America. Moreover, the entire economies of some Caribbean states depended on banana trade. In seeking to safeguard these fragile economies, the banana regime was on moral high ground, according to the EU.

Because the amount of bananas Europe allowed in was far less than the amount consumers wanted to purchase, the price of bananas in Europe was inflated to about twice the U.S. level. In 1999, a pound of bananas sold for about 50 cents in the United States but went for about a dollar in Europe. Therefore, bananas were lucrative for holders of the licenses that allowed selling under Europe's higher prices.

According to the United States, the EU's banana regime resulted in unfair treatment for American companies. U.S. trade officials maintained that Chiquita Brands International and Dole Food Co., which handle and distribute bananas of Latin American nations, lost half of their business because of EU's banana regime. Put simply, the United States contended that the EU must adopt a single trade policy for bananas that applies the same set of criteria for all suppliers of the world.

As a result, the United States, Mexico, Ecuador, Honduras, and Guatemala brought this issue to the World Trade Organization and successfully argued their case. The WTO ruled that the EU's banana regime discriminated against U.S. and Latin American distribution companies and banana exports from Latin American countries. Also, the WTO found that the banana regime caused $191 million in lost U.S. exports on an annual basis. This decision resulted in the United States' applying 100 percent tariffs on a list of selected European products equivalent in value to the loss in U.S. exports caused by the EU's banana regime. After a prolonged struggle, the banana dispute was resolved.

Protection of Intellectual Property Rights

In the 1800s, Charles Dickens criticized U.S. publishers for printing unauthorized versions of his works without paying him one penny. But U.S. copyright protection did not apply to foreign (British) authors, so Dickens's popular fiction could be pirated without punishment. In recent years, it is U.S. companies whose profit expectations have been frustrated. Publishers in South Korea run off copies of bootlegged U.S. textbooks without providing royalty payments. U.S. research laboratories find themselves in legal tangles with Japanese electronics manufacturers concerning patent infringement.

Certain industries and products are well-known targets of pirates, counterfeiters, and other infringers of **intellectual property rights (IPRs)**. Counterfeiting has been widespread in industries such as automobile parts, jewelry, sporting goods, and watches. Piracy of audio and videotapes, computer software, and printed materials has been widespread throughout the world. Industries in which product life cycles are shorter than the time necessary to obtain and enforce a patent are also subject to thievery; examples are photographic equipment and telecommunications. Table 6.9 provides examples of IPR violations in China.

Intellectual property is an invention, idea, product, or process that has been registered with the government and that awards the inventor (or author) exclusive rights to use the invention for a given time period. Governments use several techniques to protect intellectual property. *Copyrights* are awarded to protect works of original authorship (for example, music compositions, textbooks); most nations issue copyright protection for the remainder of the author's life plus 50 years. *Trademarks* are awarded to manufacturers and provide exclusive rights to a distinguishing name or symbol (for example, "Coca-Cola"). *Patents* secure to an inventor for a term, usually 15 years or more, the exclusive right to make, use, or sell the invention.

In spite of efforts to protect IPRs, competing firms sometimes infringe on the rights of others by making a cheaper imitation of the original product. In 1986, the courts ruled that Kodak had infringed on Polaroid's patents for instant cameras and awarded Polaroid more than $900 million in damages. Another infringement would occur if a company manufactured an instant camera similar to Polaroid's and labeled and marketed it as a Polaroid camera; this is an example of a counterfeit product.

The lack of effective international procedures for protecting IPRs becomes a problem when the expense of copying an innovation (including the cost of penalties if caught) is less than the cost of purchasing or leasing the technology. Suppose that Warner-Lambert Drug Co. develops a product that cures the common cold, called "Cold-Free," and that the firm plans to export it to Taiwan. If

TABLE 6.9

Intellectual Property Right Violations in China

Affected Firm	Violation in China
Epson	Copying machines and ink cartridges are counterfeited.
Microsoft	Counterfeiting of Windows and Windows NT, with packaging virtually indistinguishable from the real product and sold in authorized outlets.
Yamaha	Five of every six JYM150-A motorcycles and ZY125 scooters bearing Yamaha's name are fake in China. Some state-owned factories manufacture copies 4 months following the introduction of a new model.
Gillette	Up to one-fourth of its Parker pens, Duracell batteries, and Gillette razors sold in China are pirated.
Anheuser-Busch	Some 640 million bottles of fake Budweiser beer are sold annually in China.
Nike	Replicas of its T-shirts and sport shoes are widely sold throughout China.
Bestfoods	Bogus versions of Knorr bouillon and Skippy Peanut Butter lead to tens of millions of dollars in forgone sales each year.
Procter & Gamble	About 15 percent of the detergents and soaps bearing its Tide, Vidal Sassoon, Safeguard, and Head and Shoulders brands are bogus, costing $150 million annually in forgone sales.
DaimlerChrysler	Fake windshields, oil filters, brake disks, and shock absorbers for Mercedes cars are manufactured and sold in China.

Source: "Will China Follow WTO Rules?" *Business Week*, June 5, 2000, pp. 42–48.

Cold-Free is not protected by a patent in Taiwan, either because Taiwan does not recognize IPRs or Warner-Lambert has not filed for protection, cheaper copies of Cold-Free could legally be developed and marketed. Also, if Warner-Lambert's trademark is not protected, counterfeit cold remedies that are indistinguishable from Cold-Free could be legally sold in Taiwan. These copies would result in reduced sales and profits for Warner-Lambert. Moreover, if "Cold-Free" is a trademark that consumers strongly associate with Warner-Lambert, a counterfeit product of noticeably inferior quality could adversely affect Warner-Lambert's reputation and thus detract from the sales of both Cold-Free and other Warner-Lambert products.

Although most nations have regulations protecting IPRs, there have been many problems associated with trade in products affected by IPRs. One problem is differing IPR regulations across nations. For example, the United States uses a first-to-invent rule when determining patent eligibility, whereas most other nations employ a first-to-file rule. Another problem is lack of enforcement of international IPR agreements. These problems stem largely from differing incentives to protect intellectual property, especially between nations that are innovating, technological exporters and those that are noninnovating, technological importers. Developing nations, lacking in research and development and patent innovation, sometimes pirate foreign technology and use it to produce goods at costs lower than could be achieved in the innovating country. Poorer developing nations often find it difficult to pay the higher prices that would prevail if innovated products (such as medical supplies) were provided patent protection. Thus, they have little incentive to provide patent protection to the products they need.

As long as the cost of pirating technology, including the probability and costs of being caught, is less than the profits captured by the firm doing the pirating, technology pirating tends to continue. Pirating, however, reduces the rate of profitability earned by firms in the innovating nations, which in turn deters them from investing in research and development. Over time, this leads to fewer products and welfare losses for the people of both nations.

The United States has faced many obstacles in trying to protect its intellectual property. Dozens of nations lack adequate legal structures to protect the patents of foreign firms. Others have consciously excluded certain products (such as chemicals) from protection to support their industries. Even in advanced countries, where legal safeguards exist, the fast pace of technological innovation often outruns the protection provided by the legal system.

Trade Adjustment Assistance

According to the free-trade argument, in a dynamic economy in which trade proceeds according to the comparative-advantage principle, resources flow from uses with lower productivity to those with higher productivity. The result is a more efficient allocation of the world's resources over time. In the short run, however, painful adjustments may occur as less efficient companies go out of business and workers lose their jobs. These displacement costs can be quite severe to affected parties.

Many industrial nations have enacted programs for giving **trade adjustment assistance** to those who incur short-run hardships because of displaced domestic production. The underlying rationale comes from the notion that if society in general enjoys welfare gains from the increased efficiency stemming from trade liberalization, some sort of compensation should be provided for those who are temporarily injured by import competition. As long as free trade generates significant gains to the nation, the winners can compensate the losers and still enjoy some of the gains from free trade.

The U.S. trade adjustment assistant program assists domestic workers displaced by foreign trade and increased imports. The program provides benefits such as extended income support beyond normal unemployment insurance benefits, services such as job training, and allowances for job search and relocation. To businesses and communities, the program offers technical aid in moving into new lines of production, market research assistance, and low-interest loans. The

major beneficiaries of benefits of the program have been workers and firms in the apparel and textile industry, followed by the oil and gas, electronics, and metal and machinery industries.

Although the trade adjustment assistance program is considered a significant innovation in trade policy, critics maintain that it has suffered from an unstable source of funding. This has resulted in delayed approval of assistance requests. Also, trade adjustment assistance cannot resolve all the workers' challenges, especially those faced by lower-skilled workers. For example, many workers applying for training assistance do not have a high-school education, have been out of the educational system for 20 years or more, or have limited English skills. Therefore, training programs are unlikely to complete the match between these workers and the kinds of jobs available in a high-skilled economy. Critics also maintain that trade adjustment assistance has sometimes been used to financially sustain a losing concern rather than help it become more competitive by switching to superior technologies and developing new products.

Will Wage Insurance Make Free Trade More Acceptable to Workers?

Although the trade adjustment assistant program assists domestic workers displaced by foreign trade and increased imports, many workers feel threatened by international trade. Worker fears about globalization and union pressure on government officials hinder efforts to liberalize trade. That's why some economists advocate something called **wage insurance**.

The concept of wage insurance is simple. Trade, although a benefit to the economy overall, harms workers who produce things or provide services susceptible to import competition. Trade-related job losses are concentrated in manufacturing industries where import competition is strong, including automobile, steel, textile, apparel, computing, and electronics industries. Compensating the losers makes more sense than trying to protect them by denying the benefits of trade to all.

When trade or technology puts someone out of work, a worker often takes a new job that pays less. On average, a worker in a manufacturing industry hit by import competition who loses one job and gets another earns 13 percent less, according to the estimates of Professor Lori Kletzer of the University of California at Santa Cruz.[6] About a third earn as much or more, and they don't need help. But about a quarter take jobs that pay 30 percent less, or worse. Because the rest of us benefit—by getting cheaper goods, more efficient services, and a more productive economy—we can afford to make up some of the difference.

Rather than protecting workers by restricting imports, which results in losses for the overall economy, why not provide wage insurance? A proposal developed by Professor Kletzer and Robert Litan of the Brookings Institution would give eligible workers half the difference between their old wage and their new one, up to $10,000 a year, for two years following a layoff. Maintaining that what matters is the type of job lost and the type of job regained, not why the job was lost, economists Kletzer and Litan would offer wage insurance to any displaced worker who had more than two years on the job. The money would begin flowing only after a worker took a new job. In contrast, the trade adjustment assistance program basically offers extra unemployment benefits to those out of work or in training.

But wage insurance is expensive. It would have cost almost $4 billion in 1997, when the jobless rate was 4.9 percent. A cheaper alternative would cover only workers over age 50 who earn less than $50,000 a year. The rationale: Older workers are the least likely to be successfully retrained for new jobs. Another possibility is to limit wage insurance to only those workers in industries most vulnerable to imports, such as steel and textiles.

Proponents of wage insurance contend that it encourages workers to find a new job quickly, as contrasted with unemployment insurance, which creates an incentive to delay looking for work.

[6]Lori Kletzer and Robert Litan, *A Prescription to Relieve Worker Anxiety*, International Economics Policy Briefs, Institute for International Economics, Washington, DC, February 2001. See also Trade Deficit Review Commission, *The U.S. Trade Deficit*, Washington, DC, 2000.

They also contend that wage insurance yields benefits for both younger workers and older workers. For younger workers, it makes it easier for them to acquire training and the new skills that will make them more employable over the course of their working lives. Wage insurance can enable older workers to reach retirement without having to sharply lower their standard of living or dip into retirement savings after a job loss. Simply put, proponents of wage insurance contend that, by reducing worker anxiety, wage insurance will reduce worker opposition to trade liberalization and globalization more broadly.

To win authority for fast-track power to negotiate future trade agreements with Latin America, in 2002 President George W. Bush bowed to congressional pressure and initiated a 5-year pilot program of wage insurance for trade-displaced workers. To receive income maintenance benefits, eligible workers must be over 50 years old, earn less than $50,000 a year, and be employed full-time at the firm from which they were separated. Workers can receive wage insurance for up to two years; total wage insurance is capped at $10,000 over this period. It remains to be seen whether this new income maintenance benefit will reduce world opposition to liberal trade agreements.

Industrial Policies of the United States

Besides enacting regulations intended to produce a fair trading environment for all parties engaging in international business, the United States has implemented *industrial policies* to enhance the competitiveness of domestic producers. As discussed in Chapter 3, such policies involve government channeling of resources into specific, targeted industries that it views as important for future economic growth. Among the methods used to channel resources are tax incentives, loan guarantees, and low-interest loans.

Today, almost all nations implement some kinds of industrial policies. Although industrial policies are generally associated with formal, explicit efforts of governments (as in Japan and France) to enhance the development of specific industries (such as steel or electronics), other traditionally free-enterprise nations (such as Germany and United States) also have less formal, implicit industrial policies.

What has been the U.S. approach to industrial policy? The U.S. government has attempted to provide a favorable climate for business, given the social, environmental, and safety constraints imposed by modern society. Rather than formulating a coordinated industrial policy to affect particular industries, the U.S. government has generally emphasized macroeconomic policies (such as fiscal and monetary policies) aimed at such objectives as economic stability, growth, and the broad allocation of the gross domestic product.

There is no doubt, however, that the U.S. government uses a number of measures to shape the structure of the economy that would be called "industrial policies" in other nations. The most notable of these measures is agricultural policy. In agriculture, a farmer who initiates a major innovation can be imitated by many other farmers, who capture the benefits without sharing the risks. To rectify this problem, the U.S. government is involved in research in agricultural techniques and in the dissemination of this information to farmers through its agricultural extension service, as well as the fostering of large-scale projects such as irrigation facilities. The U.S. government has also provided support for the shipping, shipbuilding, and energy industries, primarily on the grounds of national security.

U.S. government defense spending is often cited as an industrial policy. As the world's largest market for military goods, it is no wonder that the United States dominates their production. U.S. spending on military goods supports domestic manufacturers and permits them to achieve large economies of scale. U.S. defense spending has provided spillover benefits to civilian industries, especially commercial aircraft, computers, and electronics. Military research and development provides U.S. companies with expertise that they can apply elsewhere.

In manufacturing, the U.S. government has provided assistance to financially troubled industries. In automobiles, for example, the government provided a $1.5 billion loan guarantee in 1979 and 1980 to bail out Chrysler Corporation. It also negotiated voluntary export restrictions with the Japanese on autos in the 1980s to ease the burden of import competition. The steel and textile industries have also been major recipients of trade protection.

Export Promotion and Financing

Another element of U.S. industrial policy is export promotion. The U.S. government furnishes exporters with marketing information and technical assistance, in addition to trade missions that help expose new exporters to foreign customers. The government also promotes exports by sponsoring exhibits of U.S. goods at international trade fairs and establishing overseas trade centers that enable U.S. businesses to exhibit and sell machinery and equipment.

The United States also encourages exports by allowing its manufacturers to form export trade associations to facilitate the marketing of U.S. products abroad. Moreover, U.S. manufacturers and financial institutions are permitted to combine their resources into joint export trading companies to export their own products or to act as an export service for other producers. Sears, Rockwell, General Electric, Control Data, and General Motors are examples of firms that have formed export trading companies.

Moreover, the United States provides export subsidies to its producers in the form of low-cost credit. The maintenance of competitive credit terms for U.S. exporters is a function of the U.S. Export-Import Bank and the Commodity Credit Corporation. The **Export-Import Bank** (*Eximbank*) is an independent agency of the U.S. government established to encourage exports of U.S. businesses. The Eximbank provides:

- Guarantees of working capital loans for U.S. exporters to cover pre-export costs
- Export credit insurance that protects U.S. exporters or their lenders against commercial or political risks of nonpayment by foreign buyers
- Guarantees of commercial loans to creditworthy foreign buyers of U.S. goods and services
- Direct loans to these foreign buyers when private financing is unavailable
- Special programs to promote U.S. exports of environmentally beneficial goods and services
- Asset-based financing for large commercial aircraft and other appropriate exports
- Project financing to support U.S. exports to international infrastructure projects

In offering competitive interest rates in financing exports, Eximbank has sometimes been criticized because part of its funds are borrowed from the U.S. Treasury. Critics question whether U.S. tax revenues should subsidize exports to foreign countries at interest rates lower than could be obtained from private institutions. To this extent, it is true that tax funds distort trade and redistribute income toward exporters.

Table 6.10 on page 204 provides examples of direct loans and loan guarantees made by Eximbank. Major beneficiaries of Eximbank credit have included aircraft, telecommunications, power-generating equipment, and energy developments. Firms such as Boeing, McDonnell Douglas, and Westinghouse have enjoyed substantial benefits from these programs.

Officially supported lending for U.S. exports is also provided by the **Commodity Credit Corporation** (CCC), a government-owned corporation administered by the U.S. Department of Agriculture. The CCC makes available export credit financing for eligible agricultural commodities. The interest rates charged by the CCC are usually slightly below prevailing rates charged by private financial institutions.

Industrial Policies of Japan

Although the United States has generally not used explicit industrial policies to support specific industries, such policies have been used elsewhere. Consider the case of Japan.

Japan has become a technological leader in the post–World War II era. During the 1950s, Japan's exports consisted primarily of textiles and other low-tech products. By the 1960s and 1970s, its exports emphasized capital-intensive products such as autos, steel, and ships. By the 1980s and 1990s, Japan had become a major world competitor in high-tech goods, such as optical fibers and semiconductors.

TABLE 6.10

Examples of Loans Provided by Eximbank of the United States (in Millions of Dollars)

Foreign Borrower/U.S. Exporter	Purpose	Loan or Loan Guarantee
Banco Santander Noroeste of Brazil/General Electric	Locomotives	87.7
Government of Bulgaria/Westinghouse	Instruments	81.8
Air China/Boeing	Aircraft	69.8
Government of Croatia/Bechtel International	Highway construction	228.7
Government of Ghana/Wanan International	Electrical equipment	21.1
Government of Indonesia/IBM	Computer hardware	20.2
Japan Airlines/Boeing	Aircraft	212.3
Fevisa Industrial of Mexico/Pennsylvania Crusher Inc.	Glass manufacturing equipment	17.7
Delta Communications of Mexico/Motorola	Communications equipment	11.5

Source: Export-Import Bank of the United States, *Annual Report*, 2003; http://www.exim.gov.

Advocates of industrial policy assert that government assistance for emerging industries has helped transform the Japanese economy from low-tech to heavy industry to high-tech. They claim that protection from imports, R&D subsidies, and the like fostered the development of Japanese industry. Clearly, the Japanese government provided assistance to shipbuilding and steel during the 1950s, to autos and machine tools during the 1960s, and to high-tech industries beginning in the early 1970s. Japanese industrial policy has had two distinct phases: From the 1950s to the early 1970s, the Japanese government assumed strong control over the nation's resources and the direction of the economy's growth. Since the mid-1970s, the government's industrial policy has been more modest and subtle.

To implement its industrial policies in manufacturing, the Japanese government has created the **Ministry of Economy, Trade and Industry (METI)**. METI attempts to facilitate the shifting of resources into high-tech industries by targeting specific industries for support. With the assistance of consultants from leading corporations, trade unions, banks, and universities, METI forms a consensus on the best policies to pursue. The next step of industrial policy is to increase domestic R&D, investment, and production. Targeted industries have received support in the form of trade protection, allocations of foreign exchange, R&D subsidies, loans at below-market interest rates, loans that must be repaid only if a firm becomes profitable, favorable tax treatment, and joint government–industry research projects intended to develop promising technologies.

Without government support, it is improbable that Japanese semiconductor, telecommunications equipment, fiber optics, and machine-tool industries would be as competitive as they are. Not all Japanese industrial policies have been successful, however, as seen in the cases of computers, aluminum, and petrochemicals. Even industries in which Japan is competitive in world markets, such as shipbuilding and steel, have witnessed prolonged periods of excess capacity. Moreover, some of Japan's biggest success stories (TVs, stereos, and VCRs) were not the industries most heavily targeted by the Japanese government.

The extent to which industrial policy has contributed to Japan's economic growth since World War II is unclear. Japan has benefited from a high domestic savings rate, an educated and motivated labor force, good labor–management relations, a shift of labor from low-productivity sectors (such as agriculture) to high-productivity manufacturing, entrepreneurs willing to assume risks, and the like. These factors have enhanced Japan's transformation from a low-tech nation to a high-tech nation. It is debatable how rapidly this transformation would have occurred in the absence of an industrial policy. Although Japan has the most visible industrial policy of the industrial nations, the importance of that policy to Japan's success should not be exaggerated.

Has Industrial Policy Helped Japan?

It is commonly argued that the Japanese government has provided assistance to high-growth or high-productivity growth industries to improve their international competitiveness. Moreover, the alleged success of Japanese targeting is often used as the justification for industrial policy in the United States. What is the evidence concerning Japanese industrial policy?

Contrary to the popular wisdom, recent research has found that a disproportionate amount of Japanese targeting has occurred in *low-growth* industries rather than high-growth industries. Moreover, evidence does not support the contention that industrial policy measures have fostered Japanese productivity.

Table 6.11 shows the relative levels of economic growth and government assistance granted to 13 Japanese industries from 1955 to 1990. Column 1 ranks these industries according to their growth rates. Electrical machinery, for example, was the fastest-growing industry, and textiles realized the slowest growth. Columns 2–5 show the usage of various industrial-policy tools. The industry that received the most government assistance in a category ranked first, and the industry that received the least ranked thirteenth. Mining, for example, received the most low-interest-rate loans, net subsidies, and tax breaks, but received the least amount of trade protection (tariffs and quotas).

The figures in the table do not provide strong support for Japan's industrial policy. In fact, it appears that the Japanese government targeted many laggard industries for assistance. For each of

TABLE 6.11

Relative Levels of Economic Growth Rates and Targeting of Japanese Industries, 1955–1990

Industry	Growth Rate	Low-Interest-Rate Loans	Net Subsidies*	Trade Protection	Tax Breaks
Electrical machinery	1	8	9	8	8
General machinery	2	12	4	11	8
Transportation equipment	3	7	11	4	8
Fabricated metal	4	10	6	12	7
Petroleum and coal	5	2	13	7	3
Precision instruments	6	13	10	6	8
Ceramics, stone, and glass	7	5	8	9	3
Pulp and paper	8	6	5	10	13
Chemicals	9	3	7	5	3
Basic metals	10	4	2	3	6
Processed food	11	9	12	1	12
Mining	12	1	1	13	1
Textiles	13	11	3	2	2

*Subsidies less indirect taxes.

Source: Richard Beason and David Weinstein, "Growth, Economies of Scale, and Targeting in Japan: 1955–1990," *Review of Economics and Statistics*, May 1996, p. 288.

the industrial-policy tools, the correlation between an industry's growth and the amount of government aid it received was negative. Therefore, the Japanese government provided more backing to losers than to winners.

Strategic Trade Policy

Beginning in the 1980s, a new argument for industrial policy gained prominence. The theory behind **strategic trade policy** is that government can assist domestic companies in capturing economic profits from foreign competitors.[7] Such assistance entails government support for certain "strategic" industries (such as high-technology) that are important to future domestic economic growth and that provide widespread benefits (externalities) to society.

The essential notion underlying strategic trade policy is *imperfect competition*. Many industries participating in trade, the argument goes, are dominated by a small number of large companies—large enough for each company to significantly influence market price. Such market power gives these companies the potential to attain long-run economic profits. According to the strategic-trade policy argument, government policy can alter the terms of competition to favor domestic companies over foreign companies and shift economic profits in imperfectly competitive markets from foreign to domestic companies.

A standard example is the aircraft industry. With high fixed costs of introducing a new aircraft and a significant learning curve in production that leads to decreasing unit production costs, this industry can support only a small number of manufacturers. It is also an industry that typically is closely associated with national prestige.

Assume that two competing manufacturers, Boeing (representing the United States) and Airbus (a consortium owned jointly by four European governments), are considering whether to construct a new aircraft. If *either* firm manufactures the aircraft by itself, it will attain *profits* of $100 million. If *both* firms manufacture the aircraft, they will each suffer a *loss* of $5 million. Now assume the European governments decide to subsidize Airbus production in the amount of $10 million. Even if both companies manufacture the new aircraft, Airbus is now certain of making a $5 million profit. But the point is this: Boeing will *cancel* its new aircraft project. The European subsidy thus ensures not only that Airbus will manufacture the new aircraft but also that Boeing will suffer a loss if it joins in. The result is that Airbus achieves a profit of $110 million and can easily repay its subsidy to the European governments. If we assume that the two manufacturers produce entirely for export, the subsidy of $10 million results in a transfer of $100 million in profits from the United States to Europe. Table 6.12 summarizes these results. The welfare effects of strategic trade policy are discussed in "Exploring Further 6.1" at the end of this chapter.

Consider another example. Suppose the electronics industry has just two companies, one in Japan and one in the United States. In this industry, learning-by-doing reduces unit production costs indefinitely with the expansion of output. Suppose the Japanese government considers its electronics industry to be "strategic" and imposes trade barriers that close its domestic market to the U.S. competitor; assume the United States keeps its electronics market open. The Japanese manufacturer can expand its output and thus reduce its unit cost. Over a period of time, this competitive advantage permits it to drive the U.S. manufacturer out of business. The profits that the U.S. company had extracted from U.S. buyers are transferred to the Japanese.

Advocates of strategic trade policy recognize that the classical argument for free trade considered externalities at length. The difference, they maintain, is that the classical theory was based on *perfect competition* and thus could not appreciate the most likely source of the externality, whereas modern theories based on imperfect competition can. The externality in question is the ability of companies to capture the fruits of expensive innovation. Classical theory based on perfect competition neglected this factor because large fixed costs are involved in innovation and research and development, and such costs ensure that the number of competitors in an industry will be small.

The strategic-trade policy concept has been criticized on several grounds. From a political perspective, there is danger that special-interest groups will dictate who will be the recipients of government support. Also, if a worldwide cycle of activist trade-policy retaliation and counter retaliation were to occur, all nations would be worse off. Moreover, governments lack the information to intervene intelligently in the marketplace. In our Boeing–Airbus example, the activist government must know how much profit would be achieved as a result of proceeding with the new aircraft, both with and without foreign competition. Minor miscalculations could result in an intervention that makes the home economy worse off, instead of better off. Finally, the mere existence of imperfect competition does not guarantee that there is a strategic opportunity to be pursued, even by an omniscient government. There must also be a continuing source of economic profits, with no potential competition to erase them. But continuing economic profits are probably less common than governments think.

The case of the European subsidization of aircraft during the 1970s provides an example of the benefits and costs encountered when applying the strategic-trade policy concept. During the 1970s, Airbus received a government subsidy of $1.5 billion. The subsidy was intended to help Airbus offset the 20 percent cost disadvantage it faced on the production of its A300 aircraft compared to that of its main competitor, the Boeing 767. Did the subsidy help the European nations involved in the Airbus consortium? The evidence suggests no. Airbus itself lost money on its A300 plane and continued to face cost disadvantages relative to Boeing. There were benefits to European airlines and passengers because the subsidy kept Airbus prices lower; however, the amount of Airbus's losses roughly matched this gain. Because the costs of the subsidy had to be financed by higher taxes, Europe was probably worse off with the subsidy. The United States also lost, because Boeing's profits were smaller and were not fully offset by lower prices accruing to U.S. aircraft users; but the European subsidy did not drive Boeing out of the market. The only obvious gainers were other nations, whose airlines and passengers enjoyed benefits from lower Airbus prices at no cost to themselves.[8]

TABLE 6.12

Effects of a European Subsidy Granted to Airbus

Hypothetical Payoff Matrix: Millions of Dollars

Without Subsidy

Boeing	Airbus: Produces	Airbus: Does Not Produce
Produces	Airbus −5; Boeing −5	Airbus 0; Boeing 100
Does Not Produce	Airbus 100; Boeing 0	Airbus 0; Boeing 0

With European Subsidy

Boeing	Airbus: Produces	Airbus: Does Not Produce
Produces	Airbus 5; Boeing −5	Airbus 0; Boeing 100
Does Not Produce	Airbus 110; Boeing 0	Airbus 0; Boeing 0

Source: Paul Krugman, "Is Free Trade Passe?" *Economic Perspectives*, Fall 1987, pp. 131–144.

[7]The argument for strategic trade policy was first presented in J. Brander and B. Spencer, "International R&D Rivalry and Industrial Strategy," *Review of Economic Studies* 50 (1983), pp. 707–722. See also P. Krugman, ed., *Strategic Trade Policy and the New International Economics* (Cambridge, MA: MIT Press, 1986).

[8]R. Baldwin and P. Krugman, "Industrial Policy and International Competition in Wide-Bodied Jet Aircraft," in R. Baldwin, ed., *Trade Policy Issues and Empirical Analysis* (Chicago: University of Chicago Press, 1988), pp. 45–77.

Economic Sanctions

Instead of promoting trade, governments may restrict trade for domestic and foreign-policy objectives. **Economic sanctions** are government-mandated limitations placed on customary trade or financial relations among nations. They have been used to protect the domestic economy, reduce nuclear proliferation, set compensation for property expropriated by foreign governments, combat international terrorism, preserve national security, and protect human rights. The nation initiating the economic sanctions, the *imposing nation*, hopes to impair the economic capabilities of the *target nation* to such an extent that the target nation will succumb to its objectives.

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The imposing nation can levy several types of economic sanctions. *Trade sanctions* involve boycotts on imposing-nation exports. The United States has used its role as a major producer of grain, military hardware, and high-technology goods as a lever to win overseas compliance with its foreign-policy objectives. Trade sanctions may also include quotas on imposing-nation imports from the target nation. *Financial sanctions* can entail limitations on official lending or aid. During the late 1970s, the U.S. policy of freezing the financial assets of Iran was seen as a factor in the freeing of the U.S. hostages. Table 6.13 provides examples of economic sanctions levied by the United States for foreign-policy objectives.

Figure 6.3 can be used to illustrate the goal of economic sanctions levied against a target country, say, Iraq. The figure shows the hypothetical production possibilities curve of Iraq for machines and oil. Prior to the imposition of sanctions, suppose that Iraq is able to operate at maximum efficiency as shown by point *A* along production possibilities curve PPC_0. Under the sanctions program, a refusal of the imposing nations to purchase Iraqi oil leads to idle wells, refineries, and workers in Iraq. Unused production capacity thus forces Iraq to move inside PPC_0. If imposing nations also impose export sanctions on productive inputs, and thus curtail equipment sales to Iraq, the output potential of Iraq would decrease. This is shown by an inward shift of Iraq's production possibilities curve to PPC_1. Economic inefficiencies and reduced production possibilities, caused by economic sanctions, are thus intended to inflict hardship on the people and government of Iraq. Over time, sanctions may cause a reduced growth rate for Iraq. Even if short-run welfare losses from sanctions are not large, they can appear in inefficiencies in the usage of labor and capital, deteriorating domestic expectations, and reductions in savings, investment, and employment. Thus, sanctions do reduce the Iraq's output potential.

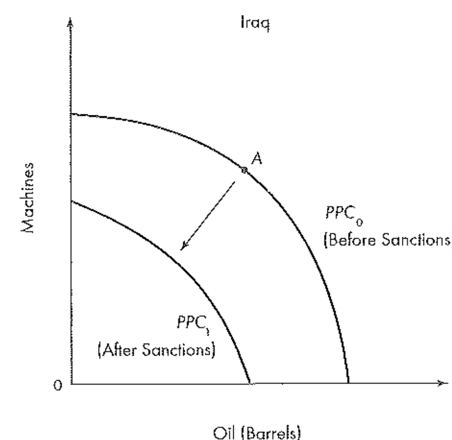
TABLE 6.13

Selected Economic Sanctions of the United States

Year	Target Country	Objectives
1998	Pakistan	Discourage nuclear proliferation
1998	India	Discourage nuclear proliferation
1993	Haiti	Improve human rights
1992	Serbia	Terminate civil war in Bosnia–Herzegovina
1990	Iraq	Terminate Iraq's military takeover of Kuwait
1985	South Africa	Improve human rights
1981	Soviet Union	Terminate martial law in Poland
1981	Nicaragua	Cease support for El Salvador rebels
1979	Iran	Release U.S. hostages; settle expropriation claims
1961	Cuba	Improve national security

FIGURE 6.3

Effects of Economic Sanctions



Economic sanctions placed against a target country have the effect of forcing it to operate inside its production possibilities curve. Economic sanctions can also result in an inward shift in the target nation's production possibilities curve.

Factors Influencing the Success of Sanctions

The historical record of economic sanctions provides some insight into the factors that govern their effectiveness. Among the most important determinants of the success of economic sanctions are (1) the number of nations imposing sanctions, (2) the degree to which the target nation has economic and political ties to the imposing nation(s), (3) the extent of political opposition in the target nation, and (4) cultural factors in the target nation.

Although unilateral sanctions may have some success in achieving intended results, it helps if sanctions are imposed by a large number of nations. Multilateral sanctions generally result in greater economic pressure on the target nation than unilateral measures. Multilateral measures also increase the probability of success by demonstrating that more than one nation disagrees with the target nation's behavior, thus enhancing the political legitimacy of the effort. International ostracism can have a significant psychological impact on the people of a target nation. Failure to get strong multilateral cooperation, however, can result in sanctions' becoming counterproductive; disputes among the imposing nations over sanctions can be interpreted by the target nation as a sign of disarray and weakness.

Sanctions tend to be more effective if the target nation had substantial economic and political relationships with the imposing nation(s) before the sanctions were imposed. Then the potential costs to the target nation are very high if it does not comply with the wishes of the imposing nation(s). For example, the Western sanctions against South Africa during the 1980s helped convince the government to reform its apartheid system, in part because South Africa conducted four-fifths of its trade with six Western industrial nations and obtained almost all of its capital from the West.

Strength of political opposition within the target nation also affects the success of sanctions. When the target government faces substantial domestic opposition, economic sanctions can lead powerful business interests (such as companies with international ties) to pressure the government to conform to the imposing nation's wishes. Selected, moderate sanctions, with the threat of more severe measures to follow, inflict some economic hardship on domestic residents, while providing an incentive for them to lobby for compliance to forestall more severe sanctions; thus, the political advantage of levying graduated sanctions may outweigh the disadvantage of giving the target nation time to adjust its economy. If harsh, comprehensive sanctions are imposed immediately, domestic business interests have little incentive to pressure the target government to modify its policy; the economic damage has already been done.

When the people of the target nation have strong cultural ties to the imposing nation(s), they are likely to identify with the imposing nation's objectives, thus enhancing the effectiveness of sanctions. For example, South African whites have generally thought of themselves as part of the Western community. When economic sanctions were imposed on South Africa in the 1980s

because of its apartheid practices, many liberal whites felt isolated and morally ostracized by the Western world; this encouraged them to lobby the South African government for political reforms.

Iraqi Sanctions

The Iraqi sanctions provide an example of the difficulties of pressuring a country to modify its behavior. In August 1990, the Iraqi military crossed into Kuwait and within six hours occupied the whole country. Iraqi President Saddam Hussein maintained that his forces had been invited into Kuwait by a revolutionary government that had overthrown the Kuwaiti emir and his government.

In response to Iraq's aggression, a United Nations resolution resulted in economic sanctions against Iraq. Sanctions were applied by virtually the entire international community, with only a few hard-line Iraqi allies refusing to cooperate. Under the sanctions program, imposing nations placed embargoes on their exports to Iraq, froze Iraqi bank accounts, terminated purchases of Iraqi oil, and suspended credit granted to Iraq. To enforce the sanctions, the United States supplied naval forces to prevent ships from leaving or arriving in Iraq or occupied Kuwait. The sanctions were intended to convince Iraq that its aggression was costly and that its welfare would be enhanced if it withdrew from Kuwait. If Saddam Hussein could not be convinced to leave Kuwait, it was hoped the sanctions would pressure the Iraqi people or military into removing him from office.

The sanctions were intended to have both short- and long-term consequences for Iraq. By blocking Iraqi imports of foodstuffs, the sanctions forced Iraq to adopt food rationing within several weeks of their initiation; although Iraq is self-sufficient in fruits and vegetables, shortages of flour, rice, sugar, and milk developed immediately following the imposition of sanctions. Over the longer term, the sanctions were intended to force Iraq to deindustrialize, interfering with its goal of becoming a regional economic power.

Despite the widespread application of sanctions against Iraq, it was widely felt that they would not bite hard enough to quickly destabilize the regime of Saddam Hussein. Over the short term, Iraq's ability to survive under the sanctions depended on how it rationed its existing stocks. One advantage Iraq had was a highly disciplined and authoritarian society and a people inured to shortages during its previous 8-year war with Iran; to enforce its rationing program, Saddam Hussein declared that black marketers would be executed. It was also widely believed that prior to the invasion of Kuwait, Saddam Hussein had spent some $3 billion from hidden funds to stockpile goods for domestic consumers. A plentiful agricultural harvest was also predicted for 1991.

Smuggled goods represented another potential source of supplies for Iraq. Although the United Nations pressured the governments of Jordan and Turkey, Iraq's neighbors, to comply with the sanctions, the potential rewards to smugglers increased as scarcities intensified and prices rose in Iraq. Reports indicated that families and tribes that straddled the Turkey–Iraq and Jordan–Iraq borders smuggled foodstuffs into Iraq. In addition, commodities flowed into Iraq from two of its traditional enemies, Iran and Syria. Such "leakages" detracted from the restrictive impact of the sanctions.

The sanctions also resulted in costs for the imposing nations. The closing down of the Iraqi and Kuwaiti oil trade removed some 5 million barrels of oil per day from the world marketplace, which led to price increases. From August to October 1990, oil prices jumped from $18 a barrel to $40 a barrel; oil prices subsequently decreased as other oil producers announced they would increase their production. In addition, nations dependent on Iraq for trade, especially neighboring countries, were hard hit by the embargoes. Turkey, for example, lost an estimated $2.7 billion as a result of the embargoes in 1990. Jordan's economy, much smaller and more dependent on Iraq's, faced a crisis even more severe. When the embargoes were initially imposed, most estimates suggested it would take up to two years before they would force Iraq to alter its policies. Therefore, the Bush administration concluded that sanctions would not succeed in a timely manner and a military strike against Iraq was necessary.

Following the ouster of the Iraqi army from Kuwait in 1990, the United Nations continued to impose sanctions against Iraq. The sanctions were to be kept in place until Iraq agreed to scrap its nuclear and biological weapons programs. However, Saddam Hussein dug his heels in and refused to make concessions. Therefore, the sanctions program continued throughout the 1990s into the 2000s.

Sanctions were devastating for Iraq. Analysts estimate that Iraq's economy shrunk more than two-thirds because of the sanctions. Moreover, that figure understates the extent of contraction. Every sector of the Iraqi economy depended to some degree on imports. The simplest textile mills could not operate without foreign-made parts; farmers needed imported pumps to run their irrigation systems; and the government could not repair war-damaged telephone, electricity, water, road, and sewage networks without material from abroad. As a result, factories and businesses shut down, forcing people out of work. Government employees remained on the job, but inflation reduced the purchasing power of their salaries to a pittance. Scientists, engineers, and academics abandoned their professions to drive taxis, sell liquor and cigarettes, and fish for a living. Crime and prostitution flourished. Moreover, the people of Iraq suffered from lack of food and medicine. Indeed, sanctions affected the lives of all Iraqis every moment of the day. The sanctions were lifted following the U.S.–Iraq war of 2002 when Saddam Hussein was ousted from office.

Summary

1. The trade policies of the United States have reflected the motivations of many groups, including government officials, labor leaders, and business management.
2. U.S. tariff history has been marked by ups and downs. Many of the traditional arguments for tariffs (revenue, jobs) have been incorporated into U.S. tariff legislation.
3. The Smoot–Hawley Act of 1930 raised U.S. tariffs to an all-time high, with disastrous results. Passage of the Reciprocal Trade Act of 1934 resulted in generalized tariff reductions by the United States, as well as the enactment of most-favored-nation provisions.
4. The purposes of the General Agreement on Tariffs and Trade (GATT) were to decrease trade barriers and place all nations on an equal footing in trading relationships. In 1995, GATT was transformed into the World Trade Organization, which embodies the main provisions of GATT and provides a mechanism intended to improve the process of resolving trade disputes among member nations. The Tokyo Round and Uruguay Round of multilateral trade negotiations went beyond tariff reductions to liberalize various nontariff trade barriers.
5. Trade remedy laws can help protect domestic firms from stiff foreign competition. These laws include the escape clause, provisions for antidumping and countervailing duties, and Section 301 of the 1974 Trade Act, which addresses unfair trading practices of foreign nations.
6. The escape clause provides temporary protection to U.S. producers who desire relief from foreign imports that are fairly traded.
7. Countervailing duties are intended to offset any unfair competitive advantage that foreign producers might gain over domestic producers because of foreign subsidies.
8. Economic theory suggests that if a nation is a net importer of a product subsidized or dumped by foreigners, the nation as a whole gains from the foreign subsidy or dumping. This is because the gains to domestic consumers of the subsidized or dumped good more than offset the losses to domestic producers of the import-competing goods.
9. U.S. antidumping duties are intended to neutralize two unfair trading practices: (1) export sales in the United States at prices below average total cost; and (2) international price discrimination, in which foreign firms sell in