

Chapter 4

U.S. Trade Policy

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INTRODUCTION AND SUMMARY

Many of the United States' key trading partners, including the European Community (EC), Japan, Korea, and Taiwan, employ diverse tools to enhance manufacturing competitiveness. Tools like R&D support, infant industry protection, and favorable financing have been used to craft comprehensive trade and industry policies. On the whole, these policies have benefited Japan, Korea, and Taiwan, while posing a competitive challenge to the United States and the EC.

The United States by and large has not imitated the proactive trade and industry policies of its trading partners. U.S. philosophy has been that manufacturing firms should make it on their own in the free market, with minimal help or interference from government. If this country were to modify its philosophy and seek ways in which government could enhance manufacturing competitiveness, two sets of policy tools could be used. The first set concerns the domestic economy. It includes improving education and training; using tax and fiscal policies to encourage long-term investment; cost-sharing commercially oriented R&D with industry; and promoting diffusion of best practice technology, especially to small and medium-sized manufacturers. Application could be uniform or selective--e.g., R&D support for certain technologies or industries. Many of these policies were discussed in *Making Things Better*¹ (also see ch. 2).

The second group of policies, examined in this chapter, deal primarily with international trade. U.S. trade policy since World War II has normally sought no advantage for U.S. businesses beyond what they would obtain in a fully open world market. Rather, policy for the most part has tried to reduce, eliminate, or counteract foreign trade practices that distort the free market. The goal has been to ensure that U.S. companies can compete on an equal footing with foreign firms--or, as is sometimes said, to "level the playing field." However, despite substantial progress in reducing quantitative restrictions on trade, this goal has not been fully met. Barriers against U.S. exports may persist for several years before the United States can get them removed. When foreign countries' domestic policies

confer advantages on their firms that result in dumped or subsidized U.S. imports, the United States can levy additional duties, called countervailing or antidumping duties, against the imports. These additional duties are intended to eliminate any foreign advantage; however, most often they do not.

The failure of U.S. trade policy to meet its objectives is not so much a result of particular measures taken; the problem is that trade policy has been assigned a role that it cannot reasonably be expected to fulfill. To understand this point, it is necessary to look more closely at what other countries do. Some target their market barriers and domestic policies to promote specific industries, such as semiconductors and computers, that contribute disproportionately to a nation's wealth and economic development, and on which U.S. manufacturing competitiveness depends. Some industries yield a high reward because they have increasing returns to scale and learning and spillover benefits to other industries. Developing such industries is often a race in which whoever gets ahead will likely stay ahead. A company with technical advantages or higher market share can reap greater economies of scale or learning, which will help it capture more market share and finance more R&D than its competitors, so that it can pull still further ahead.

After World War II, the United States was the world leader in high-reward industries, and in a free and undistorted world market would likely have remained so. However, several other countries assisted their domestic firms, in part by protecting their home markets with tariffs, quotas, and other barriers. A protected home market can increase the domestic industry's market share and development while decreasing opportunities for foreign competitors. Home market protection can further enable the domestic industry to charge cartel prices, thus earning above-normal profits that can boost R&D programs. Profits in a protected home market can bankroll forays into export markets at low prices. Of course, home market protection can easily go astray, leading to an industry ill-suited for international competition; when managed properly in combination with other policies, however, it can aid a nation's economic development.

In cases where home market protection has been successful, it has been as part of a more comprehensive strategy that included many domestic programs. This includes both society-wide programs—e. g., first-rate education, encouragement of household savings, and tax breaks for R&D and capital investment—and industry-specific programs, such as R&D projects, special tax breaks, preferential financing, and tolerance of cartel pricing in specific industries. By these means, some foreign governments have promoted selected industries to the point where they can earn large profits on their own, without need of government assistance (though assistance often continues).

Other countries' domestic programs and market protection have sometimes damaged U.S. industries. For the most part, U.S. trade policy plays out by noticing some of the advantages foreign firms enjoy, and then trying after-the-fact to eliminate or offset them, usually after substantial delay and often incompletely.

Export policy focuses on foreign market barriers. Where foreign markets are closed to U.S. goods, the U.S. Government can try to get the barriers removed. However, not all barriers can be addressed, and many important ones have taken years to eliminate. Removal of specific barriers is an ineffective solution at best. It takes time and effort to identify barriers; there are so many that some will be missed. And once a barrier is identified, it takes time to negotiate its removal, if it can be removed at all.

Import policy focuses on levying duties to counteract foreign subsidies and dumping. However, the law's approach of precisely compensating for observed subsidies and dumping has limited effectiveness. Identification and quantification of subsidies and dumping is a slow and laborious process. Once duties are in place, dumped or subsidized goods can come into the United States from a new country, requiring another investigation before duties can be assessed on the new goods. The formula to determine a duty that precisely neutralizes the foreign advantage does not fit the reality of modern industrial competition. Probably no formula could.

Other aspects of U.S. trade policy are also less advantageous for U.S. companies than foreign counterparts' policies. While many foreign governments' procurement policies are attuned to fostering national industries, U.S. procurement policy is not. The Commerce Department's export promotion

programs, while useful, are overshadowed in funding and effectiveness by similar programs in other countries. Export financing by the Export-Import Bank of the United States is sometimes less attractive than that offered by other countries' export financing agencies. Finally, U.S. export controls for reasons of national security unduly hinder high-technology exports; while many controls are necessary for national security, some are not.

THE UNDERPINNINGS OF TRADE POLICY

The conviction that free trade promotes social well-being is a cherished principle of economics and, not coincidentally, of postwar shapers of America's trade policy. The arguments for free trade are powerful, and the prosperity that coincided with the GATT regime, which opened more nations to trade than at any other time in modern history, is usually regarded as convincing evidence of free trade's benefits.

Yet challenges to the free-trade regime continue and are gaining force. There is growing sentiment, especially among business managers, that domestic firms are unable to compete on an equal footing with foreign firms because of the support and protection foreign producers receive from their governments. Such sentiment is found not only in America but in Western Europe as well. According to one analysis, the quest of American industries for relief from import competition through special trade protection is driven partly by recent developments such as the overvalued dollar and high unemployment of the early 1980s.² In addition to temporary situations that make it difficult to export or compete with imports, companies in the United States and Europe are simply up against some very well-financed and technically sophisticated competitors from Japan and East Asia, many of which have government backing in various forms. The fear of loss of dominance—or even dissolution—is driving interest in various types of trade relief, ranging from outright protection to calls for different forms of managed trade.

Is it time for a new guiding philosophy of trade? Few argue for widespread protection, but there is deep division between those who maintain that free trade invariably yields the greatest benefits and those who believe the time has come for some degree of managed trade. (Whether “some degree” of

managed trade is a realistic possibility is also in dispute. Critics see any management as the first step on the path to widespread protection.)

Both free trade and managed trade have potential benefits and drawbacks. Even the option of a middle course, with modification of free trade that doesn't fit the nebulous term "managed trade," would require a leap of faith, since evidence supporting any view of the philosophy of trade is equivocal. It should be stressed, as it often is not, that this is just as true of free trade as it is of other courses labeled industry policy, managed trade, and protectionism.

The Rationale for Free or Liberal Trade

Free trade is attractive for several reasons. One of the most powerful arguments in its favor is that a period of increasing prosperity has coincided with—proponents would say it has been caused by—international market opening. Many analyses attribute the twentyfold increase in trade in manufactured goods and the sevenfold increase in manufactured output to the accomplishments of the GATT.³

The theoretical rationale for free trade is based on comparative advantage. Different products require differing amounts of labor, capital, or other resources to produce. Nations are endowed with these resources in different proportions. This combination of differences gives nations specific advantages in producing specific products. Nations like Canada and the United States, generously endowed with softwood forests, have advantages in producing construction lumber, plywood, and linerboard, for example. If nations specialize in producing what they make best, and there is free trade, everyone is better off than if every nation tries to produce the mix of goods it consumes by itself. This straightforward result only applies under certain conditions. These include perfect, or nearly perfect, competition, and no messy complications like barriers to entry (which make it difficult for new companies to enter a market), economies of scale or learning effects (which lower the costs of production as the volume of production or experience increase), and externalities (costs that producers do not take responsibility for, or benefits that are not available to them as profits).

One of the earliest and simplest theories developed to explain why nations trade and the consequences thereof was developed by Eli Heckscher and Bertil Ohlin. The Heckscher-Ohlin theory con-

ceived of a simplified world with two so-called factors of production (labor and capital), two products whose production requires these factors in different proportions, and two countries with differing abundance of labor and capital. The capital-rich country would have an advantage producing the capital-intensive good, and the country in which labor was plentiful would have an advantage in producing the labor-intensive good. Although in theory it is unlikely that either country would specialize in producing one good to the exclusion of the other,⁴ the Heckscher-Ohlin model showed that if each exported what it was best suited to produce, the welfare of consumers in both countries would be greater than if there were no trade.

In this view, tariffs, once viewed as the classic interference with free trade, are a net loss. While producers of the protected good in the home country may benefit from a tariff and the home country gets some revenue from it, the loss to consumers more than offsets these benefits.⁵ Similarly, quotas can have negative results, as can the host of nontariff barriers that curtail free trade.

This is the standard beginner's guide to the economics of international trade. Like all models, it is built on a number of assumptions, all of which diverge from reality. The important question is how great a divergence exists between these assumptions and the real world. In some cases, the divergence is minor, and the result, free trade maximizing everyone's welfare, is still valid. In other cases, the divergence is significant.

Refinements and New Trade Theory

Dividing factors of production into just two or three groups is oversimplified. After work in the 1950s by Wassily Leontief showed that the United States, thought to be a relatively capital-rich nation, was exporting goods that were more labor-intensive than those it was importing, a refinement was developed. That is, labor could be segregated by skill intensity, and the U.S. advantage was in producing goods and services especially intensive of skilled labor.

Another oversimplification lay in using factor proportions as the only explanation of comparative advantage. Other factors can give a country an advantage in producing and exporting. Linder⁶ postulated that the size and character of the home market was an important determinant of what a

country exported; after a product was developed for the domestic market, exports would begin when the domestic market was too saturated or too competitive to offer sufficient expansion or profit opportunities. Vernon and Wells explained trade flows through the product life cycle. The life cycle explanation argued that products would be developed and manufactured for the domestic market and later sold abroad. For the United States, products would be developed with labor-saving characteristics attractive to a relatively affluent customer. As other countries raised their standards of living, their markets would become ripe for American exports, at least until manufacturers in the foreign country learned how to make the product. Over time, as the technology matured and stabilized, countries with lower production costs (one example is lower labor costs) could master production, and the affluent country would lose its advantage and begin to import the product.

Even with these refinements, trade theory was still far from reflecting real-world conditions. By the early 1980s, dissatisfaction with the theoretical basis of America's trade policy was evident even within the economics profession.⁷ Outside the profession, those concerned about the adequacy of the free-trade prescription and its theoretical basis became better informed and louder. The rise of Japan as an industrial power fueled the debate, for it was manifestly not a free trader, at least during the first three decades after the war, yet its industries were becoming more competitive and its standards of living higher. While economists may never reach a verdict on whether and how Japan's trade policies and its economic prosperity are causally linked, Japan made everybody think more deeply about trade and trade theory.

Developments in trade theory in the late 1970s and 1980s, often termed the new trade theory, have been summed up by saying "...conventional trade theory views world trade as taking place entirely in goods like wheat; new trade theory sees it as being largely in goods like aircraft.' In other words, new trade theory permits different outcomes and policy prescriptions for different kinds of goods. So what makes aircraft different from wheat, beyond the obvious physical and utilitarian characteristics?

One of the most obvious differences is in the scale of production. While wheat farming is no longer just a matter of small family farms, there are thousands

of wheat farmers, and none is large enough to exert much effect on the market. Aircraft, on the other hand, are produced by a handful of companies. There are two producers of large (100+ passenger seat) commercial aircraft in America and another in Europe, and three engine makers for large commercial jets.⁸ There is a broad consensus that the world could not support additional entrants at the level of engine or aircraft assembler. There are more firms at the subassembly levels, but many expect those numbers to shrink. Increasing returns to scale accounts for this imposing structural difference between the two industries. What this means is that compared with wheat farming, making aircraft requires a huge initial investment (typically \$3 to \$5 billion to design, develop, and certify a new model), but once it is made, producing one more airplane is relatively inexpensive (\$50 to \$150 million).¹⁰

There are also increasing returns to scale, up to a point, in wheat farming. In all industries there is a range of increasing returns, and a point where any additional input (e.g., land, labor, capital, or knowledge, singly or in combination) begins to make the production enterprise less efficient. That point, where diminishing returns are gained as the scale of enterprise increases, is reached fairly quickly in wheat farming, so that the most economical scale of enterprise is small enough to allow many thousands of producers. Large commercial aircraft production is at the other end of the scale; increasing returns are still available to Boeing Commercial Aircraft Group, whose customer base is 60 percent of the world market and has been higher. While neither industry is typical, the patterns of world trade suggest that a greater amount of trade is in goods, like aircraft, that have increasing returns to scale over a wide range of production. If government assistance helps firms pull ahead of foreign competitors, scale economies can help keep them there.

Another quality that sets aircraft apart from commodities like wheat is knowledge intensity. All products require some knowledge, at least for efficient high-quality production. But the knowledge embodied in a 747 is far greater than the knowledge embodied in a ton of wheat, and it is much more difficult to master the technology of designing and making an airplane than the techniques for growing wheat. The product cycle approach to explaining trade flows recognized the importance of technology, but it assumed a relatively fixed cycle in which technology is eventually

diffused from the country of origin to producers in countries with other advantages, such as labor costs. For sophisticated and expensive technology such as in airplanes, diffusion could be slow, difficult, and expensive.

Externalities complicate classic models of trade, too. Also called spillover effects, externalities are benefits or costs of a business or industry that are not captured or borne by the companies involved. Environmental pollution is a classic example of a negative externality; in most circumstances the generators of pollution have not had to bear the total damage or the entire burden of cleanup. One of the most frequently cited positive externalities is R&D. R&D done by one firm or industry often generates knowledge that other firms or industries can use without paying for it. Positive externalities translate into spillover effects that can benefit the society as a whole. Policies that foster growth of industries with positive externalities can create comparative advantage and produce higher growth in standards of living.

New trade theory combines the ideas of increasing returns to scale and technological advantage, creating a virtuous circle. In industries with these increasing returns, a company with superior technology or greater market share can reap greater economies of scale or learning, which will help it capture additional market share and finance more R&D than its competitors, enabling it to pull still further ahead. In this way, a firm that starts out ahead can keep increasing its advantage, at least until other entrants that are well-funded and patient enough to weather long periods of loss and learning can make inroads as, for example, Airbus and the Japanese semiconductor producers have done.

Public Policy and Trade Theory

In industries with increasing returns to scale, significant positive externalities, and high knowledge intensity, there can be a sound economic case for departures from free trade, or protection.¹¹ Economic models have postulated that it can benefit a nation's balance of trade and standard of living to protect certain kinds of industries under certain circumstances, such as infant industry protection.¹²

More cautious analysts suggest that policies to strengthen the research base (e.g., R&D tax credits) and encourage pooling of resources (e.g., policies to permit or encourage strategic alliances) would be

useful, but that protection or subsidies would lead to a neighbor-begging world of retaliation.¹³ This prescription may be more appropriate for technological leaders than for those facing dominant foreign competition. R&D incentives and encouragement for firms to pool resources may suffice to maintain competitiveness in a country with a well-developed technological base. However, without protection some domestic industries could face crushing competition from foreign firms whose technological superiority (perhaps attained through subsidies and protection by their own government) makes their production costs much lower.

It is hard to prescribe policy for trade in the real world. Ever since World War II, the United States has maintained a strong interest and belief in free trade. As the principal architect and (until recently, perhaps) greatest proponent of the General Agreement on Tariffs and Trade (GATT), the United States regards itself as the world's standard bearer for open markets and reasonable, unrestrained competition. While its market is still one of the world's most open, the United States' image as a staunch free trader is fading; as its industries become less competitive, the United States protects them more. The United States is only one culprit in what many regard as a watershed—some might even say a crisis—for GATT and the principle of free trade. Preeg cautions that “[t]he GATT multilateral system is. . .at the greatest risk of being overtaken by events. 14

What events? One is an increasing tendency for nations to negotiate quotas bilaterally or among trading blocs or customs unions. GATT has recorded over 200 quota arrangements that restrict industrialized countries' imports in products such as textiles and apparel, steel, motor vehicles, semiconductors, machine tools, footwear, and consumer electronics.¹⁵ These arrangements include the proliferation of voluntary restraint agreements (VRAs) that restrict trade between two nations. An example is the VRA between Japan and the United States in which Japan agreed to limit its exports of motor vehicles to the United States, from 1.76 million units in 1981 to 1.94 million units in 1985.¹⁶ Another kind of restriction is represented by the Multifiber Arrangement (MFA), by which signatories agree to quotas on trade in textile and apparel products. Different countries and regions set their own quotas, which limit how fast imports in covered areas can grow.¹⁷ Although done under GATT auspices and legal by

GATT standards, the MFA represents an accommodation of GATT principles to reality rather than a change in GATT philosophy.

Another possible threat to the GATT is regionalism. The GATT stresses nondiscrimination—treating all trading partners the same and providing to all signatories most-favored-nation (MFN) status.¹⁸ This principle may be eroding as more nations with geographic or other ties negotiate special trading arrangements. The recent U.S. Free Trade Agreements with Canada and Israel, and Europe's Single Market Act are recent examples; more are possible, including a North American free trade agreement (FTA) and one between Australia and New Zealand. Not all these regional arrangements are inconsistent with the spirit of GATT: the U.S.-Canada FTA and the contemplated Australia-New Zealand FTA are viewed as building blocks for broader trade liberalization.¹⁹ The European Community is a bit more of a puzzle. While many expect unification to open the market, the murky signs now available indicate that EC policies are more likely to open opportunities for investment in Europe than for exports to it. For some products, especially motor vehicles, the effect is to restrict trade with Japan.

Finally, some analysts see industrial policies as challenges to free trade. Nations use a variety of methods to support and nurture firms that are regarded as essential to national well-being. Nearly all use some means to assure domestic production of armaments and other goods vital to national security, and many promote the growth and development of economically strategic industries. The policies can range from outright protection for infant industries to policies whose protectionist intent is far more subtle and often unclear. For example, the laws and practices governing distribution of goods from wholesalers to retailers in Japan are often viewed as an effective form of protection against imports, as are public procurement of telecommunications equipment and services in Europe and Japan and U.S. national security requirements stipulating that some goods be purchased from domestic suppliers. Whether such policies are actually intended to protect domestic industries and companies is a topic for endless disagreement. But in fact, industrial policies often discourage imports, because nations often implement industrial policy to help their own industries catch up to the world's leaders. Even policies designed to accelerate development in new technologies, such as high-definition television (HDTV),

often have overtly protectionist overtones. The fact that the United States and the EC, both behind Japan in developing HDTV systems, are debating adoption of non-Japanese HDTV standards is an indication.²⁰

In short, no nation has an unblemished record of playing strictly by free trade rules. To the extent that the free-trade analyses of the gains from trade and penalties of protection are correct, increasing protectionism is a problem. There is a large class of goods—commodities or other unspecialized products—contributing about the average to value added, productivity, or knowledge, with relatively stable and widely available production technologies. This class probably includes most agricultural products and industrial goods such as toys, apparel and textiles, many chemicals, lumber and plywood, footwear, iron and steel, and a lot of industrial machinery. It is unlikely that significant sustained trade protection in these industries would benefit more than a narrow segment of society. This does not mean there is never a case for protection in such industries. Many nations—in fact, most industrialized nations—protect their steel, apparel, textile, and lumber industries; protection of agriculture borders on legendary.

Nations protect agriculture in part because of a deeply rooted conviction that it is unwise to depend on other nations for food, at least for the primary dietary staples. While most nations want to maintain friendly, or at least civil, relations with most others, none wants to be a hostage to the whims of another government in order to feed its citizens. This threat is remote, for little other than open aggression is likely to cause other nations to cut off food exports en masse (as most of the world has done recently to Iraq). But while a rational analysis might show that the vulnerability created by depending on imports for the bulk of one's food is not great, the penalty in the event of a worst-case incident is heavy; the popular consciousness often equates it with a loss of sovereignty.

One reason to protect mature industries such as steel and textiles is to ease adjustment. The traditional economic model says little about mobility of labor and capital, assuming that if an industry shrinks because its advantage declines then its workers and capital will migrate to industries with more advantage. Full employment is assumed, and the pain of the migration is mentioned only in

passing, if at all. Adjustment rarely works this way, even when unemployment is low.

Several things complicate the neat economic model. Both labor and capital may be less mobile than we would wish. Displaced workers, particularly the unskilled and semiskilled, typically undergo long periods of unemployment before finding new jobs, and most take a cut in pay and benefits when they do find new employment. According to the latest information from the Bureau of Labor Statistics, over half (55 percent) of workers displaced from full-time jobs had lower incomes when they were reemployed, most because their wages were lower in new full-time employment and some because their new jobs were part-time.²¹ Moreover, displacement and reemployment often involves loss of important benefits; Podgursky and Swaim report that 29.4 percent of all reemployed blue-collar workers and 20.8 percent of reemployed white-collar workers had group health insurance in their old jobs but not in their new ones.²² In the worst cases, dislocation has wider effects; downturns in industries have resulted in long-lasting economic disability for communities or regions. West Virginia's economy never recovered from the downturn in the coal industry in the 1950s, despite attempts to mitigate its poverty and unemployment.

Capital is not easily or painlessly mobile either. While it is not difficult to move money around, by shifting investments in a portfolio, for example, capital equipment may be specialized, and loss of competitiveness in an industry may result in scrapping of plant and equipment before their useful lives expire, or before they are fully depreciated. This kind of loss hardly compares to the trauma faced by workers and families confronting plant shutdowns or job losses, but it is a loss nonetheless.

If the adjustment period is long enough, and everyone accepts the need for industry downsizing, much of the pain of adjustment can be mitigated or avoided. But if it is rapid, resulting in the loss of significant capacity in only a few years, there can be considerable upheaval for workers, families, businesses, and communities. Moreover, during contraction, it is often difficult to distinguish competitive subsectors from candidates for dissolution. For example, while we think of the apparel and textile industries as sectors in which America has no particular advantage, parts of both industries are still competitive. Industrial and household textiles do not

face the same competitive pressure from imports as apparel textiles, and many of these companies can continue in business profitably. But many of the firms are integrated, producing both. If part of a company's business faces collapse, it becomes difficult for the other part to obtain the capital, workers, and other resources.

While the beneficiaries of such protection are invariably many fewer than the number of people who pay, costs are limited if the protection is also limited in time and scope. Like the rationale for free trade, this often looks better on paper than in real life. In fact, governments seldom cut the lifeline that protection provides. Protection has continued for decades in textiles and apparel; there are few signs that the United States is prepared to end it, or that the industry could avoid further dislocations if all protection ended.

Political considerations aside, there is widespread agreement that industries that do not contribute disproportionately to the national storehouse of knowledge and productivity and that do not have increasing returns to scale over a wide range should receive little if any protection. There is less agreement at the other end of the industrial spectrum, but a fair economic and a powerful political case can be made for including trade policy in the toolkit of measures to promote industrial development. Such protection has been used in countries that wished to jump-start their economic development. Japan and Korea, for example, have protected many developing industries and compiled a successful record in developing industrial competitiveness and technical competence in the rarefied atmosphere of domestic protection.²³ In the United States, however, consideration of infant-industry protection has been half-hearted at best, partly because of a strong conviction of the merits of free trade, and partly because high-reward industries developed and flourished here before anywhere else. The situation is different now.

The United States retains great technological strengths, but U.S. manufacturing in general and many high-tech industries in particular are moving ahead less rapidly and surely than many of their best competitors, including Japanese and some European companies. In microelectronics, Japanese manufacturers dominate world markets and technology development in many products, starting with DRAM chips in the early 1980s. Japanese manufacturers

have challenged the American lead in computers throughout the market, from laptop PCs to supercomputers, and few believe that they have reached their limit. After having pioneered scientific work in superconductivity (a technology that could contribute to many industrial products but is still mostly in the research stage), Americans and Europeans have watched Japanese companies take solid steps to incorporating superconducting materials in commercial products. And in high-resolution television, American companies have been mostly spectators in a game that involves European companies and governments struggling to catchup to the Japanese. Never before in modern history has the country been behind in developing high-technology industries, or more uncertain of its own ability to compete without greater government involvement.

Those who see a place for infant-industry protection believe it should be limited. A recurring allegation is that countries continue infant industry protection long past the point of true vulnerability, which hurts not only foreign competitors but also domestic consumers and downstream industries. In principle, infant industry protection puts an industry on its feet, at which point it should fend for itself. That point is undefined, however, and we know from experience that life support systems are easier to start than to stop. Another problem, in the United States, at least, is that there is no political institution capable of or charged with identifying high-reward industries that need protection to start. Congress lacks the time and depth of knowledge to make such choices, and few trust existing public-sector institutions to choose wisely. If the United States does depart from its traditional policy to open trade in all circumstances, and pursues policies that proactively support U.S. industrial competitiveness, the country will likely need new government institutions and new relationships between government and the private sector (see ch. 2 for further discussion of this point).

THE U.S. TRADE POLICY APPARATUS

No one government agency has overall responsibility for U.S. trade policy. Table 4-1 lists the major players. International negotiations on trade issues are led by the Office of the United States Trade Representative (USTR), located within the Executive Office of the President. The USTR's main

mission is to achieve greater access to foreign markets for U.S. goods, services, and investment. In setting negotiating priorities, the USTR consults with other agencies, Congress, and business. The USTR negotiates bilateral and multilateral treaties and investigates alleged foreign market barriers under Section 301 (and related sections) of the Trade Act of 1974, as amended.²⁴

The Commerce Department investigates allegations that imported goods are dumped or subsidized; conducts export promotion programs; and, with input from other agencies, interprets and enforces the export control laws. It studies competitive developments in U.S. and foreign industries, and advises the USTR and other agencies on the environment that U.S. industries need to stay competitive.

The International Trade Commission (ITC) studies the health of U.S. industries and the effect of imports on them. The ITC evaluates the injury (or threat of injury) to U.S. industries that petition for protection from dumped or subsidized imports, or from imports under Section 201 (and related sections) of the Trade Act of 1974, as amended.²⁵

The Defense, Energy, State, and other departments advise the USTR, the Commerce Department, and other agencies about how trade policy could affect their interests. These departments assist the Commerce Department in interpreting and enforcing export controls, and the State Department leads negotiations regarding export controls. The Defense Department makes agreements with other countries regarding defense trade. The Export-Import Bank of the United States (Eximbank) helps companies get export financing.

The Agriculture Department supports agricultural trade (including export promotion and export financing), administers price support programs, studies the business condition of U.S. agriculture, and acts as agriculture's advocate within the government.

U.S. firms and industries can seek help from the government under various trade laws. Table 4-2 summarizes some of these laws, showing when they can apply, what agencies are involved, what relief can be obtained, and the usual costs to use the laws. The first law, Section 301, is concerned primarily with exports. Under Section 301, firms can complain about any "act, policy, or practice" by a foreign country that "is unreasonable or discriminatory and

Table 4-1-Some International Trade Functions of Some Key Agencies

Agency	Function
Office of the United States Trade Representative (USTR), in the Executive Office of the President	Conducts most international negotiations, with assistance from other agencies (negotiations usually are aimed at increasing access to foreign markets). Investigates allegations of unfair foreign trade practices (most often foreign trade barriers) under Section 301.
Department of Commerce	Investigates allegations of subsidies and dumping. Conducts export promotion programs. Has lead role in specifying and enforcing export controls. Studies and advises on competitiveness of particular industries.
U.S. International Trade Commission (ITC)	Determines whether U.S. industries are injured as required for relief under the laws regarding subsidies and dumping and under Section 201. Studies and advises on the competitiveness and health of particular U.S. industries, including the effect of imports.
Department of Defense	Assists Department of Commerce in specifying and enforcing export controls. Makes agreements with other countries regarding defense trade.
Department of State	Assists Department of Commerce in specifying and enforcing export controls; leads international negotiations regarding export controls.
Department of Energy	Assists Department of Commerce in specifying and enforcing export controls.
Export-Import Bank of the United States (Eximbank)	Helps firms to obtain financing for exports.
Department of Agriculture	Conducts export promotion programs for agriculture. Leads many international negotiations regarding trade in agriculture. Collects and disseminates agricultural trade data. Helps business to obtain financing for agricultural exports. Administers price support programs for agriculture.

SOURCE: Office of Technology Assessment, 1991.

burdens or restricts United States commerce.”²⁶ Usually the complaint concerns a foreign market barrier. Under Section 301, the U.S. Government can negotiate with the country concerned to remove the barrier. If the negotiations are unsuccessful, the United States can retaliate by imposing its own barriers against goods or services from that country.

The other trade laws listed in table 4-2 concern imports. Two of these laws focus on subsidized and dumped imports. Subsidized imports are those for which the foreign producer or exporter receives a subsidy from its government. Dumped imports are those sold for less than “fair value.” U.S. firms can complain to the Commerce Department and the ITC about subsidized or dumped imports. If the Commerce Department finds subsidies or dumping, and if the ITC finds that the subsidized or dumped imports have caused or threatened material injury to

the U.S. industry, additional duties (called countervailing or antidumping duties, respectively) normally will be levied on the imports.

Finally, under Section 201 a U.S. industry can petition for relief from any increased imports that cause or threaten serious harm. The ITC determines whether the injury requirement is satisfied and, if so, recommends relief. However, the President ultimately decides what, if any, relief to grant.

FOREIGN MARKET BARRIERS

A major goal of U.S. trade policy is to reduce or eliminate obstacles to the sale of U.S. goods in foreign markets. However, despite U.S. efforts many barriers exist. While the United States itself limits some imports, the country is still one of the world's most open markets, and on the whole U.S. exports

Table 4-2-Summary of Some U.S. Laws Regarding International Trade

Name of law	Sections of Title 19 U.S. Code	Agencies responsible	Action complained about	Nature of relief granted	Approximate cost to petitioner in 1988 ^a
Section 301 ^b	2411-2420	USTR investigates and determines any retaliation subject to presidential direction.	Violations of a trade agreement, or other unreasonable foreign trade practices that restrain U.S. commerce (usually some form of foreign market barrier).	Negotiations to get foreign practice stopped, backed by threat of retaliation.	\$54,700-\$305,400
Countervailing Duty Law	303, 1671 -1671h, 675-1677k	Department of Commerce determines subsidies. ITC determines injury.	Foreign subsidies on imported goods, injuring or threatening to injure a U.S. industry.	Countervailing duties equal to the computed subsidy.	\$138,100-\$399,400 for initial investigation and ruling. \$68,300-\$106,700 for first court appeal (to Court of international Trade), if taken. \$35,000-\$50,000 for second court appeal (to Court of Appeals for the Federal Circuit), if taken. \$43,900-\$147,200 for each subsequent annual administrative review, if held.
Antidumping Law	1673-1677k	Department of Commerce determines dumping. ITC determines injury.	Dumping of foreign goods in the U.S. market, injuring or threatening to injure a U.S. industry.	Antidumping duties equal to the amount by which the goods are dumped.	\$151,000-\$553,300 for initial investigation and ruling. \$50,000-\$83,000 for first court appeal (to Court of International Trade), if taken. \$30,000-\$37,500 for second court appeal (to Court of Appeals for the Federal Circuit), if taken. \$42,000-\$168,900 for each subsequent annual administrative review, if held.
Section 201 ^b	2251-2254	ITC determines injury and recommends relief. President determines relief.	Increased imports that cause or threaten serious injury to a U.S. industry.	Protection in almost any form, and/or adjustment assistance.	\$202,000-\$566,000

^aThe cost estimates are taken from a 1988 survey by the General Accounting Office of 29 trade lawyers. U.S. Congress, General Accounting Office, *International Trade: Pursuit of Trade Remedies by Small Business*, NSIAD-89-69BR (Gaithersburg, MD: U.S. General Accounting Office, Dec. 1, 1988), pp. 6,6-11, 13,23. Each attorney was asked to give a lower and upper bound for the cost of each type of case. Each minimum value shown in the table is the average of the minimum values given by each attorney; similarly, each maximum value in the table is the average of the attorneys' individual maximums. When an attorney in a particular instance gave an indeterminate lower or upper bound, that attorney was not included in the average. "Because most indeterminate values tended to be large values for the upper bound, [the] average cost ranges tend to understate the actual costs of pursuing the remedy." Ibid., p. 6. These cost estimates do not include employee time devoted to the case. GAO noted (pp. 23-24) that its cost estimates were comparable to rough estimates by Professor John Jackson in "Perspectives on the Jurisprudence of International Trade: Costs and Benefits of Legal Procedures in the United States," *University of Michigan Law Review*, April-May 1984, pp. 1570-1587.

^bOf the Trade Act of 1974, Public Law 93-618, as Amended.

SOURCE: Office of Technology Assessment, 1991, and references cited.

face more obstacles than U.S. imports. As well as immediately worsening the U.S. balance of trade, foreign market protection can help foreign industries pull permanently ahead of their U.S. counterparts, often in high-reward sectors such as semiconductors and computers. Such barriers put the United States at risk of losing industries important for its well-being.

Negotiating To Reduce Barriers

Traditionally, the most important obstacles to international trade have been quotas (limits imposed by a country on how much or how many of a product may be imported into that country) and tariffs (taxes on imports levied by the importing country). In general, GATT has prohibited quotas for 40 years,²⁷ though there are some important exceptions.²⁸ Tariffs have been greatly reduced through a series of GATT negotiating rounds, with substantial leadership from the United States (see box 4-A). The United States has pursued lowering of tariffs by other means, such as the 1989 U.S.-Canada Free Trade Agreement, which, among other things, will gradually eliminate tariffs between these two countries.

As quotas have been largely eliminated and tariffs greatly reduced, other barriers have assumed more importance. These include burdensome and slow customs procedures, limitations on the activities of foreign-owned firms, discriminatory regulations, government procurement practices that favor domestic firms, and the inclination not to buy foreign products. These barriers can be overt or hidden, and can result from government action, private action, or a combination of the two. Collectively, these obstacles are sometimes called nontariff barriers.²⁹

Nontariff barriers are often tightly bound up with domestic policies and are therefore harder to remove than tariffs or quotas. Despite its success in reducing tariffs and removing quotas, GATT has had more difficulty in reducing nontariff barriers. Accordingly, the United States has looked beyond GATT to eliminate these impediments.

Each year the United States conducts many bilateral negotiations to eliminate particular nontariff barriers.³⁰ The USTR sets negotiating priorities primarily based on cases' political importance, as communicated by industry, Congress, the press, and other executive departments. The USTR's negotiating priorities generally have not been based on an

assessment of which industries have the most strategic importance for the nation.

These bilateral negotiations have often succeeded in reducing or eliminating market barriers. However, often many years elapse without results. One example concerns how Taiwan assessed the value of imports for the purpose of levying percentage rate tariffs. Taiwan determined the value of imported goods by administrative rulings rather than by using the invoice price. By its nature, this approach tempted government officials to set values high. In 1979, Taiwan, in an agreement with the United States, obliged itself to switch over to valuing goods based on the invoice price by January 1, 1986. However, by August 1, 1986, Taiwan had not done so.³¹

Another example involves semiconductors. Despite several agreements by Japan to remove market barriers to semiconductor imports, the U.S. producers' share of the Japanese market stayed at about 10 percent from 1973 to 1988.³² This happened even though U.S. chips were competitive (especially during the first half of the period), as shown by the large market shares U.S. companies had in the rest of the world.³³ In September 1986, to settle a Section 301 case brought by the Semiconductor Industry Association, Japan promised to make certain efforts to increase market access. The Japanese Government professed that it "strongly support[ed]" expanded trade, stated that Japanese firms anticipated "substantially increased" purchases of foreign semiconductors, and agreed that "the expected improvement in access should be gradual and steady" over the agreement's 5-year term.³⁴ During the negotiations, the United States argued that if Japan's market were truly open, non-Japanese firms would capture at least 20 percent of it. In a confidential side letter to the U.S. negotiators, the Japanese Government stated that it "understood, welcomed, and would make every effort to assist" reaching the goal of 20-percent import penetration by August 1991, when the agreement expired.³⁵

However, in the months after the agreement, despite a falling dollar, U.S. sales rose little. On March 31, 1987, the U.S. Government found Japan's efforts to increase market access "inadequate,"³⁶ and on April 17 President Reagan levied punitive tariffs on certain personal computers and power hand tools from Japan.³⁷ In response, MITI encouraged Japanese firms to purchase more U.S. semicon-

Box 4-A-GATT and the Uruguay Round¹

GATT (the General Agreement on Tariffs and Trade) is both an international agreement and an international organization. Its origin traces to the 1944 Bretton Woods Conference, which launched the World Bank (International Bank for Reconstruction and Development) and the International Monetary Fund. While the conferees did not consider trade issues as such, they went on record as recognizing the need for a third international organization to deal with trade. A charter for such an organization, called the International Trade Organization (ITO), was drafted and refined, under U.N. auspices, starting in 1946, culminating in the Havana Charter in 1948. However, the U.S. Congress would not ratify the Havana Charter; as the United States was then the world's preeminent economic power, other countries declined to form an ITO without the United States.

However, the President could ratify on his own, within a previous delegation of authority by Congress, a watered down agreement called the General Agreement on Tariffs and Trade (GATT). The difference was that GATT on its surface was just an agreement; it did not explicitly call for the creation of an international organization. For example, GATT's language does not provide for a general assembly or standing committees, but merely refers to the "contracting parties" acting in concert. Originally intended as a temporary measure until the United States endorsed an ITO, GATT has provided the legal framework for trade among nations for over 40 years. In fact, the member countries did form an organization to carry out GATT's business. However, GATT has the flavor of a loose, hastily arranged outfit, reminiscent of the Articles of Confederation that preceded the U.S. Constitution. A key weakness is GATT's set of procedures for resolving disputes under its provisions, in which any country can, in effect, veto any ruling against it.

GATT's primary mission has been reduction of trade barriers. With some exceptions, GATT immediately prohibited quotas.² From 1947 to 1979, GATT reduced tariffs in negotiating rounds through which countries would negotiate reciprocal lowering of tariffs. Each country, in return for concessions by others, would bind its tariffs for specified goods at certain rates. Each tariff concession granted to one country had to be granted to all member countries. Tariffs were greatly reduced by this process, leaving in 1979 an average tariff of only 4.7 percent for nonprimary products (products other than ores, timber, and the like) imported into industrial countries.³

¹This box draws heavily from John H. Jackson, *The World Trading System: Law and Policy of International Relations* (Cambridge, MA: MIT Press, 1989), pp. 27-57.

²GATT Articles XI-XIV, XIX-XXI.

³John H. Jackson, *op. cit.*, p. 53.

ductors and to develop long-term relationships with U.S. suppliers similar to those with Japanese suppliers. As a result, U.S. market share rose from 10.2 percent in 1988 to 11.0 percent in 1989 and 12.3 percent in 1990 (figure 4-1).³⁸ The total imports' market share was larger, 11.9 percent in 1989 and 13.2 percent in 1990.³⁹ The first quarter of 1991 shows no further increase.⁴⁰ This was still far behind the progress envisioned by the U.S. negotiators in the 1986 agreement: steady growth to 20 percent by August 1991. A new agreement, in effect from August 1991, has set a target of 20 percent by the end of 1992.⁴¹

Supercomputers provide yet another example. Since 1976, the Japanese Government heavily favored Japanese firms in its purchases of supercomputers, buying almost no U.S. machines even though they were generally superior.⁴² Cray Research, Inc., the first firm to sell supercomputers, sold the first

one in 1976. The Japanese Government did not purchase supercomputers until 1983, when Japanese supercomputers were first available. Negotiations began in 1985; in August 1987 Japan agreed to make its procurement process more open to foreign firms, through, for example, improved announcement of upcoming procurements.⁴³ However, the Japanese Government continued to favor Japanese firms and bought very few U.S. machines. The government did this through a variety of means, such as a method of evaluating performance structured to favor Japanese machines.⁴⁴ In June 1989, the USTR launched a Section 301 investigation, with the threat of retaliation if the Japanese Government's practice did not change. In June 1990, a second agreement was reached addressing performance measures and several other procurement issues.⁴⁵ This agreement may have come too late to be of much help to the U.S. supercomputer industry (see ch. 6).

In recent years GATT has focused on nontariff barriers, which have become more important as quotas have been eliminated and tariffs lowered. To some extent, GATT addressed nontariff barriers from the beginning. For example, GATT's "national treatment" provision requires that a country's internal taxes and regulatory requirements not discriminate on the basis of whether a good is domestically produced or imported.⁴ This provision prohibits explicit discrimination against imports, but leaves open the crafting of laws and regulations that more subtly discourage imports. Optional supplementary agreements called GATT Codes further address nontariff barriers. A Code is effective only between two members who have both signed it. The United States and its major trading partners have signed several important Codes, including those on subsidies, dumping, and government procurement.

While GATT and its Codes have eliminated some nontariff barriers, they have not succeeded to the same extent as the effort to reduce quotas and tariffs. Nontariff barriers have been an important focus of the latest GATT negotiating round, the Uruguay Round, which began in 1986 and was scheduled for completion in 1990, but has been extended through 1992. Canada and the EC have proposed replacing GATT with an ITO, but that proposal will be considered only after the Uruguay Round is completed.

The United States' priorities in the Uruguay Round negotiations have included:

1. extension of GATT to require countries to afford certain minimum levels of protection for intellectual property (patents, copyrights, and the like);
2. extension of GATT to cover investment;
3. extension of GATT to cover services;
4. a stronger dispute settlement mechanism;
5. a stronger legal regime to minimize subsidies and dumping;
6. tighter limits on exceptions to GATT's requirements granted to developing countries; and
7. strengthening of GATT's coverage of trade in agricultural products.

This last item, dealing with agriculture, is the top priority of many developing nations; progress on that item is a prerequisite for their consideration of other items.

⁴GATT Article III.

There are many reasons why it can take a long time to open a foreign market. First, a particular barrier must be identified and verified, and negotiations begun. Even these first steps are significant hurdles, given the prevalence of protection and the lean staffing of the USTR's office. Foreign countries can prolong negotiations, demand long transition periods to phase out barriers, and drag their feet on promised changes. Also, when one trade barrier is removed, another might take its place. Ultimately, success in opening foreign markets depends not only on the U.S. Government's diligence but also on its leverage with foreign countries. The United States has two main sources of leverage: dispute resolution under GATT⁶ and the threat of retaliation under Section 301. Neither is very effective in promptly opening foreign markets.

Dispute Resolution Under GATT

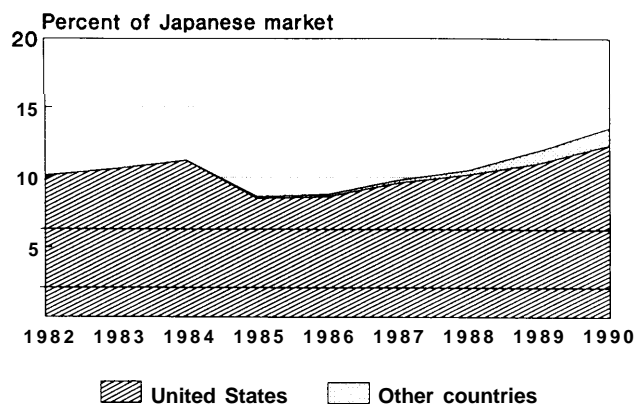
Under GATT dispute resolution procedures, an aggrieved country must first try bilateral consultations;⁷ if these are unsuccessful, an international

panel of experts hears the case. If the panel finds a violation and the GATT Council formally adopts that decision, the offending country must either stop the practice or offer compensation (typically a lessening of barriers on other products); if it does neither, the GATT Council can authorize the aggrieved country to retaliate by erecting protection of equivalent importance against the offending country.⁴⁸

This route has been well traveled. According to one tabulation, from 1947 to 1986, 233 cases came before GATT.⁴⁹ Most of these cases involved industrialized countries (figure 4-2). The United States brought 77 of these cases, with 37 directed at agriculture and 11 at manufactured goods.⁵⁰

It was often difficult and time-consuming to get and enforce GATT rulings, with the process typically taking a few years and some cases never being resolved.⁵¹ In the Uruguay Round, the United States has already achieved some success in reducing the time involved. An interim agreement, effective May 1989, made it possible to hear a dispute and get a

Figure 4-1—import Penetration of the Japanese Semiconductor Market



SOURCE: Telefaxed data from the Semiconductor Industry Association, May 29, 1991.

decision in about 10 months from the time consultations are requested. However, any country can still block the GATT Council from adopting an adverse decision as an official ruling; the defendant thus has veto power over the tribunal. And even if the GATT Council adopts the decision, a party found in violation can refuse to change or pay compensation, and can even veto any proposed retaliation by the injured country. While the pressure of international opinion can induce a country to accept GATT rulings, it still might stall for months or years.

The United States has done its share of resisting GATT rulings, but nonetheless favors putting dispute settlement on a stronger institutional footing, so that all countries would be bound alike. However, it could well be many years before GATT dispute resolutions procedures provide for speedy, effective removal of market barriers. As long as these procedures are unreliable and while GATT's jurisdiction omits items of concern to the United States, such as services and intellectual property, there will be need for an alternative source of leverage, the threat of retaliation under Section 301.

Section 301

Section 301 (and related sections) of the Trade Act of 1974, as amended,⁵² can address any "act, policy, or practice" by a foreign country that "is unreasonable or discriminatory and burdens or restricts United States commerce."⁵³ In 1988, Congress clarified that Section 301 covers at least some government tolerance of private action, specifically

"the toleration by a foreign government of systematic anticompetitive activities by private firms or among private firms in the foreign country that have the effect of restricting . . . access of United States goods to purchasing by such firms" for reasons other than commercial considerations such as product quality, cost, and service.⁵⁴

Section 301 empowers the USTR to investigate allegations of such foreign practices. If they are found, the USTR will first negotiate to stop them. If initial negotiations fail, Section 301 requires that GATT's dispute resolution process be invoked where applicable.⁵⁵ As a last resort, if all other measures fail, the USTR may retaliate. Retaliation might consist of increased tariffs or restrictions on specified goods imported from the offending country, whether or not the goods are related to the foreign practice.⁵⁶

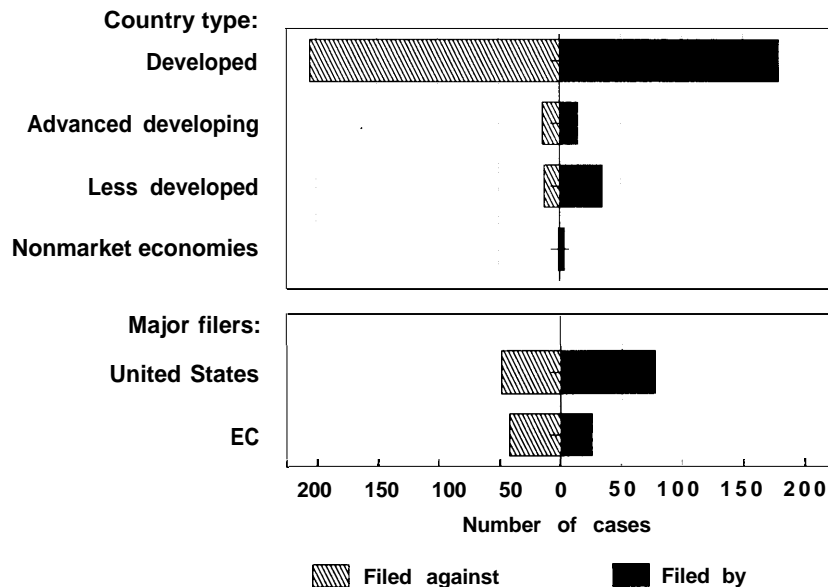
From Section 301's enactment in 1974 through 1990, 83 Section 301 cases were initiated. Of these, 35 focused purely on raw and processed agricultural products; 37 in whole or in part on manufactured goods (excluding processed agricultural products and including cases concerning intellectual property); 10 on services; and 1 on investment.⁵⁷

Section 301 has been an important trade tool. Its use has prompted specific reforms by other countries; more generally, the threat of Section 301 retaliation for areas not covered by GATT, such as intellectual property and services, has made other nations more receptive to expanding GATT's coverage to those areas.⁵⁸

However, Section 301 generally has not achieved prompt removal of market barriers to manufactured goods. Table 4-3 lists all Section 301 cases that started in 1985 or later, concerned manufactured goods (excluding food, beverages, and tobacco),⁵⁹ and contained a finding by the USTR that there was a foreign market barrier that needed fixing.⁶⁰ Most of these cases have taken many years from the first notice of the problem to achievement of effective relief.

Part of this delay comes from the time limits of the formal Section 301 case. The USTR has 1 year to investigate the alleged practice and negotiate for its elimination (up to 18 months if needed to accommodate a GATT dispute resolution procedure⁶¹) and 7 months before deciding on and applying sanctions.⁶² The USTR often takes the full time allotted, and

Figure 4-2-GAIT Dispute Resolution Proceedings, 1947-86



SOURCE: John Jackson, *The World Trading System: Law and Politics/International Economic Relations* (Cambridge, MA: MIT Press, 1989), p. 99.

foreign countries seldom make concessions unless under an imminent deadline with the threat of retaliation.

Overall, however, the longest delays are in initiating an action. Most cases start with a petition from industry for relief.⁶³ It can be years before a U.S. firm or industry association is convinced that attempts to sell in a particular country are failing not because of cost or quality, but because of market barriers. Even then, a firm or industry association might balk at preparing a petition, given the expense (table 4-2), delay, and uncertain results. The USTR has initiated cases on its own, especially in recent years,⁶⁴ but those actions mostly involved long-standing problems that attracted considerable congressional attention. For example, under the so-called Super 301 provision, the Administration was directed to identify the highest priority offending countries and initiate Section 301 cases on their most important practices.⁶⁵ Cases 74 and 75 in table 4-3, dealing with the Japanese Government's procurement of satellites and supercomputers respectively, stemmed from this process.

Delay can occur after a case is supposedly over. Case No. 52 in table 4-3 concerned Korea's intellectual property protection. Although Korea passed

remedial legislation in 1987, many problems remained into 1989.

These long delays arise because the United States is reluctant to retaliate or even start a Section 301 case. Retaliation, unless it ultimately induces the foreign country to change its practice, rarely solves the problems of the complaining U.S. industry.⁶⁶ Retaliatory restrictions on the import of goods from another country would in most cases violate GATT, and the open nature of Section 301 proceedings would instantly expose this violation to the world.⁶⁷ And while use of Section 301 does not violate GATT until retaliation occurs, starting an investigation does anger other countries, which perceive Section 301 as an assertion that U.S. law takes precedence over GATT. Such criticism might be somewhat hypocritical: if the target country maintains market barriers, overt or hidden, that could violate at least the spirit of GATT. However, this criticism is a political force to be reckoned with.

Retaliation against a foreign trade barrier would itself be a trade barrier, and could provoke counter-retaliation with still more market closures. For this reason sanctions, even as retaliation, are philosophically repugnant to the USTR and the Administration, for whom free trade is a paramount goal. On a

Table 4-3-Selected Section 301 Cases

Case No.	Country	Subject	Prior history	Date of petition or self-initiation	Effective date and nature of relief	Subsequent history	Wait for relief
48	Japan	Semiconductors: issues including access to Japanese market.	Many sets of negotiations on market access since about 1972; U.S. firms' market share stayed roughly constant at only 10 percent (far below what U.S. firms would have achieved in an open market) despite several ostensible liberalizing moves by the Japanese Government.	June 14, 1985	<p>July 31, 1986: Japan signed an agreement expressing the expectation of gradual, steady improvement in access; in a secret side letter, Japan acknowledged the U.S. goal that import penetration of Japanese market would rise over 5 years to 20 percent.</p> <p>(Apr. 17, 1987: United States retaliated for Japan's failure to improve market access, by increasing duties on certain computers and power hand tools from Japan.) Serious Japanese Government effort to improve access commenced in 1989, leading to first substantial increase in import share of Japanese market, which was 13 percent in 1990 (improved from 10 percent, but much lower than expected from agreement).</p> <p>New agreement signed June 4, 1991, effective Aug. 1, 1991, with target of 20-percent import penetration by the end of 1992.</p>		About 18 years for some improvement in market share; goal of much greater market share not achieved after about 19 years.
49	Brazil	Policies toward the informatics industry (computer and computer-related products), including import restrictions and inadequate intellectual property protection.	Negotiations since 1984.	Sept. 16, 1985	<p>Oct. 6, 1986: Brazil undertook administrative reforms designed to reduce import restrictions.</p> <p>1987: Brazil passed remedial copyright legislation to protect computer software.</p> <p>Negotiations still ongoing as of February 1991.</p>	substantial import restrictions continued into at least February 1991.	About 2 years to start removing import restrictions, with substantial restrictions lasting at least 6-7 years; about 3 years to fix intellectual property protection.

Table 4-3-Selected Section 301 Cases-Continued

Case No.	Country	Subject	Prior history	Date of petition or self-initiation	Effective date and nature of relief	Subsequent history	Wait for relief
52	Korea	Inadequate protection of intellectual property rights, including patent protection and copyright protection for software.	Extensive bilateral negotiations starting in March 1983 (patent) and in 1984 (copyright).	Nov. 4, 1985	July 1, 1987: Korea passed remedial patent and copyright legislation.	Many problems remained into 1989.	About 3-4 years to start improving intellectual property protection; many problems remained for about 5-6 years.
56	Taiwan	Customs valuation system.	In 1979 Taiwan agreed that by Jan. 1, 1986, it would value imports, for customs purposes, based on the invoice price, rather than determining the value by administrative rules. By Aug. 1, 1986, Taiwan still had not switched over.	Aug. 1, 1986	Oct. 1, 1986: Taiwan changed its customs valuation system to use invoice prices.		About 7 years.
61	Brazil	Lack of patent protection for pharmaceuticals.	Negotiations since 1985.	June 11, 1987	(Oct. 20, 1988: United States retaliated by increasing duties on some imports from Brazil.) June 26, 1990: Brazil's President announced that he would propose remedial legislation to Brazil's legislature by Mar. 20, 1991. (July 2, 1990: United States removed its retaliatory duties.) Remedial legislation not passed as of spring, 1991.		At least about 6 years.
68	Argentina	Pharmaceuticals: inadequate patent protection, and discriminatory registration requirements.	Negotiations since 1985.	Aug. 10, 1988	Fall of 1989: Argentina agreed to introduce remedial legislation by fall of 1991. The petitioner then withdrew its petition.	No remedial legislation enacted as of Mar. 5, 1991.	At least about 6 years.

Table 4-3-Selected Section 301 Cases-Continued

Case No.	Country	Subject	Prior history	Date of petition or self-initiation	Effective date and nature of relief	Subsequent history	Wait for relief
70	EC	Export restrictions on copper scrap, which allegedly depressed the price of scrap within the EC and raised it elsewhere, thereby giving an advantage to EC brass fabricators.		NOV. 14, 1988	EC agreed to remove export restrictions for at least 1990.		1 year, 2 months
*73	Brazil	Overall import licensing scheme, including prohibited items, quotas, and lack of transparency.	Negotiations since 1984 or earlier.	June 16, 1989	May 14, 1990: import regulation thoroughly changed, removing objectionable features.		About 6 years
●74	Japan	Discriminatory government procurement of satellites.	In 1983, Japan published its "Long Range Vision on Space Development," in which Japan banned all public and private purchases of foreign satellites. The U.S. Government immediately initiated negotiations. Japan agreed to remove the ban on private purchases but held fast to its ban on public purchases.	June 16, 1989	June 15, 1990: Japan signed an agreement for open procurement practices, except for R&D satellites.		About 7 years
●75	Japan	Discriminatory government procurement of supercomputers.	Discriminatory behavior since 1976, when U.S. machines were first available. Negotiations since 1985, including an agreement signed in 1987, which proved to be ineffective.	June 16, 1989	Mar. 22, 1990: Japan signed an agreement for open and fair procurement practices.	As of May 1991, it was too early to tell if this agreement would stop Japan's discrimination in procurement.	At least about 5 years since negotiations commenced; at least about 14 years since Japanese discrimination began.

Table 4-3-Selected Section 301 Cases-Continued

Case No.	Country	Subject	Prior history	Date of petition or self-initiation	Effective date and nature of relief	Subsequent history	Wait for relief
79	Norway	Discriminatory government procurement of electronic toll collection equipment.		July 11, 1989	Apr. 26, 1990: Norway took measures designed to ensure fair consideration of the petitioner in future procurements.		9 months

* Denotes cases initiated without a petition (self-initiated by USTR).

NOTE: The prior and subsequent histories given for cases were found from readily available sources. Further research might reveal in some cases that the problem started earlier or lasted later. If so, the waiting times for relief in those cases would be longer than those stated.

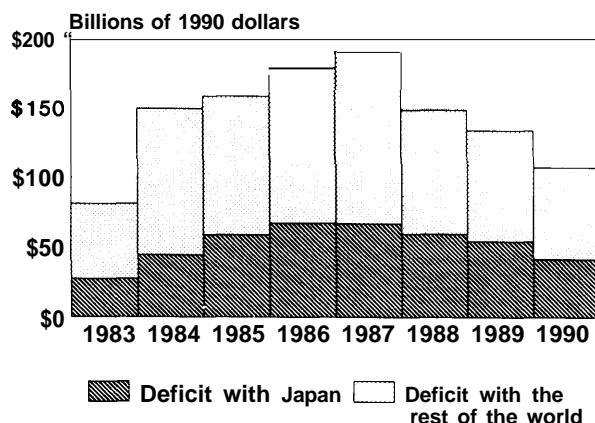
SOURCE: This table relies almost entirely on published USTR sources: Office of the United States Trade Representative, "Section 301 Table of Cases," computer printout dated Jan. 17, 1991, and Federal Register notices cited therein; Office of the United States Trade Representative, *National Trade Estimate Report on Foreign Barriers*, annual reports for 1985-1987, 1989-1991; Office of the United States Trade Representative, "Report to Congress on Section 301 Developments Required by Section 309(a) (3) of the Trade Act of 1974," semiannual reports covering January 1989 through June 1990; Office of the United States Trade Representative, "United States, Japan Conclude Semiconductor Agreement," press release, No. 91-21, June 4, 1991 (for Case No. 46); Donald Phillips, Assistant United States Trade Representative, testimony at hearings before the House Committee on Energy and Commerce, Subcommittee on Commerce, Consumer Protection and Competitiveness, May 9, 1990, Serial No. 101-149, pp. 6-11 (for Case No. 48). Other sources were relied on for particular cases: discussion in this Chapter, and also Clyde V. Prestowitz, Jr., *Trading Places: How We Allowed Japan To Take The Lead* (New York, NY: Basic Books, 1988), p. 62 (Case No. 46, prior history); USTR Official, personal communication, Feb. 27, 1991 (Case No. 49, subsequent history into 1991); USTR Official, personal communication, Mar. 5, 1991 (Case No. 61, subsequent history); USTR Official, personal communication, Mar. 5, 1991 (Case No. 68, events after initiation of investigation); chapter 6 of this report (Case No. 75, showing that Japan's discriminatory procurement of supercomputers started in 1976); Jonathan Streeter, Supercomputer Industry Analyst, International Trade Administration, U.S. Department of Commerce, personal communication, May 21, 1991 (Case No. 75, subsequent history).

pragmatic level, sanctions could hurt downstream users of the affected products. For example, when Japan violated the 1986 semiconductor agreement and USTR drew up a proposed list of Japanese products on which to increase tariffs in retaliation, many U.S. firms that purchased items on the proposed list testified and lobbied against the action.⁶⁸ Sanctions can also hurt U.S. firms with operations or joint venture partners in the country concerned.

Japan's Barriers

With the limited effectiveness of GATT dispute resolution procedures and Section 301, foreign market barriers often persist for years. This is especially true with Japan. In 1990, the United States had a \$42 billion bilateral trade deficit with Japan, accounting for about 40 percent of the United States total trade deficit (figure 4-3). This deficit has many causes, including often superior Japanese products, U.S. dissavings and high Japanese savings, and inadequate efforts by some U.S. firms to sell to Japan. However, one important cause is a rich network of market barriers, including official government action and regulation, unofficial advice from government to industry, government toleration or encouragement of anticompetitive activity, and a business culture in which Japanese companies maintain long-term relationships and prefer to deal with other Japanese businesses.-@

Figure 4-3-U.S. Trade Deficit With Japan and the World, 1983-1990



NOTE: Amounts were converted to 1990 dollars using GNP deflators from the Department of Commerce, Bureau of Economic Analysis.

SOURCE: International Monetary Fund, *Direction of Trade Statistics*, 1990, pp. 402-403, and U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, vol. 71, No. 5, May 1991, pp. S-16, S-17.

Some have likened Japan's trade obstacles to an onion: when one layer is peeled away, another is waiting below. This happened with semiconductors and supercomputers, as discussed above. It occurred from 1980 to 1983, when U.S. producers of aluminum bats tried to have their bats certified for use in Japan by the government-run children's baseball league. First certification was flatly denied, even though that went against an agreement signed by Japan in 1979 as part of GATT's Tokyo Round. Then certification was offered but conditioned on meeting discriminatory standards requiring an alloy seldom used in the United States and a base plug not used in U.S.-made bats. Then the standards were changed, but U.S. factories, because they were outside Japan, could not be qualified as meeting the standards, so that each lot of bats would have to be opened and inspected individually. Finally the inspection issue was resolved, but Japanese distributors refused to carry U.S.-made bats, effectively shutting U.S. producers out of the market. Each step required high-level U.S. Government involvement.⁷⁰

As another example, in 1989 a well-known American manufacturer approached the USTR with a fully documented problem. Two Japanese trade journals would not run its ads because of pressure from the firm's Japanese competitors. Glen Fukushima of the USTR staff raised this case informally with a contact in MITI, and the problem was quickly resolved. Mr. Fukushima commented that,

While the outcome of this case is positive, it is troubling to realize that it required the intervention of USTR and MITI, potential congressional involvement, and 1 year of frustrated effort for a major, well-established, and well-endowed American company even to place an ad in two Japanese trade journals-several stages removed from actually making a sale to Japanese users.⁷¹

The difficult task of opening Japanese markets is made worse by the scant U.S. Government resources devoted to the problem. The equivalent of only about 15 full time staff at the USTR's office work on trade with Japan.⁷² While USTR is assisted by other agencies, U.S. negotiating teams have often been far smaller and less well prepared than Japanese teams.⁷³ The U.S. agencies have faster staff turnover than their Japanese counterparts, especially at the most senior (political) levels. This has caused the United States to repeat mistakes and has made interagency coordination more difficult.⁷⁴

New Approaches

Difficulties in removing Japanese trade protection have led the U.S. Government to consider alternative approaches. In 1986, the United States tried a new approach, putting forward its expectation that the foreign share of Japan's semiconductor market would rise to 20 percent over 5 years. Rather than trying to identify every market barrier, a seemingly hopeless task, the United States in effect asked Japan to identify and remove barriers on its own as needed to reach the target import level. While the 20-percent goal has not been achieved, the 1986 U.S.-Japan semiconductor agreement, together with retaliation for Japan's breach of it, did improve U.S. market share after more than a decade of failed attempts. This results-oriented approach was endorsed in February 1989 by the top-level industry advisory group to the USTR,⁷⁵ but apparently has not been used in other cases.

Another approach has been to try to remove many trade barriers at once in a given sector. This approach was used in five sectors—telecommunications, electronics, forest products, medical equipment and pharmaceuticals, and autos and auto parts—in the Market-Oriented Sector-Selective (MOSS) talks, begun in 1984. Overall, the talks focused high-level attention on certain market obstacles, reduced them, and opened communication channels to resolve follow-up disputes. The talks seem to have helped U.S. firms increase their exports to Japan, though many companies reported continuing problems. The most substantial increases in exports occurred in telecommunications and in medical equipment and pharmaceuticals, for reasons including easily identifiable barriers that the Japanese Government could readily fix; strong U.S. presence already in Japan poised to take advantage of market liberalization; some industry support within Japan for market liberalization; and negotiators' ability and teamwork. Subsequent monitoring by the U.S. Government was crucial to translating the agreements into tangible trade gains.⁷⁶ For example, because of the MOSS talks Japan made it easier to certify U.S.-made cellular telephones for use in Japan, but follow-up U.S. Government intervention was necessary to get permission for Motorola to serve the Tokyo cellular market.⁷⁷

Yet another approach considers the whole economy. The Structural Impediments Initiative (SII), launched by President Bush and Prime Minister Uno

in July 1989, sought "to identify and solve structural problems in both countries that stand as impediments to trade and to balance of payments adjustment."⁷⁸ In a June 1990 joint report, each side resolved to modify economic practices responsible for much of the bilateral trade imbalance. Japan pledged to decrease its trade surplus, for example, by increasing spending on public works projects, liberalizing restrictions on large retail stores, and enforcing its antimonopoly laws. The United States stated that to decrease its trade deficit it would, among other things, encourage more consumer savings; reduce the budget deficit; support commercially relevant R&D; reform various areas of Federal or State regulation, such as antitrust, product liability, and export controls; improve export promotion efforts; and improve education and work force training.⁷⁹ The countries agreed to seven follow-up meetings in the next 3 years, at the level of deputy or assistant cabinet officer and vice or deputy minister, to review progress, discuss problems, and produce annual joint reports.⁸⁰

The U.S. commitments stopped far short of the fundamental and wide-reaching changes necessary to reverse the competitive decline. In May 1991, the Administration noted that Japan had made "welcome progress in a number of areas" during the SII agreement's first year, though "additional progress in all areas is necessary in order to contribute further to the goals of opening markets, reducing trade and current account imbalances, and improving the quality of life in Japan."⁸¹ Most observers outside the U.S. Government are less optimistic. Some commentators believe that the SII talks will not substantially open Japanese markets, and that the only approach that will work is to demand specific market shares, as was done for semiconductors.⁸²

The U.S. Government has also used a systematic approach to deal with the EC's evolving trade and industry policies. An interagency task force, led by USTR, was formed in early 1988 to study EC-92 and help avoid a "Fortress Europe" with strong trade barriers to outsiders. The task force has 12 working groups on specific issues, such as technical standards, quantitative restrictions, investment, and rules of origin.⁸³ It has established U.S. Government positions, developed relationships with EC officials, and negotiated to influence EC legislation before it is agreed to at the EC level. The task force has influenced EC policies in areas including standards-

setting procedures, reciprocity provisions, and rules of origin.

SUBSIDIES AND DUMPING

Subsidies and Dumping: What They Are, Why They Matter

Governments can by domestic policies give their national industries advantages in international competition. Occasionally governments have made out-right payments to firms; more commonly, benefits take a less direct form, such as R&D support, tax breaks, loans on preferential terms, and provision of raw materials at below-market prices. Recognizing that such benefits can adversely affect industries in other countries, GATT sometimes permits those countries as a countermeasure to levy extra import duties called countervailing duties. Countervailing duties are allowed only if the benefits constitute a "subsidy" under the law. GATT does not directly define subsidies; U.S. law defines a subsidy as "any bounty or grant" paid "upon the manufacture or production or export of any article or merchandise."~

Subsidies are of two types: export and domestic. Export subsidies apply only when goods are exported. For example, in 1985 New Zealand paid its producers of carbon steel wire rod 10.5 percent of the value of the exported product.⁸⁵ Other examples include preferential loans to finance exports and a reduction in corporate income tax conditioned on export performance. GATT largely prohibits export subsidies.⁸⁶

Domestic subsidies are those paid whether or not goods are exported. Benefits might be in proportion to the firm's total production--e.g., the provision of a raw material at a below-market price. Or benefits might be given to the company with no clear relation to a particular product; this could occur, for example, with R&D support or preferential loans for capital investment. Under U.S. law, domestic subsidies must be limited to "a specific enterprise or industry, or group of enterprises or industries." ⁸⁷ Broader benefits enjoyed by companies in other countries, such as a better educated work force or easier access to long-term financing for all manufacturers, do not count as subsidies.

As acknowledged by the GATT Subsidies Code, domestic subsidies "are widely used as important instruments for the promotion of social and eco-

nomic objectives." ⁸⁸ Accordingly, GATT does not prohibit domestic subsidies. However, the GATT Subsidies Code considers that domestic subsidies, by giving one nation's businesses an advantage in international competition, "may cause or threaten to cause injury to a domestic industry" in another nation.⁸⁹ In such circumstances, GATT permits the second nation to levy a countervailing duty. It is imposed in addition to any other duties normally collected and must be no more than the value of the subsidy. For example, if a foreign nation provided coal at below-market prices to steel companies, saving \$10 per ton of steel produced, then the maximum countervailing duty allowed would be \$10 per ton.

It is not always possible to levy countervailing duties to fully capture and neutralize the benefits foreign companies receive from their governments. GATT permits an alternative countermeasure: antidumping duties, **which can be imposed only when a foreign firm is "dumping."** Dumping is the selling of goods in an export market at less than a benchmark 'fair value.' The benchmark is the price in the home market "in the ordinary course of trade."⁹⁰ If no such home market price exists because, for example, there are no home market sales or the home market sales are not made in arm's length deals⁹¹, then the benchmark can be either the price in the ordinary course of trade in a third country, or a price constructed from "the cost of production. . . plus a reasonable addition for selling cost and profit."⁹²

Although GATT appears to relegate costs to a subordinate role, as an option only when home market price cannot be used, the United States and other major users of antidumping duties interpret these provisions as giving costs a primary role. These countries provide that sustained home market sales at a price below the cost of production (excluding profit) will not be deemed to be in the ordinary course of trade and should be disregarded in determining the home market price. Therefore, any home market price actually used will normally be at least the cost of production excluding profit; sales below this level will be considered dumping. If all of the home market sales for a sustained period are below the cost of production excluding profit, then there will be no home market price in the ordinary course of trade, so that the benchmark used will be a constructed price consisting of costs including profit.⁹³

GATT states that dumping “is to be condemned if it causes or threatens material injury to an established industry,” or “materially retards the establishment of a domestic industry,” in the importing country.⁹⁶ GATT does not prohibit dumping in these circumstances. Rather, as with domestic subsidies, it allows the importing country to levy an antidumping duty, which must not be more than the amount necessary to bring the price up to the benchmark value. This amount is called the “dumping margin.” Antidumping duties, like countervailing duties, are in addition to any other duties normally collected.

Sustained dumping by foreign producers is often a sign that those producers enjoy an advantage in international competition due to either government policies or societal features such as industry structure and habitual business practices, which themselves may result in part from government policies. This is true for both price-price dumping (selling in an export market for less than at home or in another export market) and price-cost dumping (selling in an export market for less than costs). With price-price dumping, the foreign producer can use its sales in the high-priced market (usually the home market) to subsidize its sales in the low-priced export market. The price difference is often due to protection in the high-priced market.⁹⁷ While one way to end the foreign firms’ advantage might be to remove the foreign market barriers, in practice that can be difficult.⁹⁸ Sometimes the foreign producers’ home government tolerates or even encourages cartel pricing; this elevates the home market price beyond what it would be with protection alone and increases the profits from home market sales that are available to subsidize low-priced exports.

Price-cost dumping indicates that the foreign supplier has a special advantage. Sustained sales below cost are normally possible only if the sales are somehow subsidized. In some cases, countervailing duty law could be used instead of antidumping law. Countervailing duty law could address subsidies provided by the government, and even those provided by related firms (e.g., in a Korean *chaebol* or Japanese *keiretsu*).⁹⁹ But a firm’s cross-subsidy between product lines would not come under countervailing duty law, so that only antidumping law could provide relief.

Sustained sales below cost could be part of a long-term plan to gain experience and market share

in a high-reward industry, which could lead to high future profits that might more than pay back the loan with interest.⁹⁸ In this case, the sales need not be subsidized, they need only be financed. For example, in the mid-to-late 1980s, capital for industrial growth was available to Japanese firms on better terms and with less pressure for short-term profits than in the United States. This included funding from the government, banks, and related firms.⁹⁹ Japanese dumping of DRAMs in the mid- 1980s can be viewed in this light; U.S. firms did not have the financial backing to undergo the massive losses that the larger Japanese firms swallowed, so most U.S. DRAM producers exited the field. Japanese firms emerged as the dominant producers.

When used in high-reward industries, both price-price and price-cost dumping can enable producers to achieve economies of scale and learning. Both types of dumping can help utilize excess capacity in industries experiencing slack demand. For example, during the late 1970s and the early 1980s, there was a worldwide excess steelmaking capacity. Steel firms in the EC, Japan, and many other countries had substantial market protection at home while they dumped in the more open U.S. market.¹⁰⁰ Since their facilities would otherwise stand idle, foreign firms could cut their losses by selling in the U.S. market for more than their variable costs, even if that was less than they charged at home, and less than their fully allocated costs.¹⁰¹

In the United States, it has often been said that subsidies and dumping are unfair. This label irritates foreign firms and countries accused of these practices, who often do not consider that they have done anything unfair. Rather than debating whether these practices are unfair, it is more helpful to recognize that government action, societal structure, or a combination of the two can give foreign firms a special advantage against which U.S. companies often cannot compete unaided. Countervailing and antidumping duties should be seen “not as a response to so-called unfairness, but rather as an ‘interface’ or buffer mechanism to ameliorate difficulties . . . caused by interdependence among different economic systems.”¹⁰²

Countervailing Duty and Antidumping Cases

The United States and other countries have laws to provide for investigations of subsidies and dumping and assessment of countervailing and antidump-

ing duties.¹⁰³ Figures 4-4 and 4-5 show the countries most active in these proceedings, based on new investigations completed from January 1987 through June 1990. During this period the United States was the leading user of countervailing duty proceedings; Latin America, the Pacific Rim, and the EC were leading targets. The United States, Australia, Canada, and the EC most often used antidumping proceedings, while the Pacific Rim (especially Japan and Korea), the EC, nonmarket economies, Central and South America, and the United States were the primary targets. Antidumping cases were far more common than countervailing duty cases. Tables 4-4 and 4-5 detail who brought cases against whom and how many resulted in some final government action.¹⁰⁴ Tables 4-6 and 4-7 list how many final actions by each country were outstanding as of June 30, 1990.¹⁰⁵

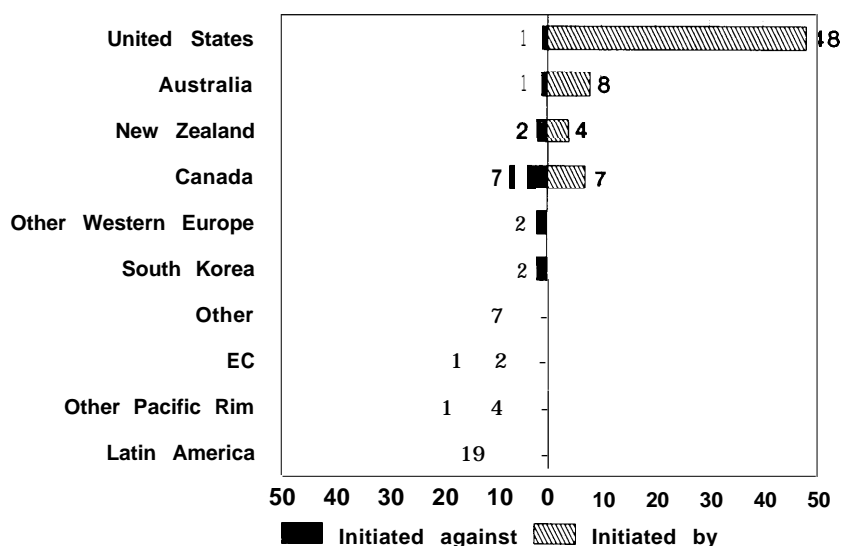
From these figures and tables it appears that in recent years the United States has been by far the biggest user of both countervailing and antidumping duties. This does not necessarily mean, however, that the United States is more aggressive in their use. The United States has a large, relatively open market that attracts imports. Countries with more market barriers have less need to impose countervailing and antidumping duties. The United States' principal trading partners use subsidies more often,¹⁰⁶ so the

United States has more occasion to levy countervailing duties. As for antidumping cases, the United States has not always been out in front. In the 1980s, Australia brought 30 percent of all reported cases; the United States brought 28 percent, Canada 20 percent, and the EC 19 percent.¹⁰⁷

GATT allows countervailing and antidumping duties only if "the effect of the dumping or subsidization . . . is such as to cause or threaten material injury to an established domestic industry, or is such as to retard materially the establishment of a domestic industry."¹⁰⁸ This condition is called the injury test or requirement. Under U.S. law, the injury or threat of injury must be caused by the dumped or subsidized "imports" rather than by the "dumping or subsidization" itself.¹⁰⁹ U.S. law imposes the injury test in every antidumping case; for countervailing duty cases, however, the injury requirement applies only to countries that have signed the GATT Subsidies Code (this includes the United States' major trading partners), have "assumed obligations with respect to the United States which are substantially equivalent to obligations" under the GATT Subsidies Code, or are otherwise entitled by international agreement to application of the injury test.¹¹⁰

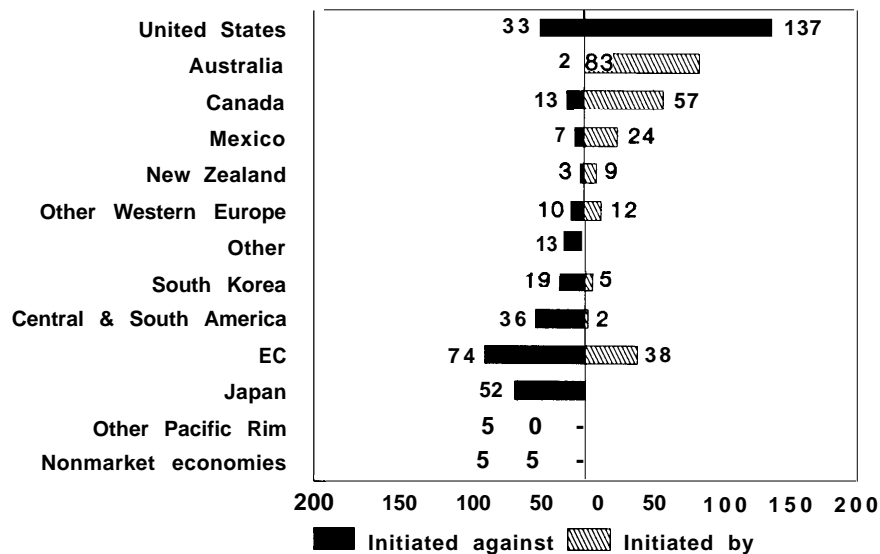
The Department of Commerce determines whether goods are subsidized or dumped and by what

Figure 4-4-New Countervailing Duty Cases Completed, January 1987 Through June 1990



SOURCE: Semiannual filings by signatories of the GATT Subsidies Code to the Committee of Signatories, provided by the U.S. Department of Commerce, International Trade Administration.

Figure 4-5-New Antidumping Cases Completed, January 1987 Through June 1990



SOURCE: Semiannual filings by signatories of the GAIT Antidumping Code to the Committee on Anti-Dumping Practices, provided by the U.S. Department of Commerce, International Trade Administration.

Table 4-4-New Countervailing Duty Cases Completed January 1, 1987 Through June 30, 1990

	Cases filed against:										
	United States	Australia	New Zealand	Canada	Other Western Europe	South Korea	Other	EC	Other Pacific Rim	Latin America	Total
Cases filed by:											
United States											
Final action			1	3	1	1	3	4	8	9	30
No final action			0	3	1	1	3	2	5	3	18
Australia											
Final action			1				0	1	0	0	2
No final action			0				1	1	1	3	6
New Zealand											
Final action		1						0			1
No final action		0						2			3
Canada											
Final action	1							1		1	3
No final action	0							1		3	4
Total											
Final action	1	1	2	3	1	1	3	6	8	10	36
No final action	0	0	0	4	1	1	4	6	6	9	29

SOURCE: Semiannual reports submitted by signatories of the GATT Subsidies Code to the Committee of Signatories, provided by the U.S. Department of Commerce, International Trade Administration.

Additional explanation is given in the accompanying text.

amount, and the ITC determines whether the injury test is satisfied. While the government can start an investigation on its own, that very rarely happens; usually an investigation begins only when industry petitions the government and sets out sufficient

grounds for believing that subsidies or dumping have occurred and that the injury requirement is satisfied. The petition must identify any known foreign manufacturers and exporters, as well as U.S. importers, wholesalers, and retailers of the foreign

Table 4-5—New Antidumping Cases Completed Jan. 1, 1987 Through June 30, 1990

Cases filed by:	Cases filed against:												
	United States	Australia	Canada	Mexico	New Zealand	Other Western Europe	Other	South Korea	Central and South America	Japan	Other Pacific Rim	non-market economies	Total
United States													
Final action . . .	0	7	2	2	3	5	4	11	21	20	12	11	96
No final action . . .	1	3	0	0	1	1	2	6	12	7	7	1	41
Australia													
Final action . . .	4	2	1	1	1	0	2	3	4	3	3	2	25
No final action . . .	3	0	2	2	1	5	2	4	16	2	3	0	58
Canada													
Final action . . .	8	0	0	0	1	0	2	2	7	3	8	5	36
No final action . . .	5	1	1	1	0	1	2	1	4	3	0	4	21
Mexico													
Final action . . .	4	4	2	2	2	2	2	2	4	3	0		10
No final action . . .	7	7	4	4	4	3	0						14
New Zealand													
Final action . . .	0	4	1	1	3	1	8		4	0	3	1	8
No final action . . .	1	1	0	0	0	0	0		0	0	0	0	1
Other Western Europe													
Final action . . .	1	1	1	1	1	1	1	1	1	1	1	11	2
No final action . . .	0	0	0	0	0	0	0	0	0	0	0	0	0
South Korea													
Final action . . .	0	0	0	0	0	0	0	0	1	1	1		3
No final action . . .	0	0	0	0	0	0	0	0	0	2	0		2
Central and South America													
Final action . . .	0	0	0	0	0	1	4	2				1	2
No final action . . .	0	0	0	0	0	0	0	0				0	0
EC													
Final action . . .	2	0	4	4	1	4	4	2	2	7	2	9	31
No final action . . .	0	1	0	0	1	1	1	1	1	2	1	0	7
Total													
Final action . . .	18	0	9	6	1	7	6	12	20	39	29	40	223
No final action . . .	15	2	4	1	2	3	7	7	16	35	21	15	144

SOURCE: Semiannual reports submitted by signatories of the GATT Antidumping Code to the Committee on Antidumping Practices, provided by the U.S. Department of Commerce, International Trade Administration.

Additional explanation is given in the accompanying text.

Table 4-6--Outstanding Measures Against Subsidies as of June 30, 1990

Country	Duties	Negotiated quantity restraint or other agreement	Total
United States	73	13	86
Canada	NA ^a	NA ^a	9
Australia	NA ^a	NA ^a	1

^aNA - Not available. Canada and Australia did not describe the nature of their outstanding orders.

NOTE: All other signatories reported no outstanding orders.

SOURCE: Semiannual reports submitted by signatories of the GAIT Subsidies Code to the Committee of Signatories, provided by the U.S. Department of Commerce, International Trade Administration.

Table 4-7-Outstanding Antidumping Measures as of June 30, 1990

Country	Duties	Price undertakings	Total
United States	192	6	198
EC ^a	82	53	135
Canada	69	12	81
Australia	12	0	12
New Zealand	N A ^a	N A ^a	11

^aData for the EC is as of Feb. 1, 1990. The EC filed no Semiannual report for the first half of 1990; that would normally imply that no additional action had been taken.

^aNA = Not applicable. New Zealand did not describe the nature of its outstanding orders.

NOTE: All other signatories reported no outstanding orders.

SOURCE: Semiannual reports submitted by the signatories of the GAIT Antidumping Code to the Committee on Anti-Dumping Practices.

goods. Those respondents are invited to participate in the investigation, along with the government of the foreign country involved.

Figures 4-6 and 4-7 show the progress of antidumping and countervailing duty cases through the Commerce Department and the ITC, along with the number of cases that have progressed through each stage for all cases completed between January 1987 and June 1990. The figures show that cases with the injury requirement progress through three stages. At each stage, the case can end with no relief; only if all three stages are passed is relief granted. First, the ITC makes a preliminary determination of whether there is reason to believe that the injury requirement could be satisfied. Second, the Commerce Department determines whether the imports at issue are subsidized or dumped, and if so by how much. Third, the ITC makes its final determination of whether the injury test is satisfied.

If subsidies or dumping are found, and if any applicable injury test is passed, the government

issues an order, enforced by the Customs Service, assessing countervailing or antidumping duties in an amount equal to the subsidy value or dumping margin. In dumping cases, each subsequent shipment is assessed an antidumping duty based on how much that particular shipment is priced below the benchmark "fair value." Thus, foreign exporters can avoid paying any duty by raising prices up to the fair value, which they often do. In both subsidy and dumping cases, annual reviews are conducted on request to determine whether the amount of subsidy or the "fair value," respectively, has changed. If so, the duties already paid for that year are adjusted; the exporter then pays any additional amount due or is refunded any overpayment. The U.S. Government sometimes accepts an agreement by the foreign government or exporters to eliminate the subsidy or limit the quantity of exports to the United States, in lieu of a countervailing duty.¹¹¹ Or, instead of levying an antidumping duty, the United States might accept an agreement by the foreign exporters to raise prices.¹¹²

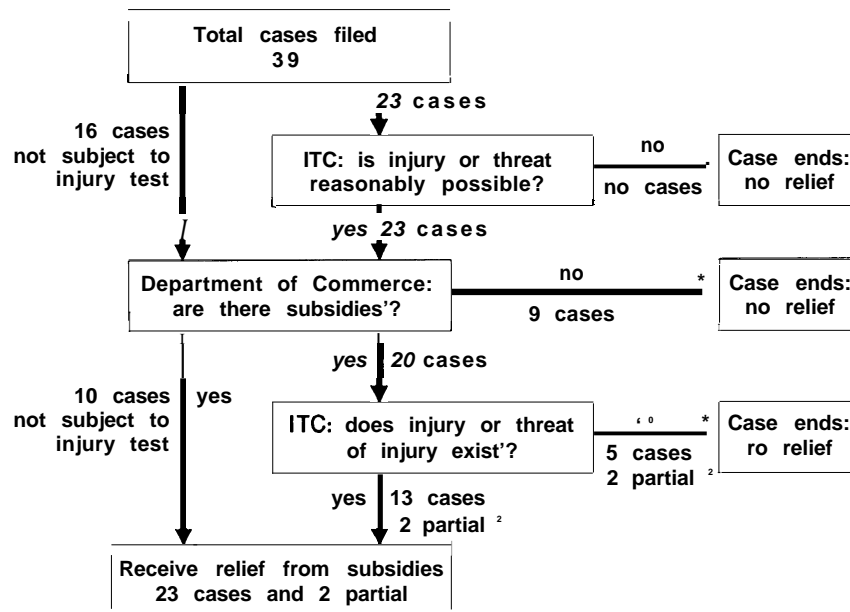
The Effectiveness of U.S. Countervailing Duty and Antidumping Law

Countervailing duty and antidumping laws have helped somewhat to protect U.S. industries from advantaged foreign competition. However, the effect of these laws is limited. The reasons come in two clusters. First, the imposition of countervailing and antidumping duties is slow and uncertain. Second, even if they were promptly applied, countervailing and antidumping duties would often be inadequate to neutralize the advantage of foreign companies.

Delay and Uncertainty in Imposing Duties

The government normally will start an investigation only when an affected U.S. business files a petition. This takes considerable time and effort. The firm must suspect that subsidies or dumping are at work; it could take months or even years to piece together why certain sales were lost and conclude that there is more than just ordinary stiff competition. For example, a company might suspect dumping only after it is forced to make a series of painful price cuts in response to foreign competition. The company must be aware that a legal remedy exists; some firms, especially smaller ones, do not know that. Plus there is a certain inertia to overcome. The Torrington Co. waited until March 1988 to file petitions regarding dumping of ball bearings from

Figure 4-6-**Decisions in U.S. Countervailing Duty Cases Completed, January 1987 Through June 1990¹**



NOTES: 1. This table does not include 7 cases that were "terminated" before a final determination was made and 5 cases for which insufficient data was provided.

2. In these cases, injury was found for some of the products at issue but not for others.

SOURCE: Unpublished data, U.S. International Trade Commission.

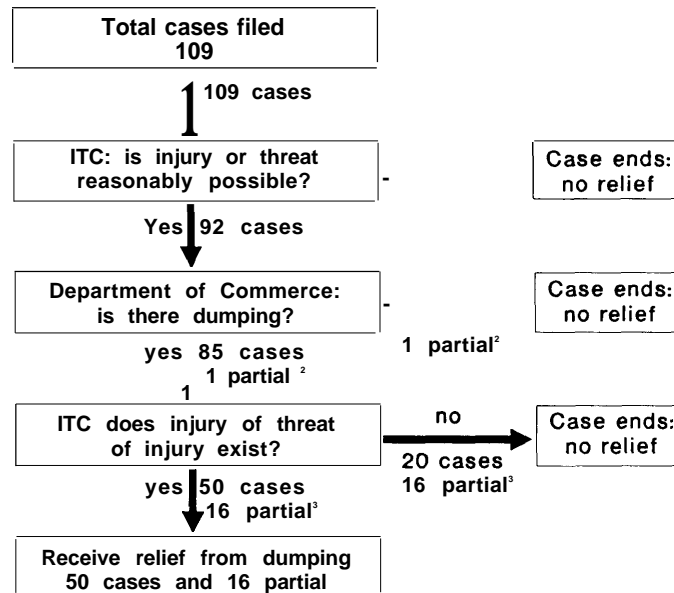
several countries, even though dumping and injury were apparent by early 1987.¹¹³ When asked about the delay, a Torrington official stated: "Most businessmen worry about the day-to-day order book. To start a trade action, you must sit back."¹¹⁴

To file a petition, a firm must present sufficient evidence of both injury and subsidies or dumping. Regarding subsidies, the petitioner must identify particular subsidy programs before the government will investigate them, but it can be difficult for U.S. firms to learn about these programs. With dumping, the petitioner must first get evidence of the prices at which the imported goods are sold in the United States. These prices would often be known only by the foreign producer and the domestic purchaser; those parties would not want to help the petitioner because any antidumping duties would be assessed against their goods. The petitioner then would have to document the foreign manufacturer's home market price or costs of production. This too can be difficult, especially if the petitioner has no presence in that country. Evidence concerning injury can be elusive, because at issue is the state of the whole domestic industry, not just the firm(s) filing the

petition. The other companies in the domestic industry might not wish to give petitioners the information they need; for example, they might be unwilling to share sensitive business information, or they might be foreign-owned, with loyalties to the respondents' Camp.¹¹⁵

Even if a firm comes up with the necessary information, other factors could dissuade it from preparing a petition and fighting the case. The first is expense, which typically ranges in the hundreds of thousands of dollars for the initial case (table 4-2), not counting employee time. Additional expense is incurred for court appeals, which are frequently taken, and for subsequent annual reviews, which are frequently conducted. Some recent cases have been quite expensive. For example, in 1989 Bethlehem Steel filed both an antidumping and a countervailing duty petition against steel rails from Canada, which resulted in substantial duties.¹¹⁶ To win the case at the Commerce Department and ITC, and to defend the victory on appeal, took over \$1 million.¹¹⁷ When cases are filed against more than one country, the expense increases. The ball bearings cases filed by the Torrington Co. in 1988 included nine countries,

Figure 4-7—Decisions in U.S. Antidumping Cases Completed, January 1987 Through June 1990¹



NOTES: 1. This table does not include 10 cases that were "terminated" (9 cases) or "suspended" (1 case) before a final determination was made.

2. In this case, dumping was found for some of the products at issue but not for others.

3. In these cases, injury was found for some of the products at issue but not for others.

SOURCE: Unpublished data, international Trade Commission.

at an estimated cost of \$4 to \$5 million.¹¹⁸ The high costs can discourage firms, especially smaller ones, from filing petitions.¹¹⁹ In estimating the expense, a firm must consider the many reasons why it could lose the case and that even a successful case might not provide effective relief. The expense, uncertainty, and difficulties of gathering information dissuaded U.S. manufacturers of rock crushing machines from filing a case in the late 1980s (box 4-b).

In response to the high legal and other fees as reported by the General Accounting Office (table 4-2), Congress in 1988 stepped up the role of the ITC's Trade Remedy Assistance Office (TRAO).¹²⁰ TRAO can help small businesses represent themselves. TRAO gives behind-the-scenes technical and legal advice, including explaining the law and procedures, identifying relevant precedents, consulting on strategy, and reviewing draft petitions and briefs prepared by the firm. Since the 1988 legislation, TRAO has helped several companies file and pursue dumping cases. While companies have been pleased with the assistance, there are some inherent limitations to how much TRAO can help. Petitioners

representing themselves have no access to confidential business information submitted by other parties; the ITC makes this information available only to outside counsel and consultants. This information is central to many cases, and lack of access puts a party at a tremendous disadvantage in formulating strategy and framing legal arguments. Further, even with TRAO's help, it requires immense effort for a firm to represent itself.

Businesses can be discouraged from filing petitions because they fear retaliation by the accused firm or a related one that might be the prospective petitioner's supplier or customer for some products, or by the foreign government. For example, it is widely believed that the U.S. commercial airframe manufacturers, Boeing and McDonnell Douglas, for many years did not file a countervailing duty case against large subsidies received by the members of the Airbus consortium from the governments of Britain, Germany, and France, for fear that those governments would direct their national airlines to buy fewer U.S. airplanes. As another example, in the spring of 1991, a survey by the U.S. and Japanese Governments found that auto parts were priced 108

Box 4-B—An Unfiled Dumping Case¹

The U.S. rock crushing machinery industry is composed of about nine companies with total annual sales of about \$175 million (including new units and spare parts). These machines are used in many public works and construction projects. The steady decline in infrastructure spending over the 1980s greatly reduced the demand for crushing equipment; 1989 sales were half those of 1979. The situation was made worse by sales lost to low-priced imports from Japan, Korea, and Taiwan that appeared in the early 1980s. After 1985, as the dollar was devalued the U.S. firms expected some relief, yet the imports' dollar price did not rise. Manufacturers lost sales in both 1987 and 1988 of some 20 to 30 machines out of 200 or 300 total sales in the United States; the west coast firms were hardest hit. Though the U.S. producers might well have been able to win a dumping case against the imports, they never filed one. The industry's attempts, and the problems it faced, show how hard it can be to use antidumping law, especially for small businesses.

One west coast producer, referred to here as Firm A, organized an ad hoc committee of manufacturers and acted as the spokesman to the government. The commerce Department's International Trade Administration (ITA) gave Firm A the legal definition of dumping. Since they were unable to determine the Japanese firms' home market prices, the U.S. manufacturers would have to show dumping on the basis that the Japanese machines in the U.S. market were priced below the cost of production. This required an analysis of the costs of production facing the Japanese companies. The major costs of making rock crushing machines are materials and labor. Because the overwhelming material input is steel, which as a commodity would normally cost about the same anywhere in the developed world, Firm A believed that the material costs of U.S. and Japanese machines might be equal. Using this assumption, and knowing that the Japanese producers also had shipping and duty costs, Firm A was fairly sure that Japanese labor and other costs could not be low enough for the price of the imported machines to be above cost.

However, the foregoing analysis was not sufficiently rigorous to get ITA to initiate an antidumping case. The U.S. manufacturers understood this, but did not know how to proceed. ITA had sent some questionnaires whose answers would supply the necessary information, but those forms were imposing and Firm A thought they would be very difficult to complete. An analysis along the lines given below might have been sufficient to induce ITA to initiate a case. The analysis below, summarized in table B-1², is for one representative Japanese model and its counterpart produced by Firm A. The analysis would have to have been performed for all import models at issue.

List Price:

List prices were readily available from promotional literature. List prices represent the maximum possible retail price, and most machines are sold below list. Unconfirmed reports of Japanese machines being sold at substantial discounts, some as high as 40 percent, were not uncommon. For the calculation, the list price was used initially, with discounts considered afterward.

Dealer Markup:

It was assumed that retailers of imported crushing machinery receive the same percentage markup as retailers of U.S. made machinery. U.S. machinery producers believed that the markups were similar, though they could not prove it.

Duties and Shipping Costs:

Data on shipping and duty charges were readily available and required no estimation.

Table B-1—Estimated Cost Breakdown of Rock Crushing Machinery, Jaw Crusher Type

	U.S. firm	Japanese firm
List price	1,600	1,000
Less dealer mark-up	-320	-200
Wholesale price (to producer)	1,280	800
Less duties	0	-24
Less shipping costs	0	-54
Factory price	1,280	722
Costs: Material	377	377
Direct labor	194	136
Variable overhead	349	209
Fixed overhead	147	74
Total costs	1,067	796
Profit (negative number for loss)	213	-74
(Factory price minus total costs)		
Dumping margin		9.3%
(Loss divided by wholesale price)		

NOTE: The figures given do not represent dollars. They are given in an undisclosed unit of currency, to protect proprietary business information. The table contains slight rounding errors.

SOURCE: Office of Technology Assessment, 1991.

¹This box is based on interviews with firm executives, the trade lawyer consulted by the firms, and a former Department of Commerce official.

²The figures in table B-1 do not represent dollars. The currency unit used is not disclosed, in order to protect proprietary business information.

Factory Price:

Factory price is the amount the producer receives, not counting any duties and shipping costs. To prove dumping based on below-cost sales, factory price must be less than the costs of production.

Material Costs:

The major material input was carbon steel. According to U.S. manufacturers, all other materials costs were insignificant. Carbon steel is a commodity good traded worldwide. Steel prices faced by Japanese competitors might then be assumed to be equal to those faced by U.S. firms. As the comparable machines weigh the same amount, it was assumed that the same amount of steel is used. Thus, material costs were assumed to be equal.

Direct Labor Costs:

Japanese labor costs had to be estimated. The Department of Labor does make international comparisons of wage rates, but not for specific industries. The rock crusher workers in the United States were paid more than the average industrial wage, but because no data is available on rock crusher workers in Japan, as a conservative assumption the average industrial wage in Japan was used. The labor cost estimate also assumed that Japanese labor was 10 percent more productive; that is, if it took 100 hours to build a U.S. machine, it took 90 hours to build a Japanese machine.

Variable Overhead and Indirect Labor Costs:

The estimates of Japanese variable overhead costs (e.g., energy consumption, worker benefits, and workmans' compensation) were more difficult to make than estimates of wages. Without access to hard data, variable overhead costs incurred per hour of direct labor in Japan were conservatively assumed to be two-thirds as much as the variable overhead costs incurred per hour of direct labor in the United States. (The figure in the table also reflects the assumption given above that Japanese labor was 10 percent more productive.)

Fixed Overhead:

Data on fixed overhead costs in Japan are not available. For the U.S. machine, fixed overhead was about 16 percent of the total of the other costs (material, direct labor, variable overhead). Without direct data, fixed overhead for the Japanese machine might conservatively be assumed to be about 10 percent of the total of the other costs.

As table B-1 shows, under these assumptions Japanese firms were dumping. Even with sales at list price, the dumping margin (the cost minus price, divided by price) was 9.3 percent. Moreover, both domestic and foreign rock crushers were rarely sold at list price. One reported Japanese sale was at 40 percent off list. If the wholesale price was similarly reduced by 40 percent, then, using the same cost assumptions, that sale would have a dumping margin of 89 percent.

To win a dumping case, the U.S. manufacturers would also have to prove injury. Under the law, a sizable number of sales lost to dumped goods can constitute injury if those sales were lost on the basis of price. In both 1987 and 1988, an estimated 20 to 30 imported crushers were sold in the United States, all in the west coast region, competing primarily with Firm A and one other firm. All evidence available to Firm A from its customers indicated that price was, in fact, the overriding factor. Comments such as, "we liked the way you [the domestic producers] do business but, their price was just too low" were typical. These lost sales probably constituted roughly 10 percent of the U.S. market for new machinery. Lost sales of this magnitude, if they could be proved, would stand a good chance of satisfying the injury requirement.

However, the U.S. producers did not perform the above analysis, for they did not know how. Instead, they consulted an experienced trade lawyer. The lawyer explained that, while a dumping case had a fair chance of success, it would cost about \$1 million. While this was a substantial amount to an industry with an annual profit only in the range of \$5 to \$10 million, especially since the chance of winning the case was far from certain, for the industry as a whole it probably would have been manageable. However, because the imports competed only in the west coast market, many of the companies whose sales were concentrated elsewhere did not feel injured enough to justify a large expense. The two firms bearing the brunt of the injury did not feel able to bear the bulk of the case's cost.

In principle, the firms could have filed a petition on their own, and if the Commerce Department accepted the petition then the Commerce Department and the International Trade Commission would investigate dumping and injury respectively, whether or not the U.S. producers hired a lawyer. However, this arrangement would have required considerable employee time to develop the petition. Moreover, the lack of an attorney would pose two serious practical problems. First, a petition would need to contain companies' confidential business information

Continued on next page

Box 4-B—An Unfiled Dumping Case¹ Continued

regarding sales, prices, customers, profits, and so on. They could not share this information with each other. An outside attorney could take all pertinent information from the firms in confidence, combine it as needed in the petition, and designate certain information in the petition as confidential. Without an outside attorney, the firms were stuck. As the case developed, the other side (foreign manufacturers and importers) would submit confidential business information of its own as key elements of its case. While an outside attorney for the U.S. producers could have access to such information, the companies themselves could not. Thus, if they argued the case without an outside attorney, the U.S. firms would have no way of refuting key arguments of the other side, since they could not know what those arguments were.³

The Department of Commerce could initiate an investigation on its own on behalf of the U.S. industry. However, the Department of Commerce has done so only once in hundreds of cases. While the Department may have considered doing so in this case, it ultimately decided not to. The producers were forced to ride out the dumping without remedy. In this case, riding it out seems to have worked. The continued low value of the dollar and increased labor costs in Japan and other Asian countries have combined to push the price of imports up. Additionally, the continued decline in U.S. demand may have dissuaded foreign firms from buying a large market share through dumping. Domestic producers say the Japanese are still selling in the United States, but not with the same “sell at any price” fervor.

This case highlights some problems faced by small firms in trying to attain relief from dumping. The problems included difficulty in getting needed data on foreign firms’ costs and prices, difficulty in collecting industry-wide data, difficulty in justifying the payment of legal fees (especially since success was uncertain), and a general lack of familiarity with the law.

³The firms would be given **nonconfidential** summaries of the confidential information, but those summaries would usually omit important details.

percent higher in Japan than in the United States. The Commerce Department’s Auto Parts Advisory Committee, a group of 35 industry representatives, advised that the Commerce Department initiate a dumping case on its own. The Committee explained that industry would be reluctant to file antidumping petitions, partly because of the need to preserve business relationships with Japanese firms.¹²¹ Filing petitions can also anger U.S. customers who stand to be deprived of cheap imported goods.

After a petition is filed, a case takes time to yield results. Provisional duties are not imposed until the ITC first finds reason to believe the injury testis met and the Department of Commerce makes a **preliminary** finding of dumping or subsidies. This usually takes over 5 months for dumping cases and almost 3 months for subsidy cases.¹²² The duties ordinarily apply only to goods that clear customs after the preliminary determinations are made and published, though in rare cases the Commerce Department will seek to collect duties retroactively for up to 90 days.¹²³ The Commerce Department’s preliminary determination is often based on unverified statements by the foreign manufacturers. Only after a final determination, usually another 21/2 months,

will the duties collected be based on verified information.¹²⁴ Even these relatively modest delays could be important for products with short life cycles. Moreover, these delays must be added to the time it takes for a business to suspect subsidies or dumping and to prepare a petition.

Additional delay can occur if further proceedings, and perhaps court appeals, are necessary to get duties assessed. One example is that after a countervailing duty order is in place, subsidy levels can be increased; it will take at least a year or two before the Commerce Department determines the new subsidy level in an annual review. In while increased duties will be assessed retroactively, the underresponse to the subsidy in the interim could allow the foreign producer to capture market share.

An extreme example of delay pending review is the case of portable electric typewriters from Japan. In May 1980, Smith Corona Corp. obtained an antidumping order against these products.¹²⁶ Within 2 years after this order, Japanese firms started exporting portable typewriters that included memory. In January 1987, the Commerce Department ruled that the typewriters with memory did not come under the scope of the 1980 antidumping order.¹²⁷

Three court appeals later, in September 1990, the U.S. Court of Appeals for the Federal Circuit ruled that these typewriters did come under the 1980 order, and ordered the collection of antidumping duties.¹²⁸ However, antidumping duties could no longer be collected on typewriters imported in the intervening 8 or 9 years.¹²⁹ Delays of several years can also occur because of ineffective enforcement; sometimes the duties are never collected.¹³⁰

Effective relief is sometimes held up because one case after another must be filed. Each countervailing duty or antidumping case must name a specific product or group of products already entering the United States from a specific country of origin. However, after a case is won and countervailing or antidumping duties stem the flow of goods from the country named, the flow of dumped or subsidized goods can start up again from other countries. The Torrington Co. claims that this happened in the late 1980s with ball bearings, when several multinational firms switched production to facilities in other countries.¹³¹ If foreign producers can easily switch production capacity among different final products, a producer might export one product until a countervailing duty or antidumping order issues, and then switch to another product. This occurred with steel in the 1980s.¹³² After hundreds of cases were filed starting in 1982, in September 1984 President Reagan announced that countervailing duty and antidumping cases had been “slow, cumbersome and incomplete in remedying [the U.S. steel industry’s] injuries.”¹³³

Antidumping and countervailing duty orders are simple to circumvent for goods whose final stage assembly is easily moved across national borders. Such a move can put the goods out of the reach of a previous order;¹³⁴ thus, a new pattern of subsidized or dumped imports could go unimpeded until a new case was filed and a new order obtained. In 1988, Congress added so-called ‘anticircumvention’ provisions so that the initial order can sometimes cover the new import patterns. However, these provisions apply only in very limited circumstances and will likely have little effect.¹³⁵ It might not be possible to strengthen these provisions while staying consistent with GATT as it now stands.¹³⁶ In the Uruguay Round, the United States and the EC have proposed that GATT should explicitly permit certain anticircumvention measures, to deal not only with cases of relocated final assembly but also with relocated parts production, as occurred with ball bearings.

Another possible impediment to relief, in the case of subsidies, is the specificity test. As discussed, a government program is counted as a subsidy only if it in fact selectively benefits a specific firm or industry, or group of firms or industries; programs granting equal benefit to a broad range of firms and industries are not counted. Foreign countries can phrase their laws so as to paint benefits as widely available, even when in practice they are not. Former U.S. Government officials representing foreign firms in trade cases could coach foreign governments on how to do this. When foreign laws appear to grant benefits to a wide range of firms, often as a practical matter the difficult task of proving that the benefits are indeed selective falls on petitioners.

In other ways as well, the Commerce Department at times does not recognize certain subsidies. For example, the Commerce Department does not count R&D subsidies if the results are made public, but making the results public does not negate the benefits to the firm of being among the first to know and the most familiar with the new discoveries. As another example, if a foreign government disguises a long-term loan as a series of short-term loans, the Commerce Department often will count it as short-term; this can decrease the computed subsidy if, as is most often the case, the market interest rate for long-term loans exceeds the market rate for short-term loans.

Another important limitation on the effectiveness of countervailing duty and antidumping law is the injury test. U.S. law, implementing GATT’s requirement, provides that antidumping and countervailing duties cannot be levied unless ‘by reason of imports of [dumped or subsidized] merchandise or by reason of sales (or the likelihood of sales of that merchandise)’ either an “industry in the United States” is “materially injured” or “threatened with material injury,” or “the establishment of an industry in the United States is materially retarded.” Congress has further defined ‘material injury’ as ‘harm which is not inconsequential, immaterial, or unimportant,’ and has specified certain factors to be considered, such as the volume and trend of imports, whether the imports depress or suppress prices, and sales, profits, and capacity utilization in the affected industry.¹³⁷ It is up to the ITC, which determines injury in U.S. cases, to evaluate and weigh the factors. The ITC has considerable discretion and the courts seldom overturn its decisions.

As shown in figure 4-7, the injury test is the primary reason why petitioners lose antidumping cases. Well under one-tenth of the cases (6 cases, plus 1 partial case, out of 109) are lost because no dumping is found. In contrast, one-third of the cases (37 out of 109) are completely lost because no injury is found, and about half of the cases (53 out of 109) are lost completely or in part because no injury is found. Figure 4-6 shows that, while a factor, the injury test in countervailing duty cases is less important. Of 39 cases, 23 were subject to the injury test. Of those, 5 whole cases and 2 partial cases were lost because of the injury test.

The injury test adds expense. The legal fees and other expenses needed to prove injury are often greater than those needed to prove subsidies or dumping. Sometimes they are quite large. For example, in 1988 and 1989 The Torrington Co. spent a quarter of a million dollars on economic consultants merely to criticize and comment on an economic model proposed by Commission staff to analyze the injury. Torrington believed its opposition spent an equivalent sum.¹³⁸ While much of this expense is unavoidable due to the complex, technical subject matter, the ITC's approach to injury determinations does add to it. The ITC determines each case on its own facts, without articulating or following rules of general applicability. One such rule could be that a drop in profit of a certain percentage of sales, if linked to the imports, normally establishes the requisite injury. Without 'safe harbor' rules such as this, petitioners are compelled to develop the facts and argue the law for all possible factors that the ITC might consider—profits, sales, capacity utilization, and so on. The ITC's case-by-case approach also makes case outcomes less predictable, which can discourage petitioners from filing complaints.

The injury test poses a particular problem for firms seeking relief in good economic times, at the beginning of a product cycle, or before much damage has been done. As the ITC has interpreted the test in some recent cases, industries that appear fairly healthy in an absolute sense and whose health has not recently declined will likely fail the injury test, even if they would have done far better if not for the subsidized or dumped imports. This happened in a case decided in January 1989 concerning digital readout (DRO) systems from Japan. The Commerce Department had found large dumping margins on DRO systems, ranging from 39 to 55 percent.¹³⁹

DRO systems consist of two components: a transducer, which measures the position of equipment such as metalworking machine tools during operation, and a console, which displays the result in digital form. In determining injury, the International Trade Commission considered console production and transducer production to be two separate industries, and made a separate determination for each industry.

Four Commissioners, a majority of the six-member International Trade Commission, ruled that the required injury was not present for either industry. The Commissioners never considered whether the dumped imports made the industries less successful than they otherwise would have been.¹⁴⁰

Two Commissioners dissented. They pointed to strong economic evidence, supplemented by an admission by one of the major Japanese manufacturers, that the Japanese firms had maintained their market share only by dumping.¹⁴¹ They also noted strong evidence that the dumped imports had substantially lowered the price for DRO systems in the U.S. market.¹⁴² These two Commissioners believed that injury should be considered primarily in terms of the *effect of the dumping*, rather than the general health of the industry. The majority approach can make it hard for U.S. firms to win dumping cases early in a product cycle (when markets are growing) or before significant damage has been done. This can put companies in a dilemma: file a case early and risk that not enough injury will be found; or file later, when the damage is substantial and hard to reverse.¹⁴³

The DRO systems case shows another hurdle in the application of the injury test. In assessing the health of the domestic industry, the Commission considered export sales together with domestic sales. Under this approach, even if subsidies or dumping severely hurts the domestic industry in its home market (the only market that U.S. countervailing or antidumping duties can address), no relief will be obtained if the U.S. industry's export sales of consoles are strong enough to make the overall industry healthy. In the DRO case, export sales were apparently much more profitable than domestic sales, which appeared to be made at a loss.¹⁴⁴

The injury test permits the respondents to claim that the domestic industry's troubles came not because it was undersold but for other reasons. When credible alternative reasons are offered, often as a practical matter the burden of proof shifts to the

petitioners to show that the low-priced imports were responsible for at least some of the material injury. This issue arose in a case brought in 1990 by National Label Co., a firm in Lafayette Hill, Pennsylvania.¹⁴⁵

National Label made pressure-sensitive polyvinyl chloride covers for alkaline and some other batteries. These covers used a new technology that expands battery life.¹⁴⁶ National Label had been making the battery covers under a 1986 patent and trade secrets **license from Zweckform, a German firm, which gave National Label the** exclusive right to exploit the technology in North America. Relations between the two firms soured, however, and in December 1988 Zweckform told **National Label it was terminating the license**, and (according to National Label) began approaching potential U.S. customers. National Label asserted that Zweckform did not have the right **to terminate its** exclusive license and sued Zweckform in Federal court to stop it from selling in the U.S. market.¹⁴⁷ In January 1990, National Label also filed an antidumping petition, alleging that Zweckform was dumping battery covers in the U.S. market with the intent to drive National Label out of the business.

National Label maintained that it had been injured in at least two ways: first, that it had lowered its prices to keep from losing sales to its principal customer, Eveready; and second, that it had lost a sale to a prospective new customer, Mutec, a potentially powerful new entrant into the battery market backed by Matsushita and Kodak. Regarding its Eveready account, National Label submitted sworn statements by its president that in March 1989, Zweckform representatives visited Eveready's office in Chicago and an Eveready official present at that meeting told him later that Zweckform had solicited to sell Eveready battery covers for the U.S. market. In April 1989, according to the statement, Zweckform gave him a choice between selling his battery cover business to Zweckform or being driven out of the business through deliberate below-cost pricing by Zweckform in the U.S. market.¹⁴⁸ However, Zweckform disputed the facts of the case, claiming that the March 1989 meeting in Chicago was to discuss the European market only, and that Zweckform had never approached Eveready regarding the U.S. market.¹⁴⁹ Apparently Eveready told the Commission that Zweckform's version of the facts was correct. The Commission agreed with Zweckform and found that Zweckform had not offered to

sell to Eveready, and therefore could not be held responsible for National Label lowering its prices to Eveready.¹⁵⁰

Regarding the prospective Mutec account, Zweckform said that it won the sale to Mutec because National Label's samples did not meet Mutec's specifications, rather than because National Label charged more. Mutec gave testimony agreeing with Zweckform. National Label disputed this point, arguing that Mutec's rejection of the samples was a sham. National Label argued that Mutec's parent Matsushita had found National Label's samples acceptable; Eveready and other firms found National Label's cover acceptable; the rejection of National Label's samples came after Mutec had already chosen Zweckform as a supplier, with the antidumping case started or anticipated, and it was then in Mutec's interest to claim that National Label's samples were unsatisfactory; and problems found in samples can often be fixed, but here there was no chance to do so because thanks to Zweckform's low price, Mutec had decided to purchase from Zweckform before it ever tested National Label's samples.¹⁵¹ The commission agreed with Zweckform and found that Zweckform's low price was not what had caused National Label to lose the sale to Mutec.¹⁵²

OTA does not know whose version in this case is correct. The ITC's decision was based on confidential information not available to OTA. But this case does illustrate some difficulties facing a petitioner. In both cases of alleged injury, key testimony as to the real cause of National Label's injury came from Zweckform's customer (Mutec) or potential customer (Eveready)--parties predisposed to take Zweckform's side. The details of the tests performed by Mutec on National Label's samples were considered Mutec's confidential business information. While National Label's outside counsel could see this information, National Label's president, who was a technical expert, could not.¹⁵³ National Label's president believed that this handicapped his ability to challenge the rejection.¹⁵⁴

Offsetting Foreign Advantages

Even if antidumping and countervailing duties were applied reliably and immediately to subsidized and dumped imports, this often would not offset the advantages of foreign firms. Some practices and effects **slip through the cracks; they cannot be addressed as either subsidies or dumping. Some-**

times the foreign practice can be stopped by negotiation (perhaps using Section 301 or GATT dispute resolution procedures), though such negotiations, like negotiations to remove market barriers, are likely to be slow and difficult.

Countervailing and antidumping duties affect only sales in the U.S. market. Subsidies can give foreign firms an advantage in their home and third country markets, and dumping can mean an advantage for foreign firms in third country markets. Such subsidies have been addressed in several Section 301 cases (most involved agricultural products), and third country dumping of memory chips by Japan was addressed in the simultaneous settlement of a Section 301 case and three antidumping cases. Realizing that its firms needed relief from third country dumping, the United States negotiated a special commitment by Japan not to dump in the United States *or in third countries*.¹⁵⁵

Another practice that can fall through the cracks is sales in the U.S. market at very low profit margins—high enough to sustain foreign manufacturers, but low enough to squeeze U.S. manufacturers. If the same price were charged at home, such sales would not constitute dumping. Lower profit margins might be more acceptable in another country in which conditions for raising capital are different. Or the foreign firm might be cross-subsidizing its low-priced exports to the United States with profits from other product lines, as Japanese supercomputer manufacturers have begun doing.¹⁵⁶ That cross-subsidization could not be countervailed.

Perhaps the most profound limitation is that subsidies are quantified in a manner that systematically understates their true value. To calculate the countervailing duty, the Commerce Department first puts a monetary value, called the subsidy value, on the benefit conferred. For example, the subsidy value of a low interest loan would typically be the interest saved by the company compared to the interest that it would have had to pay on a commercial loan. Next, the Commerce Department allocates the subsidy value over time. For example, the subsidy value of a low-interest loan could be allocated over the life of the loan. Then, for each period used for calculating countervailing duties, the countervailing duty rate for imports is that part of the subsidy value allocated to that period, divided by the value of the goods produced (or sold) during the

same period with the help of the subsidy. For several reasons, a countervailing duty computed in this manner often does not compensate for the advantage received by a foreign producer.

Sometimes the subsidy is essential in order for the foreign producer to export in the first place. Often government financing makes it possible to get crucial bank loans, without which the business might never get off the ground. In the 1960s and 1970s, the Japanese Government subsidized its computer industry by means of low-interest loans from the Japan Development Bank (JDB) to the Japan Electric Computer Co. (JECC), a joint venture of the Japanese computer manufacturers. JECC's function was to finance computer sales; JECC bought computers for cash from the manufacturers and leased them to users. The loans from JDB made it possible for JECC to acquire additional commercial loans. Without JECC's help, most of the Japanese manufacturers probably would not have been able to borrow money to finance sales of computers. These manufacturers would then have been restricted to customers who could pay cash, and as a result Japan's computer industry would have developed more slowly.¹⁵⁷

But if U.S. manufacturers had filed a countervailing duty case, what would the countervailing duty have been? As calculated by one scholar, the subsidy implicit in the JDB loans from 1961 to 1969 was 2 billion yen, while the Japanese computer firms' sales during those years were about 230 billion yen.¹⁵⁸ Therefore the subsidy, and the countervailing duty, would have been computed as less than 1 percent of the value of the goods sold.

A similar mismatch between the countervailing duty computed and the advantage conferred on the foreign firm can occur with government support of R&D. An example is MITI's VLSI project in the late 1970s, which concerned techniques for making denser semiconductor chips. This project was important in helping the Japanese semiconductor and computer industries catch up with their U.S. counterparts,¹⁵⁹ and was important to the development of Japan's supercomputer industry.¹⁶⁰ But if U.S. firms were to petition for relief in 1991, what countervailing duties might be imposed? The VLSI project is relevant to producing a wide range of electronics products; those of the participating firms will probably total well over \$40 billion in 1991.¹⁶¹ In

comparison, the \$150 million contributed to the VLSI project by MITI, of which little if any would be allocated to 1991, would yield a minuscule countervailing duty, far less than 1 percent of sales.

Why does the countervailing duty calculation fail to capture the full worth of the R&D? Perhaps the most important reason is that the approach to calculating countervailing duties assumes incorrectly that benefits are static. Under the law, subsidies are used once, and then their effect is gone; the only issue is how to divide up the benefit over time and products. In fact, under the law an R&D project in the late 1970s, such as the VLSI project, would be considered irrelevant to sales in the 1990s; the project's payback period would be considered over and its effects dissipated. In reality, however, subsidies can create new opportunities and help a business seize an advantage years later; the effect can grow, rather than diminish, with time. In high reward industries this is particularly likely.¹⁶² The effects of Japan's VLSI project probably increase with each passing year. The same can be true, for example, with low interest loans. Under the law, preferential financing to Japanese computer companies in the 1960s is probably irrelevant to sales of supercomputers and other computers in the 1990s; but in fact, the effect of those loans is strongly felt in 1991 (see ch. 6).

Under the law, it is not possible to capture the benefit that such government action confers on industries. Legalities aside, this task is very difficult. The foreign industrial policies discussed in this report are replete with actions intended to benefit national industries. To track the effects of all actions that helped a particular industry is a hopeless task.

How Hard Are the Problems to Fix?

The ineffective response of countervailing duty and antidumping law is not easy to fix. First, the law is inherently reactive. Duties are imposed in response to specific observed foreign practices; therefore, some delay occurs before the duties are imposed. In this way the approach of U.S. trade law differs fundamentally from one in which the U.S. Government would proactively seek to create advantages for its national industries, as other governments do.

However, there are ways to improve the effectiveness of countervailing and antidumping duty law. For example, the injury test could be attuned to be

more receptive to companies still doing fairly well, before serious damage is done; the Commerce Department could be directed to suspend closing out of customs entries as soon as a case is started, and, once imposed, to collect duties retroactively as far as possible; and the Commerce Department could be more aggressive in finding and evaluating subsidies. These changes might be challenged as inconsistent with GAIT's requirements. For example, an attempt to change the evaluation of subsidies to more completely capture the subsidy's full effect could run afoul of GATT's requirement that countervailing duties not exceed "the estimated bounty or subsidy determined to have been granted."¹⁶³ Precisely what GATT allows is not always clear; ambiguities can be resolved only by a GATT ruling on a dispute between two countries, or by amendments to clarify the rules. Some countries have maintained that current U.S. practices violate GATT—e.g., the use of a minimum of 10 percent general administrative overhead and 8 percent profit when constructing a product's fair value based on foreign manufacturers' costs,¹⁶⁴ and the practice of assuming until proven otherwise that petitions are supported by the majority of the domestic industry. This latter practice has already been found to violate the GAT Antidumping Code.¹⁶⁵

The United States has been negotiating in the Uruguay Round to allow countervailing and antidumping cases to be more effective. Along with the EC, it has pressed to provide clear authority for certain expanded anticircumvention measures. The United States has also pressed to prohibit domestic subsidies in certain cases, just like export subsidies are now prohibited. However, the United States faces an uphill battle in GATT, with few allies and with many nations pushing to weaken countervailing duty and antidumping law.

Several practical concerns counsel caution in trying to enhance the laws' effectiveness. Imposing countervailing and antidumping duties entails substantial administrative costs, starting with an expensive investigation. Further, the computations used to determine subsidies and dumping rely on imprecise data that may contain a fair amount of estimation. At times, duties will be levied when there really were no subsidies or dumping. The stronger the laws, the more often such mistakes will occur, throwing up misguided barriers to imports.

This problem is magnified because countervailing duty and antidumping petitions can be filed to harass one's competitors. While cases cost petitioners, they also cost the respondents. In fact, the burden on respondent firms can be greater, because the Commerce Department and the ITC, in developing the facts of the case, often scrutinize these firms' business records. Just the threat of countervailing or antidumping duties creates uncertainty that can impede imports. And if, perhaps because of the proceedings' inherent imprecision, very small countervailing or antidumping duties are imposed, there is the threat that in subsequent annual reviews these duties will be retroactively increased.

In the case of antidumping law, the imprecision is not just in evaluating data, but also in how dumping is defined. The problem is that what is defined as dumping does not always justify a response. While dumping is often a sign that the foreign firm has a special advantage, this is not always the case. Dumping is sometimes a short-term ploy to get new customers; U.S. firms can often meet this type of competition on their own. As calculated, dumping could be found when a foreign firm prices identically at home and in the United States, if the prices in both markets fluctuate together. Or dumping could be found simply because of exchange rate fluctuations.¹⁶⁶ But if the definition of dumping excluded these transient effects, the law would also miss, at least for a while, situations that do require a government response. Another problem with dumping calculations concerns how to compare U.S. and home market selling prices. A fair comparison requires that differences in selling costs in the two markets be taken into account to net back to ex-factory prices for sale to each market; but when the foreign exporter sells through a U.S. subsidiary it seems impossible to write rules that will always fairly compare the two selling costs. It is not always possible to separate cases that warrant antidumping duties from those that do not.

Even when foreign firms enjoy a special advantage, countervailing or antidumping duties might not be helpful. The U.S. industry might be well able to take care of itself, while important downstream industries could benefit from the cheap imports. For certain industries, the U.S. economy might be best served by the downsizing or eliminating the industry

in question, with resources put to better use elsewhere. As useful as countervailing and antidumping duties are in some cases—and foreign firms and countries often target high-reward industries where the U.S. industry appears vulnerable—in other cases, they are not.

Yet another consideration is that foreign countries can use these duties against U.S. exports. These countries include traditional users of countervailing and antidumping law such as the EC and Australia and newer users such as Mexico. Imprecision in computing dumping and subsidies, and the broad reach of the “dumping” label to include some conduct not warranting a response, can come back to bite U.S. exporters. In some cases the United States has subsidized its industries, usually in an incidental rather than planned way. For example, government-supported R&D for military aircraft has helped the U.S. commercial aircraft industry (see ch. 8).¹⁶⁷ Another example is the government's support of half a billion dollars over 5 years for Sematech, an R&D consortium concerned with semiconductor manufacturing. If the United States decides to increase support for its industries, they could become more vulnerable to trade remedies in other countries.

Where subsidy and dumping laws are ineffective, Section 301 might apply. In 1988, Congress specified that Section 301 applies to foreign “export targeting,” defined as “any government plan or scheme consisting of a combination of coordinated actions . . . bestowed on a specific enterprise, industry, or group thereof,” with the effect of enhancing export competitiveness.¹⁶⁸ Section 301 would thus seem to cover a variety of foreign policy tools inadequately covered by U.S. antidumping and countervailing duty law, such as R&D programs and preferential financing. As of August 1991, no Section 301 case had been brought based on this provision, and such use of Section 301 would pose problems. There would be the same problems of delay, angering foreign countries, and soon as when Section 301 is invoked to eliminate foreign market barriers. Other countries are particularly averse to being told how to run their domestic economies. And Section 301 cannot reach back in time: a policy discontinued years or even decades ago, such as market protection or R&D support, can be the cause of an export surge today.

OTHER MEASURES AGAINST IMPORTS

Restrictions on particular imports can play a role in strategies for both mature industries facing difficult adjustments and for sunrise industries that promise fast growth. The appropriateness of protection depends on a host of factors and does not hinge on the presence of any individual foreign practice such as subsidies or dumping.

To justify such protection countries sometimes invoke GATT's Article XIX, the so-called "escape clause."¹⁶⁹ The escape clause addresses situations in which, because of a combination of "unforeseen developments" and the country's GATT obligations, a product is imported in such "increased quantities" as to "cause or threaten serious injury" to a nation's domestic producers. Under these circumstances, a country may temporarily suspend performance of its GATT obligations "to the extent and for such time as may be necessary to prevent or remedy such injury."¹⁷⁰ The nation may raise tariffs, or impose quotas or nontariff barriers, but must compensate the countries whose exports have been blocked. If agreement can be reached, the compensation can consist of concessions (e.g., reduced tariffs) on other items; if no agreement is reached, an affected country may impose "substantially equivalent" barriers on imports from the nation using the escape clause.¹⁷¹ Typically, the affected country would raise tariffs on products of its choosing.

U.S. law implements the escape clause in Section 201 and the following sections of the Trade Act of 1974, as amended.¹⁷² While GAPP requires only that the increased imports "cause or threaten serious injury," U.S. law specifies that the increased imports be at least as great as any other cause of injury.¹⁷³ The U.S. statute, reflecting *GATT*, requires that an existing industry be injured; the injury test cannot be met by showing that the imports are preventing the establishment of an industry.¹⁷⁴ In these ways and perhaps others, the injury test under Section 201 is more stringent than the injury test in subsidy and dumping cases. To assess injury, U.S. law specifies factors such as idling of facilities, profit levels, and unemployment levels.¹⁷⁵

The ITC determines injury under Section 201. A petition from industry or organized labor normally

triggers an ITC investigation,¹⁷⁶ and the ITC typically takes 4 months to decide whether the injury requirement is satisfied.¹⁷⁷ If the injury requirement is not satisfied, the case ends with no governmental action; if the requirement is satisfied, then the ITC decides whether to recommend protection. The protection can be tariffs and/or quotas, lasting up to 8 years.¹⁷⁸ The ITC can recommend that the President negotiate with other countries to address the underlying cause of the increased imports or ameliorate their effect (as by restraining other countries' exports), or take any other action authorized under law.¹⁷⁹ The ITC usually submits its recommendations to the President 6 months after the petition was filed.¹⁸⁰ The President then has 2 months to decide what trade relief, if any, to grant.¹⁸¹

The President is supposed to weigh the social benefits and costs, and consider "efforts being made by the domestic industry to adjust to the import competition" and the "position of the domestic industry in the United States economy."¹⁸² The President has great flexibility in selecting the form of relief; he may choose one or more measures, including tariffs, quotas, auctioning off quotas to foreign producers, assistance to the domestic industry, negotiation of agreements with foreign countries, and "any other action which may be taken by the President under authority of law."¹⁸³ Relief can last up to 8 years.¹⁸⁴ While relief is in effect, the ITC reports to the President every 2 years on industry's progress in adjusting to import competition. The President can then reduce, modify, or terminate the relief based on changed economic circumstances or his determination that the industry "has not made adequate efforts."¹⁸⁵

Table 4-8 summarizes the use of Section 201 during 1975-1990. Of 62 cases, the ITC found injury in 33, and in 30 recommended protection. The President granted protection in 14 of the cases. Overall, a petitioner's chance of obtaining some protection was about 23 percent. Further, the President frequently reduced the level of protection recommended.¹⁸⁶

Use of Section 201 tapered off considerably after the 1970s. The change probably occurred in part because the Trade Act of 1979 made it easier to win dumping and countervailing duty cases, so that those cases were often a more attractive route to relief.¹⁸⁷

Table 4-8-Section 201 Cases

Years	Cases filed during years shown	ITC found injury	ITC recommended protection ^c	President granted protection
1975-90	62	33 ^c	3 0 ^a	1 4 ^a
1980-90	20	7 ^c	7 ^a	5 ^a
1986-90	2	0	0	0

^aIncludes all cases in which the majority of the Commissioners voting on the remedy to be used recommended some form of protection, plus the one case (filed in 1977) where half of these Commissioners so voted.

^bProtection consisted of one or more of the following: increased tariffs (used 7 times), quotas (used 3 times), tariff rate quotas (increased tariffs charged only on imports above quotas, used once), negotiated agreements to limit foreign countries' exports (used 4 times), and price supports (used once).

^cIncludes 6 cases in which injury was found only with respect to some of the products at issue; includes 4 cases in which the ITC's vote on injury was evenly divided.

^dIncludes 6 cases in which injury was found only with respect to some of the products at issue; includes 2 cases in which the ITC's vote on injury was evenly divided.

^eAll were cases in which a clear majority found injury and the ITC recommended protection. Includes 4 cases in which injury was found only with respect to some of the products at issue.

^fIncludes 2 cases in which injury was found only with respect to some of the products at issue.

^gIncludes 2 cases in which injury was found only with respect to some of the products at issue.

^hIncludes 2 cases in which injury was found only with respect to some of the products at issue.

SOURCE: U.S. General Accounting Office, International Trade: Activity Under Section 201 of the Trade Act of 1974. NSIAD-87-96FS (Gaithersburg, MD: U.S. General Accounting Office, Mar. 30, 1987), pp. 6-9; U.S. International Trade Commission Annual Reports, 1987-1990.

In addition, the ITC found the injury test not satisfied in a highly visible case filed in 1980 concerning automobiles. To many, this seemed an ideal case for relief if ever there was one: an unexpected rise in oil prices suddenly made large U.S. cars an unattractive purchase compared to smaller Japanese cars. The ITC's negative decision in that case conveyed the message that the injury test under Section 201 would be very hard to meet. Although Congress in 1988 changed the statute in a way that likely would have changed the result in the autos case,¹⁸⁸ there has not been a resurgence of interest in Section 201; in fact, only one case has been filed since.

Section 201 can be a useful trade tool. It operates within the GATT framework and therefore tends to be accepted by other countries. It has two advantages over countervailing duty and antidumping proceedings: it does not require the proof of subsidies or dumping; and it does not irritate foreign firms or countries by calling them unfair.

Section 201 has significant limitations that restrict its usefulness, especially for high-reward industries. It applies only to an already existing

"domestic industry" that is "producing an article" that competes with the imported goods.¹⁸⁹ It thus cannot be used to promote the formation of a new industry.¹⁹⁰

The industry must be seriously injured or threatened in an absolute sense; it is not enough that the industry would have done much better without the increased imports.¹⁹¹ The Commission will find that a threat of serious injury exists only if "serious injury, although not yet existing, is clearly imminent if import trends continued unabated."¹⁹² These requirements make it hard to get relief at the beginning of a product cycle, when markets are growing rapidly.

Section 201 has not often been invoked on behalf of high-reward industries. One prominent high-reward sector, electronics, is represented by only two cases—television receivers, filed in 1976, and CB radio transceivers, filed in 1977. The television case concerned a U.S. industry in decline, and the CB radio case concerned a potential growth industry that, according to the ITC, was in deep trouble because of the Federal Communications Commission's decision to expand the citizens band from 23 to 40 channels.¹⁹³ Section 201 has not been invoked for supercomputers, mainframe computers, workstations, personal computers, or semiconductors, where Japanese companies are a strong competitive threat to a U.S. industry.

Even for mature industries, the injury requirement can make it difficult to get relief before much damage has been done. For example, in July 1984 the ITC found no threat of serious injury to the nonrubber footwear industry even though imports had increased in volume from 51 percent of domestic consumption in 1979 to 65 percent in 1983.¹⁹⁴ The ITC reasoned in part that imports were predominantly at the low end and domestic production was predominantly at the high end, so that "rather than displacing domestic nonrubber footwear production, imports have served to complement it."¹⁹⁵ In value terms, the imports had increased only from 36 percent of domestic consumption in 1979 to 44 percent of domestic consumption in 1983.¹⁹⁶ As the ITC spoke, however, the situation was changing. The industry filed another petition for relief, and in July 1985, one year after its first ruling, the ITC found a threat of serious injury. Import volume had risen to 71 percent of domestic consumption in 1984, and 77 percent in the first quarter of 1985. The

imports had moved upscale; their value was 54 percent of domestic consumption in 1984 and 62 percent in the first quarter of 1985.¹⁹⁷

Even if the legal hurdles are passed, relief still depends on the President. Recent Administrations have been averse to granting import relief in Section 201 cases. This results from a free trade orientation and the obligation under GATT to pay compensation.

GOVERNMENT PROCUREMENT

In market economies, governments seldom own industries, and must procure goods and services from private enterprises in order to function. Government procurement contracts cover everything from pencil sharpeners to cleaning services to supercomputers. If procurement is open and competitive, governments take bids and choose the suppliers that fulfill their needs at the cheapest prices. Often this does not happen.

Some foreign governments use public procurement to develop or maintain key industries and technologies. For example, the Japanese Government has procured Japanese supercomputers instead of faster U.S. machines to help develop its domestic industry (see ch. 6).

The United States seldom uses procurement as a tool to promote industries or technologies. Its basic policy is to conserve tax dollars and be fair to all U.S. suppliers by buying at arm's length. Accordingly, procurement law has elaborate procedures to ensure that the process is transparent, meaning that firms have adequate notice and opportunity to bid and that the selection is made according to criteria announced when bids are solicited. U.S. law allows disappointed bidders to protest; if the required procedures were not followed, a resolicitation could be required.

Another policy uses government purchases to protect domestic jobs and promote various social goals. This policy is reflected in laws giving preferences to goods manufactured in the United States—including "Buy American" laws and preferences for businesses that are small, minority-owned, or in depressed areas. National security concerns can limit purchases to U.S. goods. These laws are not meant to help commercial competitiveness, although they occasionally do—e.g., the requirement that DoD buy only domestically made

supercomputers. But often these preferences do not apply, so that suppliers of foreign goods can compete on an equal footing.

Many foreign procurement markets are not so open. Standard practice in many other countries is to grant notice of procurements to, and fairly consider bids from, certain domestic firms. This imbalance of access was perpetuated by international agreements. These agreements include bilateral memoranda of understanding (MOUs) dealing with defense procurements and the GATT Procurement Code. The United States is negotiating to improve access to foreign procurements, but the negotiations are difficult and even modest improvements are not assured.

The imbalance of access and the fact that foreign governments often use procurement as a strategic tool to enhance competitiveness while the United States seldom does mean that U.S. and foreign procurement policies together have a negative effect on U.S. competitiveness.

What the U.S. Public Sector Purchases

In 1990, the U.S. public sector purchased about 9 percent of the goods produced in the United States (see table 4-9). Half of these purchases were for defense needs.¹⁹⁸ The defense share of public purchases of durable goods was greater: 68 percent (see figure 4-8). Durable goods include computers, semiconductors, and many other important high technology products.

The effect of defense procurement on competitiveness is not clear. A large portion of defense purchases have no commercial use: military ships, missiles, military communications and electronic

Table 4-9-Purchases of Goods by the U.S. Public sector in 1990 (in billions of dollars)

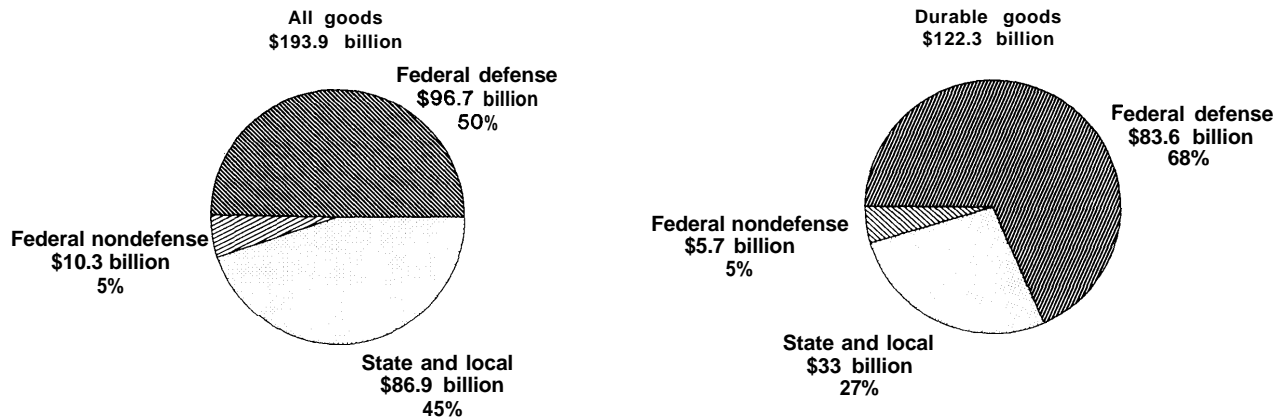
	Durable	Nondurable	Total	Percent of GNP for goods (\$2,144bn)
Federal defense ^a . . .	83.6	13.1	96.7	4.5
Federal nondefense . .	5.7	4.6	10.3	0.5
State and local	33.0	53.9	86.9	4.1
Total	122.3	71.6	193.9	9.0 ^b

^aThis spending is almost all by the Department of Defense. A small amount, probably under 1 percent, is by the Department of Energy and NASA for defense-related work.

^bFigures do not add up because of rounding.

SOURCE: Department of Commerce, Bureau of Economic Analysis, Government Division, computer printouts, Feb. 28, 1991, and Economic Report of the President, 1991, table B-6.

Figure 4-8-Government Purchases of All Goods and Durable Goods, 1990



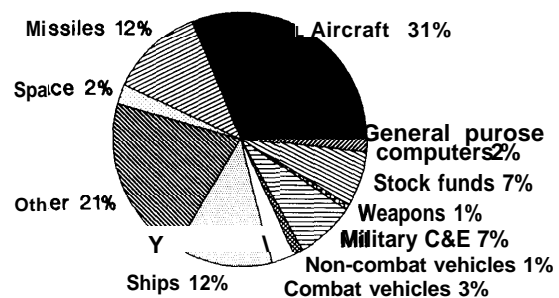
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, unpublished data.

equipment, and combat vehicles (see figure 4-9). The largest portion (31 percent in 1990) is for aircraft. Although defense purchases of military aircraft have long generated spillover benefits to the civilian aircraft industry, these benefits are dwindling (see ch. 8, and vol. 2).

Defense procurement includes some items with commercial use, such as general purpose computers and automobiles, but their procurement represents only a tiny fraction of the U.S. market for the products. For example, defense purchases of general purpose computers in 1990 were worth \$1.56 billion,¹⁹⁹ less than 1 percent of the estimated total U.S. market sales of \$176 billion.²⁰⁰ Defense purchases of noncombat motor vehicles in 1990 were worth \$984 million,²⁰¹ less than 1 percent of the estimated \$139 billion in shipments of motor vehicles and car bodies made in the United States.²⁰² These relatively small quantities limit the power of defense procurement to affect commercial industries.

On the other hand, defense needs for certain niche products have sometimes provided crucial early demand. Since its first sale in 1976, the U.S. supercomputer industry has benefited greatly from defense-related purchases by the Departments of Defense and Energy. For many years they were the major customers, and if not for early defense purchases and software generated in national laboratories, Cray Research Co., since 1976 the world's leading supplier of supercomputers, might not be in the supercomputer business today.

Figure 4-9-Defense Purchases of Durable Goods, 1990, \$83.6 Billion



SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, unpublished data.

Federal nondefense procurements, while more oriented toward commercial products, are relatively small. In contrast to many other developed countries, the United States runs no national health service, no national railway, no national airline, no national telecommunications system, and no national university system. Therefore its public sector does not provide as large a market for medical equipment, rolling stock, aircraft, telecommunications equipment, computers, etc. For example, U.S. Government purchases of telecommunications equipment accounted for 17 percent of the domestic market in 1989.²⁰³ In contrast, up to 1988 roughly 90 percent of the equipment sold in the European Community was reportedly delivered to government entities.²⁰⁴

State and local governments together are more important than the Federal Government as public

purchasers of nondefense goods in the United States. As shown in table 4-9, they purchased goods worth \$87 billion (\$33 billion for durables) in 1990. This was 4.1 percent of the U.S. GNP for goods. Indeed, State and local governments are significant purchasers of certain products. In 1982 (the latest year for which figures are available), about 24 percent of State and local government purchases of durable goods were for motor vehicles. The same proportion spent on vehicles in 1990 equates to about \$7.9 billion in current dollars.²⁰⁵ This is about 6 percent of the \$139 billion in 1990 shipments of motor vehicles and car bodies made in the United States.

The U.S. Legal Regime

Buy American and Other National Preferences

"The Buy American Act was passed in 1933 as . . . an unabashed protective measure, providing a barrier against goods of foreign origin in the area of Federal Government purchasing."²⁰⁶ This was one of many laws introduced during the depression years to use procurement to promote employment and other socioeconomic goals.²⁰⁷ The law has been amended several times and interpreted by regulations.

The Buy American regime applies to goods to be used within the United States. In general, domestic goods will be favored unless they are priced more than 6 percent higher than foreign goods;²⁰⁸ if the U.S. bidder is a small business or in a labor surplus area, the preference increases to 12 percent.²⁰⁹ If a product is manufactured in the United States, and if the cost of domestic components going into the product is over half the total component costs, then it is domestic; otherwise, it is foreign.²¹⁰ This preference does not always apply. Two major exceptions arise under the GATT Procurement Code and bilateral defense MOUs, discussed below. Other exceptions stem from the GATT Civil Aircraft Code and the U. S.-Canada and U.S.-Israel Free Trade Agreements.²¹¹

The Department of Defense (DoD) procures under a slightly different set of rules. Products from countries that do not have special agreements with the United States can be subject to a 50 percent price preference. DoD must disadvantage foreign bids either by adding 50 percent to the value exclusive of duties, or by adding 6 percent inclusive of duties, whichever is greater. The 6 percent preference increases to 12 percent in competition with domestic

bids from small businesses, or in areas of labor surplus. After this adjustment, the lowest bid wins.²¹²

Many "Little Buy American" acts grant additional preferences to particular products such as machine tools and ball bearings. Some of these preferences are absolute, forbidding the purchase of foreign products no matter what they cost. Aside from Buy American, there are some absolute preferences for products of U.S. businesses that are small, minority-owned, or located in disadvantaged areas; in fiscal year 1990, 19.9 billion dollars' worth of contracts for goods and services were made under these preferences, out of total Federal contract actions worth \$191 billion.²¹³

Defense Procurement and Memoranda of Understanding

The United States has negotiated defense MOUs with most major trading partners, though not Japan, Korea, or Taiwan. About half of defense procurement is open to MOU partners on an equal basis.²¹⁴ Under the MOUs, the United States waives the general Buy American preference,²¹⁵ though not some of the specific Buy American preferences.²¹⁶ The MOUs do not affect small business, minority business, and labor surplus area preferences; they do not apply when a U.S. or Canadian source is required to preserve the defense industrial base; and they do not apply to classified military procurements that require a U.S. source for security reasons.

The GATT Procurement Code and the Trade Agreements Act

The GATT Procurement Code²¹⁷ and the Trade Agreements Act of 1979 eliminate the general and some specific Buy American preferences.²¹⁸ The Code requires signatories to give each other's goods national treatment, treating the foreign goods the same as domestic goods. The Code currently applies only to goods; it does not cover purchases by State and local governments, or military weapons or other goods necessary to maintain national security.²¹⁹ Further, the Code covers only purchases worth at least 130,000 Special Drawing Rights (SDRs), equal to about \$180,000 in January 1981.²²⁰ Finally, the Code applies only to agencies specifically listed in a country-by-country Annex; some countries have specified other exemptions. For many countries, including the EC and the United States, agencies dealing with telecommunications, transport, energy, and water are not covered. Also, the United States

has exempted from Code coverage purchases reserved for small or minority businesses.

The GATT Procurement Code is implemented in U.S. law by the Trade Agreements Act of 1979.²²¹ The Code Annex lists most agencies of the U.S. Government. Some exceptions are the Department of Energy, the Department of Transportation, the Bureau of Reclamations at the Department of the Interior, the Army Corps of Engineers within DoD, and, for some products, DoD. The Act grants national treatment not only to Code co-signatories, but also to countries with whom the United States has equivalent bilateral treaties, and to many developing countries on a nonreciprocal basis.²²²

State and Local Procurement

Like the Federal Government, all the States have adopted the rule of competitive procurement. According to a 1987 survey, 27 States have no Buy American laws on their books;²²³ the other States have some Buy American laws, though sometimes they are not implemented. For example, in 1968 a California appellate court found California's Buy American law to violate the U.S. Constitution;²²⁴ the law has since been inoperative. Kansas law permits the State government to reject foreign bids, but this is not done.²²⁵ States may offer preferences to small business, minority businesses, and in-State suppliers.²²⁶ Some local governments have preferences of their own.

The Effect of U.S. Procurement Law and Policy

U.S. procurement law and policy in international negotiations have been of limited value in advancing U.S. competitiveness. This is because the United States does not use procurement strategically, and procurements are on balance more open than foreign procurement markets.

Buy American Preferences

Buy American preferences can raise the prices the government pays for goods. It is not clear whether Buy American's benefits outweigh this and other possible costs. The 6 percent Buy American preference is intended to promote employment, but it applies with no consideration of whether additional jobs are needed.²²⁷ Specific Buy American preferences, usually the result of heavy lobbying from industry associations or regional interests, have supported many industries: food, clothing, coal,

paper, valves and piping, machine tools, aircraft ejection seats, supercomputers, etc. This targeting is not based on competitiveness strategy. It carries the danger that the protected industry will grow complacent and uncompetitive. The Buy American laws are complex, highly technical, and difficult for bidders and agencies alike to understand and apply.²²⁸ They add complexity, cost, and delay to an already burdened Federal procurement process.²²⁹

Occasionally, defense procurement aids competitiveness in dual-use industries. For example, the 1987 Defense Appropriations Act stipulated "that none of the funds in this Act maybe used to purchase any supercomputer which is not manufactured in the United States."²³⁰ This restriction has probably helped the U.S. supercomputer industry, not only by assuring revenues but also by promoting the development of software for domestic machines. However, on the whole special Buy American preferences might do less good than harm (higher prices paid, inefficiencies perpetuated, and administrative burden).

While reliable data are not available,²³¹ the effect of the general Buy American preference is likely to be modest, since defense MOUs and the GATT Procurement Code override the preference when they apply and the civilian preference is only 6 (sometimes 12) percent for nondefense goods.

Buy American preferences are a lightning rod for foreign criticism as a symbol of U.S. protectionism.²³² Perhaps Buy American's best use is as a bargaining chip to open up foreign markets. Negotiations to expand the scope of the GATT Procurement Code have tended in that direction.

Unequal Access

The defense MOUs, first negotiated in the late 1970s, have perpetuated the imbalance in access to government procurements. These MOUs probably cover about half of DoD procurement. Since defense accounts for about 90 percent of government procurements of goods (table 4-9), and 80 percent of Federal procurement generally (including goods and services),²³³ these MOUs open a substantial part of U.S. Government procurement to foreign competition.²³⁴

These MOUs did not open foreign government procurement to U.S. competition in the same way. To begin with, defense spending is less important in other countries. While defense procurement of

goods and services is 80 percent of government procurement in the United States, it is only an estimated 25 to 50 percent of the procurement of its allies.²³⁵

In addition, the defense MOUs were intended as defense cooperation agreements, and were not designed to open foreign procurement markets to U.S. goods. The primary goal was to secure the goodwill and cooperation of military allies. It was expected that the MOUs would reduce the U.S. surplus in defense trade, which they did.²³⁶ While 17 of the 19 MOUs in principle were supposed to grant reciprocal national treatment,²³⁷ they required national treatment only to the extent consistent with the other country's laws and regulations;²³⁸ this huge loophole allowed buy-national preferences to remain. These MOUs did not require foreign defense procurement to be transparent; in large measure it is not. Foreign procurements are often not well publicized. Also, the foreign governments' selection criteria are often less open and predictable, with U.S. bids not guaranteed full consideration. This uncertainty sometimes deters U.S. firms from preparing bids. And foreign governments have often required U.S. prime contractors to use local subcontractors, which can hurt U.S. small businesses that cannot easily export on their own.²³⁹

Reliable data on how much procurement these MOUs cover in the United States and elsewhere, and how much trade results in both directions, is not available.²⁴⁰ However, the lesser importance of defense procurement in foreign countries and the lack of true reciprocity suggest that the MOUs have cost U.S. firms home market share without opening export markets enough to compensate. This imbalance prompted a debate within DoD in the late 1980s about whether the MOUs are to the United States' advantage;²⁴¹ it also aroused congressional concern.²⁴² In 1989, the Administration began renegotiating the MOUs to achieve better access by U.S. firms to foreign defense markets. As of April 1991, MOUs had been renegotiated with France, Italy, and The Netherlands. The new terms require some procedural fairness but still do not require waivers of buy-national preferences.²⁴³

The GATT Procurement Code might have reduced the imbalance in access to government procurements. In addition to requiring national treatment, the Code requires covered purchases to be transparent. Upcoming procurements are to be

announced in advance, giving firms at least 30 days to bid, and evaluation is limited to criteria specified in advance. The Code's provisions, originally written in 1979 and amended in 1986, were modeled after U.S. practice.

Recent data on procurement and trade under the Code are not publicly available because the Administration has classified it.²⁴⁴ Detailed data are available only for 1981, the first year during which the Code was applied. The Administration had predicted that the Code would open \$20 to \$25 billion annually in foreign procurements to U.S. competition on an equal basis. However, for 1981, the General Accounting Office found that the Code covered a total of only \$4.2 billion of purchases by all foreign signatories. In contrast, \$18 billion of U.S. procurement was covered under the Code.²⁴⁵ Thus, roughly 80 percent of the trade opportunities mandated by the Code were in the U.S. market, and only 20 percent in foreign markets. This roughly 80/20 ratio persisted through 1987.²⁴⁶ This ratio contrasts sharply with the ratio of the United States' total procurement to foreign signatories' combined total procurement, which is at most about 50/50.²⁴⁷

While it may seem that the United States gave up more than it got with the Procurement Code, the matter is not that simple. Many of the purchases covered by the Code would have been open to foreign competition anyway. Close to 90 percent of U.S. purchases covered by the Code have been for defense,²⁴⁸ and a substantial portion of those have been covered under MOUs. Where MOUs do not apply, if not for the Procurement Code the Buy American regime would most often govern procurement, but even under Buy American foreign goods are sometimes purchased. Thus, it is possible that the new opportunities for U.S. exports under the Code were the same or even greater than the new opportunities for foreign countries' exports to the U.S. market; there is no way to tell with the available data.

Another way of assessing the effect of the Code is to look at actual purchases made under it. While the Code does not guarantee any sales, which depend on competitive bids, the level of sales is one indication of how effectively the Code has opened a given market. In 1981, \$3.3 billion of foreign goods were purchased by the U.S. Government under the Code, but of that over \$3 billion was for fuel and related products that were sold by longstanding arrange-

ments predating the Code.²⁴⁹ Only about \$270 million of nonfuel-related foreign goods were purchased, or about 1.5 percent of covered purchases. Much of that might have occurred anyway under defense MOUs. For trade in the other direction, while recognizing that data were unreliable, GAO estimated that only about \$210 million of U.S. goods were sold in 1981 to foreign governments under the Code (none of it fuel-related), or about 5 percent of the covered purchases.²⁵⁰ In sum, the trade volumes were low, and it is not clear whether the Code contributed more to U.S. exports or imports. Startup problems might have depressed the trade in 1981.²⁵¹ Amendments effective in 1988 might have increased trade volumes in both directions.

One persistent problem is that a large part of civilian procurement in the EC and other countries is made by agencies not covered under the Procurement Code, including those responsible for telecommunications, transport, energy, and water. In these sectors, which probably account for 25 to 50 percent of the EC procurement market,²⁵² the EC member governments favored domestic over U.S. suppliers. For example, in the last 30 years, there have been virtually no sales to the European Community of American electric utility equipment such as boilers and turbine generators,²⁵³ even though General Electric and Westinghouse were the top two world suppliers as a percent of world sales between 1955 and 1984.²⁵⁴ The only sales have been to countries with no production facilities of their own. EC members have favored national producers of telecommunications equipment. For example, in 1987, France, Germany, Italy, the United Kingdom, and Belgium on average satisfied 73 percent of their demand for digital switching equipment from domestic producers, despite substantially higher costs.²⁵⁵

In the United States these sectors are largely open. Many U.S. utilities and telecommunications companies are privately owned and procure openly and competitively as a matter of course. Government-owned utilities have also purchased substantial shares of equipment from foreign sources. For example, from 1977 to 1981 the largest Federal purchasers of heavy electrical equipment collectively spent about 26 percent of their money abroad.²⁵⁶

The United States has been negotiating to bring government entities buying equipment in these sectors within the GATT Procurement Code.²⁵⁷ The

EC contends that if publicly held utilities in these sectors are to be covered by the Code, then privately held utilities should in many cases be subject to similar procurement requirements. The EC's position is that if: 1) there are substantial barriers to entry in the industry; and, 2) there is substantial government influence over the utility (e.g., as regulation of the utility's operation), then there is insufficient assurance that the utility would, on its own, procure as a private firm does, on the basis of quality, cost, service, etc. (Both British Telecom and the Bell operating Companies in the United States, for example, would meet these two conditions.) The EC internally is following its own precepts: effective January 1, 1993, it will regulate procurement by privately owned utilities to prevent favoring domestic goods over the goods of other EC members.²⁵⁸ The United States opposes this change, arguing that such utilities would, on their own, procure on the basis of cost, quality, etc., because that would maximize their profit, and that regulating such utilities would saddle them with a needless administrative burden. As of June 1991, the resolution of this issue was unclear.

The EC also wishes to include procurements by State and local governments in the new Code. However, there is some question as to the extent of the U.S. Government's legal power over State procurement. So far, the Office of the United States Trade Representative (USTR) has made inquiries as to whether States might be willing to make a voluntary commitment to follow the Code. These commitments could then be incorporated into Federal law.²⁵⁹ Also under negotiation is the coverage of services and rules to ensure that a fair hearing is given to unsuccessful bidders who complain that the required procedures were not followed.

Forcing Open Foreign Markets

Whether or not the GATT Procurement Code applies in a given case, the United States considers closed foreign procurement markets, like other trade barriers, unjustified. Under the Buy American Act of 1988, also known as Title VII of the Omnibus Trade and Competitiveness Act of 1988,²⁶⁰ the USTR annually lists countries that discriminate in their procurement against U.S. products. The list is to include not only violations of the Procurement Code, but also any "significant and persistent" patterns of

discrimination, causing “identifiable harm” to U.S. businesses, by countries “whose products or services are acquired in significant amounts” by the U.S. Government.²⁶¹ When a country is listed, the USTR is to negotiate to have the practice changed; if the country does not stop, the President can retaliate by discriminating against that country in U.S. Government procurement.²⁶²

In its first report, in April 1990, the USTR described “substantial procurement problems” in several countries with markets “of particular significance,” and noted special concern over “access to the heavy electric equipment and telecommunications sectors” (currently excluded from the Procurement Code) in the EC, Germany, France, and Italy. However the USTR determined that no countries met the criteria of the statute.²⁶³ It is difficult to understand how the examples the USTR noted for special concern fail to meet criteria for listing under Title VII. The discrimination appears to be significant and persistent, and cause considerable harm to U.S. firms; the noted countries’ products and services are purchased by the U.S. Government in significant amounts. In its second report, in April 1991, the USTR listed just one country, Norway, for violating its Code obligations in its procurement of an electronic toll collection system.²⁶⁴ The USTR decided again, however, not to list the EC, Germany, France, and Italy for their non-Code-covered discrimination in the procurement of heavy electrical equipment and telecommunications equipment, even though this discrimination ‘remain[ed] of particular concern.

Why has the Administration not used Title VII more? Partly because threatening countries with sanctions during the Procurement Code negotiations, especially for actions not inconsistent with the current Code, could antagonize them and set back the negotiations. In April 1990, the Administration believed that keeping Congress informed and promising to evaluate the progress of the negotiations in the next annual review would facilitate the negotiations in progress while keeping in reserve a prod for recalcitrant countries.²⁶⁵ In April 1991, the Administration reported that progress had been made in the past year in negotiations to end the cited discrimination by expanding the Code’s scope and that it would continue to monitor developments.

EXPORT PROMOTION

Exporting is difficult. To export, a firm must:

- evaluate foreign markets;
- learn how business is done abroad;
- identify, contact, evaluate, and select potential customers, agents, distributors, and/or partners;
- learn about foreign customers’ special needs and perhaps modify the product;
- prepare special labeling for each market and possibly special packaging as well;
- conduct an advertising campaign abroad (unless that is done by a local agent); and
- arrange for shipping, insurance, and customs clearance.

The exporter must also follow any regulatory requirements of the target country, and is sometimes disadvantaged by foreign tariffs or nontariff barriers. Frequently, special export financing must be obtained. And these efforts require the exporter to overcome separations due to geography, language, and culture.

The U.S. Government assists exporters in these efforts. The Department of Agriculture provides a full range of services for agricultural exports. But exporters of manufactured goods must go to more than one agency to get a full range of services. The Export-Import Bank of the United States (Eximbank) assists with export financing, and many other services are provided by the Commerce Department’s International Trade Administration (ITA). The activities of these and other agencies are coordinated by the Trade Promotion Coordinating Committee, chaired by the Secretary of Commerce.²⁶⁶

Within ITA, the U.S. and Foreign Commercial Service (USFCS) is primarily responsible for gathering information on export markets and making it available to business. In summer 1991, USFCS had about 200 commercial officers and 490 foreign national employees providing export counseling in U.S. embassies abroad and a total staff of about 300 in field offices in the United States.²⁶⁷ USFCS emphasizes industry sectors with substantial export potential. Otherwise, USFCS does not target any particular sector for strategic or other reasons. Also within ITA, Trade Development (TD) analyzes trends by industry sector and works with industry associations to promote exports, and International Economic Policy (IEP) monitors foreign trade prac-

tices and proposes strategies for opening foreign markets.²⁶⁸

The United States spends proportionately much less on export promotion than do many other countries. An unreleased 1988 report by the Department of Commerce²⁶⁹ compared export promotion programs in eight nations: Belgium, Canada, France, Germany, Italy, Sweden, the United Kingdom, and the United States. The report shows that in 1987 all of the other nations spent between 2 and 25 times as great a fraction of GNP on export promotion as the United States (table 4-10). The United States ranked sixth in export promotion spending in proportion to total exports. As well as spending relatively less overall, the United States allocates funds lopsidedly for agricultural rather than industrial exports compared to other countries. The United States only spends one-eleventh as much on industrial exports as on agricultural exports, per dollar of each type of export. In contrast, France spends 29 times as much on industrial exports, the United Kingdom 5 times, Belgium 1.6 times, and Italy one-fifth as much.

The USFCS budget was particularly tight in the late 1980s, when the budget for foreign operations was not adjusted to compensate for the dollar's declining purchasing power abroad.²⁷⁰ Foreign posts had no money for market research contracts and often had inadequate libraries. Sometimes foreign service officers did not even have funds to return phone calls from firms in the United States.²⁷¹ The USFCS budget has recently improved somewhat, from \$75 million in fiscal year 1987 to \$108 million

in fiscal year 1991.²⁷² But a policy of recovering costs from firms using USFCS services has had some perverse effects. In the 1980s, USFCS published *Basic Guide to Exporting*, a step-by-step introductory manual on how to export. While the guide cost only \$8.50 per copy, the need to collect this amount made it harder for businesses to get the book; USFCS field offices could not sell it because the revenue belonged to the Government Printing Office. The need to recover publication costs similarly crippled ITA's Associate Office Program, under which local business organizations help promote ITA products, services, and activities.²⁷³

USFCS recent problems have not stopped with money matters. In January 1989, the General Accounting Office reported other weaknesses, including a mismanaged trade show program and an inefficient information management system.²⁷⁴ Starting in July 1989, USFCS, with a new Director General, undertook an extensive long-term strategic review of its operations. Partly through surveys, interviews, and discussion groups, USFCS sought to determine anew what business' most important needs were, how USFCS could be most helpful, and what tasks were better left to other organizations.²⁷⁵

Instead of trying to be all things to all people, USFCS decided to focus on the needs of the infrequent exporter—one that exported more than once per year but less than once per week. USFCS concluded that firms exporting less needed basic information that could be disseminated most efficiently by organizations such as State governments,

Table 4-10-Spending for Export Promotion in 1987

	Belgium	Canada	France	Germany	Italy	Sweden	United Kingdom	United States
Central government								
spending	\$45.8m	\$484.3m	\$330.1m	\$61.5m	\$209.3m	\$10.0m	\$190.9m	\$261.6m
Total spending ^a	\$62.9m	\$546.8m	\$340.7m	\$102.1m	\$219.3m	\$72.4m	\$194.1m	\$294.0m
On agricultural exports	\$4.5m	\$43.7m	\$2.5m	\$5.1m	\$30.7m	\$2.2m	\$2.7m	\$173.0m
On industrial exports	\$58.4m	\$503.1 m	\$338.2m	\$97.0m	\$188.6m	\$70.2m	\$191.4m	\$121.0m
Total spending per \$1,000 of								
all exports	\$0.71	\$6.00	\$2.18	\$0.35	\$2.00	\$1.65	\$1.45	\$1.16
Of agricultural exports	\$0.46	NA	\$0.09	NA	\$9.30	NA	\$0.29	\$5.95
Of industrial exports	\$0.74	NA	\$2.61	NA	\$1.78	NA	\$1.53	\$0.54
Total spending per								
\$1,000 GN ^b	\$0.40	\$1.48	\$0.47	\$0.11	\$0.29	\$0.46	\$0.43	\$0.06
\$1,000 Central Government								
spending	\$1.07	\$6.02	\$1.95	\$0.68	\$0.64	\$1.33	\$0.98	\$0.29
Capita	\$6.35	\$21.44	\$6.19	\$1.67	\$3.74	\$8.72	\$3.42	\$1.20

m-million

^aTotal spending comprises not just central government spending, but spending from local governments, quasi-government agencies, and cooperating nongovernment agencies.

^bGross Domestic product (GDP) is used instead of Gross National Product (GNP) for Canada and Italy.

SOURCE: Unreleased Department of Commerce Report, Export Promotion Activities of Major Competitor Nations, May 1988.

industry associations, and chambers of commerce. USFCS considered that very experienced exporters could, for the most part, fend for themselves, although they needed help in removing foreign market barriers.

USFCS found that industry's top two priority needs were for timely, product-specific information, and for assistance in locating and dealing with overseas agents, distributors, and end users. Accordingly, it has switched the focus of its information gathering from general information about sectors to specific information about particular products, and has worked harder to help industry with foreign contacts. An example of the latter is the "Match-maker" program, by which U.S. exporters travel abroad and interview about 10 interested local firms per day. Another example, a joint effort among USFCS, TD, and IEP, is the 5-year Japan Corporate Program, for which the Commerce Department selected 18 firms (out of about 130 applicants) that showed exceptional promise for being able to export to Japan. The companies, selected in late 1990, committed to:

- visit Japan four times per year (at least twice per year by the firm's President or CEO);
- print labeling and promotional material in Japanese;
- participate in at least one trade show each year;
- modify products as needed for the Japanese market; and
- arrange for after-sale service and maintenance.

The Commerce Department in return is providing marketing data and promotional support, which included the participation of Commerce Secretary Mosbacher in kicking off the program in Tokyo in April 1991.

USFCS has increased both its counseling regarding options and sources for financing exports, and assistance in complying with export control regulations. USFCS is also trying to improve information flow among its headquarters, domestic field officers, and overseas posts, though this effort depends largely on an automated information system whose target completion date is September 30, 1993.

The Commerce Department does not provide export financing. Often credit terms are an important part of competitiveness in export sales, especially to developing countries. All major economic powers have some governmental export credit agency (ECA)

that helps to finance exports.²⁷⁶ In the United States, this function is carried out primarily by the Eximbank, an independent agency of the U.S. Government, and (for agricultural products) the Commodity Credit Corporation, a corporation owned by the U.S. Government and run by the Department of Agriculture.²⁷⁷

Eximbank can fill in after private sector financing leaves off, so as to provide, when possible, export financing comparable to that available for exports from other countries. While U.S. commercial banks are often reluctant to provide export financing services because they are unfamiliar with the risks in the destination country, Eximbank's specialized knowledge of these risks enables it to provide such services. The need for Eximbank is greater now that U.S. commercial banks, burned by bad foreign debts in the 1980s, are more cautious about foreign loans. Even when banks are willing to provide services, their interest rates and other fees may be higher than the fees for government-backed export financing abroad. Eximbank's activities have cost money; at the end of fiscal year 1990, Eximbank had an accumulated deficit of \$6.5 billion, financed by borrowing from the government.²⁷⁸

If an exporter grants a foreign customer time to pay, Eximbank may provide insurance against the risk of nonpayment. Similarly, if a U.S. or foreign bank lends money to the customer, Eximbank can provide the bank with a guarantee against default on the loan. Insurance and guarantees help guard against both normal commercial risk of nonpayment (bankruptcy of buyer, change in market demand for buyer's product, etc.) and political risks (war, expropriation, asset freezes, etc.). Eximbank guarantees can be crucial to obtaining private sector loans, and can help firms get these loans on better terms. Eximbank can lend money itself, though it normally does so only to match particular loans offered by foreign ECAs.²⁷⁹ These loans may be direct to the customer, or indirect by rediscounting bank loans (lending to a bank money that the bank in turn lends at higher interest to the customer). Eximbank also makes short-term working capital loans to exporters.

Eximbank's total outstanding commitments, including loans, guarantees, and insurance, cannot exceed \$40 billion, though the first \$25 billion of insurance and guarantees are counted only at a quarter of their value so that a total of \$58.75 billion is possible. As of September 30, 1990, actual out-

standing commitments were \$13.3 billion in loans and \$16.7 billion in insurance and guarantees, for a total of \$30 billion. There are also ceilings set each year on new commitments. For fiscal year 1990, the ceiling was \$612 million for loans and \$10.2 billion for guarantees and insurance. The actual commitments made were \$612 million in loans (the full amount authorized) and \$8.2 billion in guarantees and insurance. These amounts are modest compared to the total U.S. exports in calendar year 1990 of about \$390 billion in goods and \$133 billion in services. Agricultural exports receive proportionately much more government financing. The Commodity Credit Corporation made commitments of \$911 million in loans and \$4.5 billion in guarantees in fiscal year 1990,²⁸⁰ compared with about \$40 billion in agricultural exports in fiscal year 1990.²⁸¹

Congress apparently envisioned that Eximbank's financing be focused on strategically selected industries. In 1983, Congress amended the Export-Import Bank Act of 1945 to require that Eximbank provide in an annual report "a detailed description of all actions which have been taken . . . or . . . will be taken" to:

- "maintain the competitive position of key linkage industries" [this refers primarily to industries that benefit downstream industries];
- "support industries which are engaged in the export of high value added products";
- "support industries which are engaged in the development of new capital goods technology"; and
- "preserve and create high skilled jobs in the United States economy."²⁸²

However, it is not clear to what extent Eximbank's activities have been strategically focused.²⁸³ Further, Eximbank's effectiveness is limited in two ways.

First, Eximbank grants credit on a "needs" basis, while European and Japanese ECAs grant credit on an "entitlement" basis. European and Japanese governments "make broad, long-term determinations about" which exports to assist and by what means, "and then provide . . . sufficient resources and administrative freedom" to assist exports in all credit worthy cases within the guidelines.²⁸⁴ However, in the United States, "increasing budget discipline and a strong free trade, antigovernment interventionist philosophy have combined" to require that applicants demonstrate on a case-by-case

basis that they need the financing to close the deal.²⁸⁵ The case-by-case approach increases paperwork, which along with the uncertainty regarding approval can discourage would-be applicants.

Eximbank's effectiveness has also been limited in matching the very favorable terms of some foreign loans. The United States and its major trading partners have subscribed to an Arrangement on Guidelines for Officially Supported Export Credits. The Arrangement limits the attractiveness of ECA financing by specifying interest rate floors, minimum up-front cash payments, and maximum pay-back periods.²⁸⁶ The Arrangement has largely prevented U.S. firms from being disadvantaged by superior financing by foreign ECAs. However, the Arrangement has a big loophole that lets countries combine export loans or guarantees with grants of aid for development. The combination of export financing with aid is called mixed credits or tied aid (since the aid is tied to the purchases from the donor country).

It is difficult to assess the impact of tied aid on U.S. manufacturing competitiveness. An Eximbank study asked firms in five capital goods industries (telecommunications equipment, computers, electric power generating machinery, rail transportation products, and earth moving equipment) to estimate sales to developing countries that were lost because of foreign tied aid. The firms estimated that for the years 1985 through 1988, an average of between \$400 and \$800 million per year of sales were lost in all sectors combined. These lost sales were at least 10 percent of the combined markets of all developing countries in 8 out of 12 subsectors, and were at least 30 percent in 4 of these subsectors. However, the lost sales represented at least 10 percent of the U.S. industry's total output in only 4 subsectors²⁸⁷ and in no cases represented at least 30 percent.

These figures do not tell the whole story. Lost initial sales can mean lost follow-on sales, especially when compatibility is a concern. The survey responses indicated that foreign tied aid had overall decreased exports by at least 10 percent in 7 out of 12 subsectors.²⁸⁸ This result is open to question. To balance its case studies, Eximbank performed a macroeconomic analysis of the impact of tied aid. The analysis failed to confirm this significant negative impact.²⁸⁹

The United States ties a large part of foreign aid to purchases. However, since 1974, U.S. aid has

focused on agriculture, nutrition, health, and education, rather than the large capital projects favored by some major donor countries. From 1984 through 1987, U.S. bilateral development assistance was \$15.2 billion, amounting to 34.8 percent of the aid given by the seven largest donors; but the figure drops to \$1.1 billion, or 5.3 percent of the seven-country total, when only extractive industries, power, transport, telecommunications, and other capital goods are counted.²⁹⁰ Thus, tied aid programs in other donor countries offer more opportunity to manufacturing industries. This is no accident. Most other aid donors use tied aid to promote particular industries, while the United States, except for agriculture, does not.²⁹¹

Japan in particular uses foreign aid to promote selected industries. Japan grants about as much nonmilitary foreign aid as the United States.²⁹² However, 44 percent of Japanese aid goes to economic infrastructure, compared to only 4 percent of U.S. aid.²⁹³ Most of Japan's aid (about 60 percent in 1987) is in the form of subsidized loans, so a given amount of aid (subsidy) results in a greater amount of purchases; most U.S. aid (probably around 75 percent in 1987) is provided as grants.²⁹⁴ Japan focuses its aid on Asian countries, which represent one-third of Japan's trade with developing countries and whose relatively advanced economies have great potential to buy capital goods and services. The United States, on the other hand, gives the bulk of its aid to Central America and the Middle East, which represent less than a tenth of U.S. trade with developing countries.²⁹⁵

Japanese Government and business practices can magnify the competitiveness effect of aid, even if the aid in principle is not tied. Unlike the United States, Japan awards aid primarily based on proposals received. The requirements for proposals are so complex that often foreign governments need help from Japanese firms, which steer proposals in the direction of providing follow-on work for themselves or affiliated companies. Japan sometimes ties only the design and planning phase of a project. The use of a Japanese company for that phase makes use of Japanese sources for follow-on construction quite likely.²⁹⁶

To minimize the adverse competitive impact from other countries' use of tied aid, the United States has attempted to close or reduce the loophole that permits aid to be mixed with export credits. Effec-

tive July 1988, the Arrangement was amended, at U.S. urging, so that mixed credits must have at least a 35 percent grant component (50 percent in the case of aid to the least developed countries). The intent was to make mixed credits so expensive that their use would decline; however, this did not occur in 1989 and 1990.²⁹⁷ The United States has continued attempts to limit the use of tied aid. It is negotiating for further amendments to the Arrangement, notably one to prohibit mixed credits when a project is commercially viable without a grant element. It has also gotten an informal agreement to avoid using mixed credits in Eastern Europe; as of July 1991, this agreement was working.²⁹⁸

To strengthen its negotiating position, the United States has matched or even overmatched some foreign mixed credit offers, to show foreign countries that they have nothing to gain by offering mixed credits. These offers have used Eximbank's war chest of grant money, which can be combined with loan funds. In fiscal year 1990, \$53.8 million in war chest grant funds were used,²⁹⁹ supplemented by \$30 million in grant funds from the Agency for International Development (AID), resulting in \$228 million in concessionary loans. For fiscal year 1991, Eximbank had used war chest grant funds of \$58.1 million by July, yielding concessionary loans of \$130.8 million, though Eximbank reported that it might by the end of fiscal year 1991 use the entire \$150 million in grants available, for a total of about \$500 million in loans.³⁰⁰ While sales have been won in this manner, the war chest sums are much smaller than those available for tied aid programs in several other countries, notably Japan, France, and Germany, whose annual loans with tied aid are measured in billions of dollars.³⁰¹

The U.S. Trade and Development Program (TDP) also offers tied aid. TDP started within AID but was spun off as an independent agency in 1981. This program funds feasibility studies and other project planning services by U.S. firms in developing and middle-income countries. It resembles Japan's tied aid funding for planning and design. TDP provides project planning funding only for projects that are priorities of the host country and present a good opportunity for sales of U.S. goods and services.³⁰² TDP's budget, initially only a few million dollars, has grown in recent years. In fiscal year 1990 the \$32.2 million in funds included \$29.9 million for program activities and \$2.3 million for administrative expenses.³⁰³ Of program funds obligated in

fiscal year 1990, 36 percent were for infrastructure, 17 percent for energy, 15 percent for manufacturing and processing, and 15 percent for communications and computer technology. In contrast to most other U.S. aid, the fast-growing Asian region received the most funding, 33 percent in fiscal year 1990.³⁰⁴ TDP's fiscal year 1991 budget is \$35 million.

TDP reports that "[e]very major donor nation offers grants for feasibility studies, ' and the host country almost always

... has the option of obtaining a grant from another donor government. Typically, these grants are made to promote procurement from the donor nation, thereby virtually locking U.S. firms out of major projects at the implementation stage.³⁰⁵

Thus, the competition to determine who performs the feasibility study is sometimes decisive in the competition for exports. As an independent agency since 1981, TDP spent \$161.6 million through fiscal year 1990 in program funds.³⁰⁶ As of December 1990, the associated projects had given rise to documented U.S. sales of \$3.2 billion (\$2.4 billion to Asia). The sales yield to date is thus 20 times the program funds spent. The annual sales have increased rapidly in recent years, and TDP estimated that activities already funded by December 1990 will provide an additional \$18 billion of exports as projects mature.

EXPORT CONTROLS

Some items, such as computers, have both commercial and military use. The United States controls export of such dual-use items under the Export Administration Act of 1979 (EAA), as amended.³⁰⁷ The Act is administered by the Commerce Department's Bureau of Export Administration (BXA), in cooperation with the Defense, State, and Energy Departments, and several other Federal departments and agencies. The Control List specifies dual-use items subject to control. This list includes physical products, software, technical data, and know-how.³⁰⁸ A license from BXA is necessary to export these items to some foreign countries. The license may be conditioned on assurances that the item will be used for civilian purposes; in some cases, BXA insists on the right of inspections or other constraints to guard against diversion to military use. BXA does not know precisely how much export trade is licensed, but \$90 billion seems a fair estimate for 1990.³⁰⁹ This is about 28 percent of the \$316

billion³¹⁰ in total U.S. exports of manufactured goods in 1990. This percentage declined from an estimated 40 percent or more in 1985³¹¹ and is expected to decline further in 1991.

The purpose of most controls on dual-use exports is to deny militarily strategic technology to potential adversaries. This control, however, comes at a price: requiring a license can hinder commercial exports. Moreover, export controls affect primarily high-technology industries on which U.S. manufacturing competitiveness especially depends. Some export controls on dual-use items are necessary, and some resulting drag on competitiveness is inevitable. However, there is an emerging consensus that export controls have unduly hindered competitiveness.

The export control regime came under intense scrutiny with the publication in 1987 of a report by the National Academy of Sciences.³¹² This scrutiny intensified for three reasons. First, political reform swept the nations of Eastern Europe and the Soviet Union. This reduced the military threat from these countries, lessening the need for controls. These nations need technology to hasten their transformation into open, economically viable societies. Sophisticated computers are needed, for example, to run a modem banking system, and fiber optics are crucial for a modem telecommunications network. If export controls prevent the transfer of such technology to these nations, they could increase the risk these nations pose.³¹³

Second, the changing political climate intensified allies' dissatisfaction with the United States' hard line position. This led to speculation that CoCom (Coordinating Committee for Multilateral Export Controls), the multilateral forum in which the United States and its allies coordinate export controls (see box 4-C), might break apart. To avert a crisis, in June 1990 the United States agreed to a great loosening of controls. Third, concern has increased over the continuing decline in U.S. manufacturing competitiveness, prompting closer scrutiny of whether the security benefits of particular controls are worth the competitiveness costs.

Most observers agree that too many items were controlled under the EAA. Some items were not decontrolled even when advancing technology eliminated their strategic value. Some other controlled items, while still strategic, were available from unrestricted sources in third countries; the controls

Box 4-C—East-West and North-South Controls; Cocom and Other Multilateral Export Control Forums

Traditionally, most U.S. export controls on dual-use items (items with both military and commercial use) aimed to keep militarily strategic technology from Communist countries. These controls are issued as “national security” controls under Section 5 of the Export Administration Act of 1979, as amended (EAA).¹ They are sometimes referred to as “East-West” controls. East-West controls affect more than just exports to Communist or formerly Communist countries; approximately 85 percent of the individual license applications processed in 1990 were for exports to the “free world” (not Communist or formerly Communist countries).² While individual license applications for exports to the free world are almost always granted,³ the approvals sometimes contain conditions designed to prevent possible diversion to Communist countries.

In most cases, the United States’ militarily strategic technology is shared by other countries; to prevent transfer of such technology, cooperation from other countries is necessary. Internationally, East-West export controls have been coordinated by the Coordinating Committee for Multilateral Export Controls (CoCom), an informal, nontreaty organization with 17 member countries. CoCom consists of the NATO members except Iceland, plus Japan and Australia.⁴ CoCom controls those dual-use items on its “Core List,” a scaled down version of its old “Industrial List.” Traditionally, the United States has been the most zealous CoCom member. While many CoCom members generally control items only to the extent required by CoCom, the United States controls many items to a greater extent. Lately, the difference between the United States and other members has narrowed.

Another group of U.S. export controls is issued under Section 6 of the EAA. These “North-South” or foreign policy controls aim to prevent proliferation of weapons of mass destruction, including missiles and chemical and biological weapons, to countries that do not have them, especially those countries prone to support terrorism or other reckless use.⁵ Such controls are *not aimed* at the Communist or formerly Communist nations as a whole or the Soviet Union in particular, indeed, the Soviet Union and the People’s Republic of China possess great capability in these areas. Missile and chemical weapons technology are controlled in multilateral groups other than CoCom, but these groups have limited effectiveness because they do not include the Soviet Union. No international group controls biological weapons.⁷ Foreign policy controls under Section 6 of the EAA can be imposed for other reasons as well, such as to sanction nations for human rights abuses. In that case the control is intended as a political statement, rather than to deny particular technology or products. In some cases—such as sanctions against nations that support terrorism the control has a mixture of military and political goals.⁸

¹50 U.S.C. app. 2404.

²“Office of Licensing Statistics: CY 1990,” n.d. (prepared by Bureau of Export Administration (BXA), U.S. Commerce Department). This percentage is by number of applications, not dollar value. The figure includes all individual license applications, not just those required by East-West controls.

³In fiscal year 1990, 94.2 percent of such applications were approved. BXA 1990 Annual Report, ch. 2 (in press). (This figure is based on counting the People’s Republic of China as a free world nation; otherwise the approval rate would probably be slightly higher.) Only about 0.3 percent were denied; the rest were “returned without action” because of insufficient information or at the applicant’s request.

⁴The complete membership list is Australia, Belgium, Canada, Denmark, Germany, France, Greece, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Turkey, the United Kingdom, and the United States.

⁵The term “North-South” is a convenient shorthand to indicate that the orientation of these controls is different from that of East-West controls. It should not be taken to imply that all or most developing countries give cause for concern.

⁶50 U.S.C. app. 2405. Nuclear weapons are controlled by another statute, Section 309(c) of the Nuclear Non-Proliferation Act of 1978, codified at 42 U.S.C. 2139a(b). See Section 17(d) of the EAA at 50 U.S.C. App. 2416(d).

⁷Multilateral coordination of North-South controls is discussed in Panel on the Future Design and Implementation of U.S. National Security Export Controls, Committee on Science, Engineering, and Public Policy, National Academy of Sciences, National Academy of Engineering, Institute of Medicine, *Finding Common Ground: U.S. Export Controls in a Changed Global Environment* (Washington DC: National Academy Press, 1991), pp. 83-85.

⁸Export controls on dual-use items can also be imposed under Section 7 of the EAA during a shortage of domestic supply.

did not deny technology to the target country but simply diverted business to foreign suppliers.

In principle, controlled items could still be exported, provided that an application for an export

license was submitted and approved. In practice, however, the time and trouble involved discouraged some firms from applying. And even if permission to export were ultimately granted, the delay could cost the sale. Such delays have been used as a selling

point by competing foreign manufacturers who suffered no such hindrances. In addition, export controls occasionally stopped U.S. firms from providing repairs and spare parts to items already in the field; this made U.S. suppliers appear especially unreliable. Another thorn in the side of foreign customers was reexport controls. If controlled U.S. technology or components were incorporated abroad into finished goods, sometimes permission from the U.S. Government was necessary to export those goods to a third country. As a result, many foreign manufacturers avoided using technology and components that originated in the United States. Some U.S. allies resented this extension of U.S. law onto their soil.³¹⁴

In recent years this situation has improved. Reform has focused on East-West controls, traditionally the most common type, that are designed to keep technology from former Communist bloc³¹⁵ countries (see box 4-C). Reform has proceeded on three interdependent tracks: multilateral negotiations, legislation by Congress, and domestic action by the Administration. In CoCom, the United States has agreed to lessen controls, and other countries therefore appear more willing to maintain not only common rules but a uniform standard of enforcement; this should reduce the advantages to foreign firms resulting from less restrictive control regimes. The Export Enhancement Act of 1988 (1988 Act)³¹⁶ amended the Export Administration Act of 1979 to prod the Administration to remove unnecessary controls and streamline the license application process. Further legislation in this direction is under consideration.³¹⁷ The Administration has been reducing U.S. controls to track reductions in CoCom's controls, and over time (sometimes more time than Congress allowed) has been implementing changes mandated in the 1988 Act.

Despite the reforms, export controls remain a live issue. In two sectors, computers and communications, many within industry view the Core List reductions as insufficient. Nor is it clear that procedures and attitudes have changed enough to avoid licensing delays, permit timely decontrols in the future, and facilitate increased government-industry cooperation. While reform proceeds on East-West controls, broad use of North-South controls could reverse some of the progress made. North-South controls are implemented for two purposes: to prevent proliferation of weapons of mass destruction; or to further other foreign policy

goals, such as to show disapproval of a country's human rights abuses or support of terrorism (see box 4-C). The recent Gulf War has increased proliferation concerns, sparking the Administration's Enhanced Proliferation Control Initiative. North-South controls are largely unaffected by the recent reforms, and could lead to substantial disruption of legitimate commercial sales.

Reducing East-West Controls' Drag on Competitiveness

What Is Controlled

The United States controls exports of dual-use items bound for either former Communist bloc countries or other countries where risk of diversion to former Communist bloc countries is substantial. This second case has greater commercial impact; in 1990, 85 percent of all license applications were for exports to the free world (not former Communist bloc countries).³¹⁸ In fiscal year 1989, computers accounted for 42 percent of the dollar value of all license applications; other electronic equipment and aircraft also accounted for large dollar values.³¹⁹

These East-West controls are based largely on CoCom's Core List, which replaced the old Industrial List effective September 1, 1991. The Core List includes items in nine categories: advanced materials; material processing; electronics; computers; telecommunications and information security; sensors and lasers; navigation and avionics; marine; and, propulsion.³²⁰ CoCom controls exports at three levels, depending on the item and the proposed destination. At the highest or "general exception" level, unanimous approval by CoCom members is necessary. At the next level, "favorable consideration," there is a presumption of approval; the export may be made if no CoCom member objects within 30 days of submission to CoCom. At the lowest level, "national discretion" (also called "administrative exception"), a member nation may approve the export on its own, but CoCom must be notified after the fact.

In May 1990, following a study of export controls, the Bush Administration found that the Industrial List contained "items not strategically critical to U.S. interests."³²¹ In a June 1990 CoCom meeting, the United States, responding to pressure from its allies, proposed to scrap the Industrial List and build from scratch a new, much shorter "Core List" containing only truly strategic technologies.³²² As

an interim measure, the Industrial List was trimmed in summer of 1990, especially in the computers, telecommunications, and machine tools sectors; a revised Core List was agreed upon on May 24, 1991, to take effect September 1, 1991. Controls were lifted on many important items, including satellite ground stations for television, weather, and civil communication. Machine tools were decontrolled to up to accuracies far greater than before.³²³ Many personal computers based on Intel's 80386 processor chip, which were available throughout the world, were no longer subject to controls as of July 1990,³²⁴ and some more advanced versions based on Intel's 80486 chip, also available from unrestricted sources, were decontrolled in May 1991.

The significance of the reduced Core List is not only that fewer items are controlled, but also that U.S. and foreign controls will more closely resemble one another. It is widely believed that in the late 1980s many other CoCom members were chafing under controls retained only at the United States' insistence, and were sometimes enforcing controls loosely. With the U.S. agreement to eliminate or reduce most of the controls, other members appear headed toward more uniform enforcement. CoCom members have agreed on standards for an effective export control regime, and as of June 1991 BXA anticipated that these standards would be in force in all member countries by the end of 1991.³²⁵

Uniform enforcement standards would mean that the United States could trust the export controls of other CoCom members. Current East-West controls require licenses for some items even when shipped to CoCom destinations. The United States imposes these licenses because it does not fully trust its allies to prevent reexport in violation of CoCom rules. Those few cases in which BXA requires licenses for intra-CoCom trade tend to be cutting edge items, such as the latest computer models, which can be important for winning new customers. For years industry has wanted BXA to eliminate the license requirement for intra-CoCom trade. In the 1988 Act, Congress mandated that the Commerce Department annually take stock of which other countries have fully satisfactory export control systems, and eliminate license requirements (under the East-West controls) for exports to these countries.³²⁶ The Administration has not yet found that any countries meet the requirements. In November 1989, President Bush promised to remove intra-CoCom East-West license requirements by June 1991;³²⁷ the target date

for the new enforcement standards has since been revised to the end of 1991.³²⁸

Previously, U.S. East-West export controls covered many items not controlled by CoCom, thus putting U.S. producers at a disadvantage relative to producers in many countries that rarely controlled such items.³²⁹ The 1988 Act provided that, with certain exceptions, East-West controls must not be imposed unilaterally for over 6 months. This provision led to decontrol and reduced control of many items in February 1989, 6 months after the 1988 Amendments became law.³³⁰ This should lead to greater parity between U.S. and foreign export controls.

The 1988 Act tightened provisions that items must be decontrolled to particular destination countries when they are in fact available to those countries in sufficient quality and quantity to render U.S. controls ineffective.³³¹ The 1988 Act requires the Commerce Department to rule on alleged cases of foreign availability within 4 months and to publish its determination within 1 more month; if CoCom permission is necessary to export the item, 8 months are allowed for the ruling instead of 4.³³² Under this provision, BXA completed 17 such assessments by May 15, 1991, and found foreign availability in 12 cases. In eight of those cases the item was decontrolled; in one case the item remained controlled based on by the President's finding that decontrol would be detrimental to national security, and the decision was pending in three cases.³³³

Another development is the effort to induce nations outside of CoCom to institute similar export controls. This will enhance the effectiveness of U.S. and CoCom controls, put U.S. exports more on a par with exports from the other countries, and permit trade with those countries under lessened controls. CoCom has approached countries for this purpose, including those of Eastern Europe. The United States has for years conducted bilateral negotiations to encourage other countries to control exports, resulting in more liberal treatment of exports to Austria, Finland, Ireland, Singapore, Sweden, Switzerland, and South Korea. Other nations, such as Taiwan, have not yet been responsive.³³⁴

A further reform is the reduction of reexport controls. The 1988 Act removed East-West controls for the reexport of items to a destination within CoCom or with similar safeguards. The Act lifted all East-West controls for the reexport of U.S. goods

and technology incorporated abroad into foreign products, provided that either the controlled U.S. content comprises at most 25 percent of the product's total value, or CoCom controls the parts at only the national discretion level.³³⁵ The Commerce Department implemented these changes in July and October of 1989, well after the November 1988 deadline given by Congress.³³⁶ Moreover, BXA did not completely implement this provision because it believed that it would endanger national security, for example, by decontrolling sensitive avionics. BXA changed the 25 percent threshold to 10 percent for reexport to certain countries, including Iran and Libya, and did not modify an existing rule that controlled reexport of U.S. technology incorporated abroad into finished products regardless of the percentage value the technology represented.

As a result of these and other reductions in East-West export controls, the amount of licensed trade has been decreasing. The number of applications received for individual licenses dropped from 98,000 in fiscal year 1988 to 85,000 in fiscal year 1989, 65,000 in fiscal year 1990, and an annual rate of about 40,000 for the first 6 months of fiscal year 1991.³³⁷ The value of individual license applications processed dropped from \$132 billion in 1989 to \$73 billion in 1990, and the value of applications approved dropped from \$123 billion in 1989 to \$63 billion in 1990.³³⁸ The new Core List and other recent or pending changes will further decrease the amount of licensed trade.

Licensing Procedures

In the mid- and late 1980s, acquisition of export licenses took much time and effort. For the first quarter of 1986, the Commerce Department reported an average processing time of 27 days, with some applications taking several months and a few even taking years.³³⁹ However, a survey of U.S. industry reported an average of 54 days; the difference in the averages is that industry counted time spent preparing applications, time after the applications were sent but before the Commerce Department logged them in, and time after approvals were sent but before they were received.³⁴⁰ The view from European firms that needed U.S. approval for purchases or reexports was particularly negative. European industry representatives reported "widespread disgust" with this system, citing: "lost applications; . . . technically incompetent questions; and delays caused by the use of surface mail." ³⁴¹ License

turnaround times in other CoCom countries were "generally much shorter."³⁴²

When the Commerce Department wanted to approve a license but DoD did not, the interagency dispute resolution process was cumbersome.³⁴³ Both the time required and the nature of the process discouraged industry. The regulations were complex and difficult to fathom; firms seldom got advance indications from the government of the likelihood of approval and the likely delay; and companies were sometimes kept in the dark about concerns delaying license approval, making them unable to help resolve the problem.³⁴⁴ In one instance, it took a U.S. company almost 3 years to get a license to sell a \$450,000 nuclear magnetic resonance (NMR) spectrometer to a medical research unit in Eastern Europe; in the interim a German firm sold several similar systems to Communist bloc customers.³⁴⁵ The U.S. practice contrasted with that of Japan, where "company representatives work[ed] closely with their government counterparts" and "[a]s a result, export license applications [were] rarely submitted if they [were] not virtually certain to be approved."³⁴⁶ Similar government-industry consultation occurred in some other CoCom countries.³⁴⁷ Industry was not told of likely U.S. or CoCom decisions to reduce or eliminate certain controls; advance warning could have allowed a head start in exploring new export markets. Other CoCom members kept their industries much better informed.³⁴⁸

This picture has changed. Average processing times for individual licenses, as reported by the Commerce Department, have decreased from 23 days in fiscal year 1986 to 16 days in fiscal year 1990.³⁴⁹ This decrease is significant because during this period, with the decontrol of lower levels of technology, the applications' complexity and sensitivity increased. Applications for exports to CoCom members take the least time—an average of 3 days in calendar year 1990. Much delay comes from the need for the Department of Commerce to refer applications to other agencies and/or CoCom. In calendar year 1990, applications not requiring referral took an average of 7 days for processing; those requiring referral averaged 67 days.³⁵⁰

BXA has made the application process more user-friendly. BXA opened branch offices, gave many seminars to industry, and now provides extensive counseling to exporters. Urgent applications get special handling, sometimes gaining ap-

proval in a few hours. A computerized tracking system permits instant determination of an application's status, and BXA's automated phone-in system gives status updates 24 hours per day, including authorization to ship if the license was approved with no restrictions. Exporters may submit applications by computer (accounting for 29 percent of the applications filed in fiscal year 1990); approvals for those applications are returned electronically.³⁵¹ BXA consults with applicants if problems arise in interagency review and tries to work out a solution acceptable to all parties.³⁵²

Remaining Concerns

Some concerns remain despite recent progress. One issue is whether there is sufficient political will to overcome bureaucratic gridlock. Traditionally, the Defense Technology Security Administration (DTSA), the part of DoD with primary responsibility for export controls, has been hostile to liberalization. This is to be expected up to a point, since DoD's mission is military security rather than economic competitiveness. However, there is a consensus that in the mid- and late 1980s the DTSA went too far; it did not take seriously the need to avoid unnecessary drag on competitiveness and often blocked clearly justified liberalization. DTSA stalled for almost a year a 1988 Commerce Department recommendation to decontrol personal computers compatible with IBM's AT models that were based on Intel's 80286 processor. These machines, at the time midrange PCs, were available from many producers in seven non-CoCom nations (including Korea and Taiwan, which produced over 1 million units in 1988) and were in wide civilian use in Soviet bloc countries.³⁵³

A combination of circumstances overcame DTSA's resistance in 1990, when President Bush personally backed a drastic reduction in controls. However, many in industry worry that DTSA can impede the actual implementation of promised reforms. This may have happened already. The new Core List, and the U.S. proposals for it, were supposed to be written "from scratch"³⁵⁴ with each item specifically justified. However, when it came time to draft the U.S. proposals in meetings of BXA's Technical Advisory Committees (TACs), industry representatives report that some DTSA representatives refused to do so and instead sought only to trim existing lists.³⁵⁵

With the 1988 Act, Congress strengthened the Commerce Department vis-à-vis the Defense De-

partment. DoD can no longer delay license approvals indefinitely. When the Secretary of Commerce decides to approve a license, the Secretary of Defense has 20 days to object, and the license may be granted unless the President intervenes in another 20 days.³⁵⁶ However, interagency coordination below the cabinet level could still be cumbersome, taking over 100 days.³⁵⁷ CoCom approval might require additional time. The detailed procedures are not publicly known because an Executive Order setting them out is classified.

Another possible problem in implementing reform is that dual-use items removed from the Control List might be added to the Munitions List, which is supposed to govern only purely military items. The control regime for items on the Munitions List is much stricter, without the EAA's competitiveness safeguards. While President Bush promised to remove all overlap between the lists "unless significant U.S. national security interests would be jeopardized,"³⁵⁸ here is some danger that the Munitions List will be used to maintain or institute controls over dual-use items that could not be justified under the EAA.

Another concern is the new Core List. In two important sectors, computers and telecommunications, industry is not completely satisfied. In 1990, the computer sector accounted for 41 percent of the value of all individual license applications.³⁵⁹ Modern telecommunications systems for the Soviet Union and Eastern Europe will cost many billions of dollars. Hungary plans to spend \$6.3 billion over 10 years, Czechoslovakia \$3 billion through 1995, and Germany \$4 billion on East German upgrades in 1991 alone.³⁶⁰ The Core List controls computers that these nations need for economic development. In one broad performance range, the United States wanted to control the computers, but most allies did not. As a compromise, the Core List controls them at the national discretion level. Most other CoCom members will probably permit those computers to be exported with either no prior application or a very quick one; some in industry worry that they will suffer the disadvantage of long licensing delays. Current Administration policy is to process applications for items at the national discretion level within 15 days, without DoD review.³⁶¹ However, even if BXA keeps to 15 days, that delay, coupled with the need to apply in the first place and the lack of certainty that the application will be approved, could cost some sales.

The Core List controls telecommunications equipment these nations need. This includes fiber optic cable for state-of-the-art telecommunications systems, which the Core List controls at the general exceptions level. The United States pushed for that result, but many other members were quite unhappy and will seek substantial loosening of controls in 1992. Poland, Czechoslovakia, and Hungary receive favorable consideration. As long as controls affect all suppliers equally, U.S. companies will suffer no competitive disadvantage. But it is possible that foreign governments will try harder than the United States to obtain CoCom approval on behalf of their firms.

There is concern as to whether an effective mechanism exists for updating controls. Today's current list of controls can become tomorrow's obsolete list. More timely review will be easier because the U.S. list now has fewer items; it is now within the bounds of CoCom's Core List, which is much smaller than the old Industrial List. U.S. reviews will better track CoCom routine reviews, which will occur every 3 years instead of every 4 years as in the past.³⁶² Also, industry can now better funnel information about advancing technology to the government through the TACs.

But list review requires considerable effort and expertise. The basis for decontrol is often a determination that an item is available in sufficient quantity and quality from unrestricted sources.³⁶³ A delay in this determination results in an ineffective control that hinders U.S. exports while foreign manufacturers get the business. These determinations, performed by BXA's Office of Foreign Availability (OFA), require investigating the sources, quality, and quantities of foreign goods; such information can be hard to find. Further, the technologies involved are specialized and complex. OFA's staff of about 25³⁶⁴—out of about 530 BXA employees³⁶⁵—seems too small for such an important and difficult job. The salary levels authorized for OFA--GS-13 (starting salary about \$44,000 as of Jan. 1, 1991) for most working engineers³⁶⁶—make it difficult to keep top-notch people. In addition, these politically charged determinations are sometimes opposed by other agencies at high levels. One example is the case of AT personal computers already mentioned; another is semiconductor wire bonders. The Commerce Department found foreign availability of wire bonders and recommended decontrol, which was approved by the President in 1987, but was blocked

into 1990 by interagency dissension.³⁶⁷ In 1991, a National Academy of Sciences panel found that BXA's procedure of finding foreign availability "has proven largely ineffective," and has been "costly and contentious and has rarely resulted in timely decontrol."³⁶⁸

A complementary approach to avoiding outdated controls is indexing. For example, if a particular control applies to all computers above a certain processing speed, there might be a presumption, based on projected industry trends, that each year the processing speed threshold be increased by 10 percent. Each subsequent year, those opposing the adjustment would have to justify their position. As another example, there could be a presumption that personal computers (or some other type of equipment) would be decontrolled (or controlled at a lower level) after the model in question has been sold commercially for a certain number of years. Again, those who opposed a particular decontrol would have to justify their position. While Congress has encouraged indexing,³⁶⁹ so far the Administration has rarely used it.

Some in industry are concerned that the government does not welcome its participation and cooperation in administering export controls. In 1991 a National Academy of Sciences panel recommended increased cooperation.³⁷⁰ BXA did involve industry TACs in drafting and negotiating the Core List. The TACs advised on appropriate technical thresholds for control; industry representatives occasionally spotted foreign proposals that were apparently crafted to decontrol items made by foreign firms while leaving controlled similar items made by U.S. firms. It remains to be seen how BXA and industry will build on this experience. According to some analysts, BXA and industry have been in a vicious circle: BXA not taking the TACs seriously, and industry not devoting sufficient resources to them. One industry observer commented that because the industry representatives are busy corporate officers who barely have time to fly to Washington for a one-day meeting, the TACs can work well only if the Commerce Department does considerable preparatory and follow-up work: preparing memoranda setting out issues to be discussed; writing draft position papers based on the discussion at meetings; gathering facts; and soon. This observer commented that the National Academy of Sciences proceeds in this manner with its panels of experts, but the

Commerce Department lacks the resources to do this.³⁷¹

Industry representatives have had complaints about the use of TACs. For example, a representative of one high-technology firm with experience on several TACs stated that some parts of TAC meetings are needlessly classified, preventing the representatives from reporting back to industry.³⁷² An experienced representative on the TAC for automated manufacturing stated that DTSA representatives often will not give reasons for their positions, even in a classified session, so that industry cannot address DTSA's concerns.³⁷³ Some felt that the government used TACs to legitimate its policies: it would pose a limited set of choices, none of which appealed to industry; the industry representatives would make their choice; and then the government would claim that industry had approved that choice.

Controls for Reasons of Foreign Policy

While much progress has been made in reducing the drag from East-West export controls on commercial exports, that progress could be reversed by the use of North-South or "foreign policy" controls. Some foreign policy controls are aimed at preventing proliferation of weapons of mass destruction, missiles to carry them, and chemical and biological weapons. Other foreign policy controls, such as those in reaction to human rights abuses, and those against Libya, Syria, and Iran, are intended primarily to make a political statement rather than deny military technology.³⁷⁴

As explained in box 4-C, Section 5 of the EAA governs East-West controls, while Section 6 governs foreign policy controls. Section 6 controls must be justified annually, but they are not subject to the Section 5 safeguards against unnecessary interference with legitimate commercial exports. The Section 5 prohibitions against unilateral controls and against controlling items shown to have foreign availability do not apply to controls under Section 6.³⁷⁵ Thus, section 6 can provide an end run around the restrictions in Section 5. For example, in March 1991, BXA imposed unilateral controls for chemicals and chemical manufacturing equipment that could be used to make chemical weapons.³⁷⁶ As another example, in June 1991, BXA removed Section 5 controls on certain equipment used to manufacture prepregs (fibers embedded in resin used to make, for example, tennis racquets and

aircraft structural components), because of foreign availability. However, the equipment remained subject to foreign policy controls.³⁷⁷

In August 1991, BXA issued regulations under Section 6 that prohibit all exports that the exporter knows will be used to make chemical or biological weapons.³⁷⁸ This rule might be interpreted by BXA and the courts to imply a duty on the exporter's part to make a reasonable inquiry as to where the exports will be used; if the exports are used in making the prohibited weapons, and the exporter could have discovered that in advance with reasonable inquiry, then the exporter might be deemed in violation of the act and suffer stiff penalties. To be safe, any firm that exports virtually any goods or technology to any country might need to set up a monitoring and control system with careful communication between headquarters and marketing.³⁷⁹ BXA can inform exporters that exports to a particular consignee require a license because of risk of diversion to a prohibited weapons plant. This gives BXA broad power to prohibit exports of any items to particular destinations. This regulation controls exports unilaterally, with no consideration of whether items have strategic importance and whether they are available from non-U.S. sources.

These rules have been fashioned within the rubric of the Administration's Enhanced Proliferation Controls Initiative (EPCI), announced December 13, 1990.³⁸⁰ Heightened concern for proliferation is natural in the wake of the Gulf War and revelations about prior exports to Iraq. However, industry is concerned that the Administration is starting an open-ended export control campaign without serious consideration of the effect on commercial trade.

1 U.S. Congress, Office of Technology Assessment, *Making Things Better: Competing in Manufacturing, OTA-ITE-443* (Washington DC: U.S. Government Printing Office, February 1990), passim. *Making Things Better* did not consider domestic policies that affect competitiveness incidental to their main purpose—for example, environmental regulation of workers' health and safety, and product liability.

2 Gary Clyde Hufbauer, Diane T. Berliner, and Kimberly Arm Elliott, *Trade Protection in the United States: 31 Case Studies* (Washington, DC: Institute for International Economics, 1986). This report uses the term "special trade protection" to mean protection under Section 201 and related sections of the Trade Act of 1974, as amended. This protection is based on GATT's so-called "escape clause," which permits countries to protect industries seriously injured by foreign competition even in the absence of any unfair trade practice.

3 Labor-Industry Coalition for International Trade, "The Uruguay Round: Will It Be a Good Deal for U.S. Manufacturing?" June 1990, p. 1.

4 Complete specialization was considered unlikely because of the

diminishing marginal productivity of factors of production. This means that, after the point where inputs are combined optimally, any input (in this case, capital and labor) contributes in diminishing quantities to productivity the more of that input is used.

5 For a more detailed but still simple, explanation of how this works, see David B. Yoffie, *International Trade and Competition: Cases and Notes in Strategy and Management* (New York NY: McGraw-Hill Publishing Co., 1990), pp. 4-8.

6 The contributions of Linder, Vernon, and Wells are discussed in Yoffie, *ibid.*

7 Yoffie, *op. cit.*, p. 13.

8 Paul R. Krugman, *Rethinking International Trade* (Cambridge, MA: The MIT Press, 1990), p. 1.

9 The two commercial aircraft makers in America are Boeing and McDonnell Douglas; the European manufacturer is Airbus, a consortium with four member companies. The engine makers are Rolls Royce of England, and GE and Pratt & Whitney of the United States. In addition, SNECMA of France, MTU of Germany, and Mitsubishi Heavy Industries, Kawasaki Heavy Industries, and Ishikawajima-Harima Heavy Industries of Japan make major subassemblies of engines. See ch. 8 for a description of the world's large commercial jet aircraft industry.

10 W. Brian Arthur, "Positive Feedbacks in the Economy," *Scientific American*, February 1990, p. 93. Approximate dollar figures are OTA estimates for 1991.

11 Krugman, *op. cit.*, p. 164.

12 Infant industry protection is defined as the protection of a fledgling group of producers from incursions of foreign firms that dominate production and have superior technology in industries with high knowledge intensity, significant positive externalities or increasing returns.

13 Arthur, *op. cit.*, p. 98.

14 Ernest H. Preeg, *The American Challenge in World Trade: U.S. Interests in the GATT Multilateral Trading System* (Washington, DC: The Center for Strategic and International Studies, 1989), p. 4.

15 *Ibid.*, p. 23.

16 Hufbauer et al., *op. cit.*, pp. 250-251. These limits were exceeded every year of the VRA, rising from actual Japanese imports of 1.78 million units in 1981 to 2.31 million units in 1985.

17 Occasionally limitations on imports are more stringent. In 1981, at the beginning of the negotiation of the third phase of MFA, the European Economic Community cut back the volume of imports from **so-called** dominant MFA suppliers (Hong Kong, Macao, Korea, and Taiwan) by nearly 7 percent. Thomas R. Howell and William A. Noellert *The EEC and the Third Multifiber Arrangement: A Study Prepared for the Fiber, Fabric and Apparel Coalition for Trade (FFACT)* (Washington, DC: Dewey, Ballantine, Bushby, Palmer & Wood, 1986), p. 7.

18 This means that all GATT signatories are to be given the same favorable terms of trade as those given to the nation with the best terms, or the most-favored nation.

19 Preeg, *op. cit.*, p. 31.

20 Some experts in both the United States and the EC argue convincingly that these countries are considering standards other than those used by Japanese producers is for technical rather than nationalistic reasons; but among policymakers, the concern is at least as much for national competitiveness as for technical superiority.

21 U.S. Department of Labor, Bureau of Labor Statistics, "BLS Reports on Worker Displacement" News Release, Dec. 9, 1988.

22 Michael Podgursky and Paul Swain, "Labor Market Adjustment and Job Displacement: Evidence from the January, 1984 Displaced Worker Survey," Final Report, Bureau of International Labor Affairs, U.S. Department of Labor, January, 1986.

23 See chs. 6 and 7, on the industrial policies of Japan Korea, and

Taiwan, for further discussion.

24 19 U.S.C. 2411-2420.

25 19 U.S.C. 2251-2254.

26 19 U.S.C. 2411(b); see also 19 U.S.C. 2411(a)(l).

27 GATT Article 12, paragraph 1.

28 GATT allows agricultural quotas in many cases; it also allows quotas by countries with dangerously low foreign currency reserves and for reasons of national defense. GATT Article XI, paragraph 2; Articles XII, XXI. Quotas are also permitted under GATT's so-called "escape clause" (Article XIX, though in this case the issuing country is obliged to pay compensation. Under GATT's Multifiber Arrangement, many bilateral agreements limit trade in textiles. Finally, sometimes two countries reach an understanding to limit bilateral trade in specified products, even though this understanding is arguably prohibited under GATT.

29 This term, as used here and often elsewhere, refers to barriers that are not tariffs **and also are not quotas**. Also, as used here, the term refers to both public (government-imposed) and private barriers; some use the term to mean only public barriers.

One type of barrier is the failure of foreign countries to protect intellectual property (by means of patent rights, copyrights, trademark rights, trade secret rights, etc.). If a foreign government protects intellectual property, U.S. inventors, authors, etc. will in many cases have the exclusive right to make and sell particular goods in that country. If a foreign government protects intellectual property poorly or not at all, U.S. inventors and authors can lose sales to foreign imitators. Therefore, the lack of protection can be considered a trade barrier, since it hinders sales of U.S. goods abroad. This trade barrier was discussed in U.S. Congress, Office of Technology Assessment *Making Things Better*, *op. cit.*, pp. 69-71, 211-219. The justifications for protecting intellectual property are discussed in that report and in U.S. Congress, Office of Technology Assessment *Intellectual Property Rights in an Age of Electronics and Information*, OTA-CIT-302 (Springfield, VA: National Technical Information Service, 1986).

30 See, for example, Office of the United States Trade Representative, 1991 *National Trade Estimate Report on Foreign Trade Barriers* (Washington DC: U.S. Government Printing Office, Mar. 29, 1991); Office of the United States Trade Representative, "Report to Congress on Section 301 Developments Required by Section 309(a)(3) of the Trade Act of 1974 (January-June 1990)," n.d. (one of a series of semiannual reports).

31 President Ronald Reagan memorandum of Aug. 1, 1986, "Determination Under Section 301 of the Trade Act of 1974," 51 *Federal Register* 28219 (Aug. 6, 1986).

32 Semiconductor Industry Association "Four Years of Experience Under the U.S.-Japan Semiconductor Agreement: 'A Deal Is a Deal,'" Fourth Annual Report to the president November 1990, pp. 35-38; Clyde V. Prestowitz, Jr., *Trading Places: How We Allowed Japan To Take The Lead* (New York, NY: Basic Books, 1988), pp. 62-63; Donald Phillips, Assistant United States Trade Representative, testimony at hearings before the House Committee on Energy and Commerce, Subcommittee on Commerce, Consumer Protection and Competitiveness, May 9, 1990, Serial No. 101-149, pp. 8-9; Semiconductor Industry Association, "World Market Sales and Shares for 1982- 1990," n.d.

33 U.S. firms' market shares generally declined over the years. As late as 1985, U.S. firms still held 86 percent of the U.S. market, 54 percent of the European market, and 40 percent of the rest of the world market outside of Japan. Semiconductor Industry Association "World Market Sales and Shares for 1982- 1990," n.d.

34 The text of the agreement is contained in an exchange of letters on Sept. 2, 1986, between Japan's Ambassador Matsunaga and USTR Clayton Yeutter.

35 Prestowitz, Jr., *op. cit.*, pp. 65. (The quoted language is a paraphrase by Prestowitz of the letter's contents.)

36 52 Federal Register 10275, (Mar.31, 1987).

37 52 *Federal Register* 13412, (Apr. 17, 1987). Some other punitive tariffs were levied at the same time in retaliation for Japan's failure to stop dumping; in the September 1986 agreement, Japan's Government had also promised to stop its firms from dumping in the U.S. and third country markets.

38 Semiconductor Industry Association, "World Market Sales and Shares for 1982-1990," op. cit.

39 Ibid. The USTR gives slightly different figures for the share of imports from countries other than the United States. See Office of the United States Trade Representative, "United States, Japan Conclude Semiconductor Agreement," press release dated June 4, 1991, ref. No. 91-21, attachment entitled "Background Statistics on Semiconductor Sales to the Japanese Market."

40 Jacob M. Schlesinger, "Foreign-Chip Shine in Japan is Below Goal," *The Wall Street Journal*, June 17, 1991.

41 Office of the United States Trade Representative, "United States, Japan Conclude Semiconductor Agreement," press release & dated June 4, 1991, ref. No. 91-21.

MITI claimed that the imports' market share had in fact risen to about 17 percent in the first quarter of 1990 and 19 percent in the fourth quarter. MITI used a different measure of market share than the U.S. Government and industry, based on its surveys to 60 Japanese firms. The U.S. approach is based on statistics collected by the World Semiconductor Trade Statistics (WSTS) Program. The two measures differed in three ways. First, MITI's survey included only about 75 percent of the industry, while WSTS statistics were more comprehensive. Also, MITI counted, but the U.S. approach excluded, 1) captive sales—that is, in-house sales of a chip of a type that is not offered for sale to outsiders, and 2) private label sales—that is, sales of a chip made by a Japanese firm with a U.S. firm's label. The U.S. industry maintains that the Japanese industry agreed in 1986 to use the U.S. approach. In the new agreement, MITI agreed to drop using its survey and accept the use of WSTS statistics; the two countries still disagree on the other two differences in measuring approach. Under this new framework MITI claims that import penetration reached about 16 percent in 1990, compared with the U.S. figure of about 13 percent. Sources that discuss the measurement issue include Semiconductor Industry Association, *Four Years of Experience*, op. cit., Appendix 8; Jacob Schlesinger, op. cit.; "U.S. and Japan Sign Semiconductor Pact; Targeting 20 Percent Share, Design-Ins," *Regulation, Economics and Law*, June 5, 1991 (Bureau of National Affairs, Inc., Washington DC), p. A-15 (substantially the same article is in BNA's *International Trade Reporter*, June 5, 1991); Tsuyoshi Sunohara "Chip Pact Dispute Shifts to Market Share Calculation," *Japan Economic Journal*, July 14, 1990, p. 1.

42 Ch.6; U.S. Congress, General Accounting Office, *U.S.-Japan Trade: Evaluation of the Market-Oriented, Sector-Selective Talks*, NSIAD-88-205 (Gaithersburg, MD: U.S. General Accounting Office, July 18, 1988), p. 45; Cray Research, Inc., *The Japanese Public Sector: Problems and Prospects for U.S. Supercomputer Vendors* (May 1990), pp. 3-1 through 3-23, 4-1 through 4-8, 5-1 through 5-3.

43 Chapter 6; U.S. Congress, General Accounting Office, *ibid.*, pp. 45-46; Cray Research Inc., *ibid.*, p. 4-10.

44 Chapter 6; Office of the United States Trade Representative, "Report to Congress on Section 301 Developments Required by Section 309(a)(3) of the Trade Act of 1974 (January-June 1990)," n.d., pp. 5-6; Cray Research Inc., *ibid.*, pp. 4-11 through 4-18.

45 Office of the United States Trade Representative, *ibid.*, pp. 5-7.

46 This course of action is available only if the subject in question is covered by GATT. For example, while the United States is seeking in the Uruguay Round to have GATT require certain levels of intellectual property protection GATT does not now have any such requirement.

47 See GATT Article XXII; Article XXIII, paragraph 1.

48 This procedure is based on GATT Article XXIII, paragraph 2.

49 John Jackson, *The World Trading System: Law and Policy of International Economic Relations* (Cambridge, MA: Press, 1989), pp. 98-100. A small number of these cases were brought under GATT's supplementary Codes, some of which provide similar dispute resolution procedures.

50 Ibid., p. 100. Of the remaining cases, 4 specifically concerned primary products (from mines, forests, and the like), while 25 had less specific product focus (such as a complaint about a country's import licensing scheme in general). 48 cases were brought against the United States: 15 concerning manufactured goods, 17 concerning agriculture, 2 concerning primary products, and 14 without specific product focus.

51 Ibid., pp. 98-100.

52 19 U.S.C. 2411-2420.

53 19 U.S.C. 2411(b); see also 19 U.S.C. 2411(a)(l).

54 Omnibus Trade and Competitiveness Act of 1988, Public Law 100-418, Sec. 1301, enacting new provision at 19 U.S.C. 2411(d)(3)(B)(i)(III).

55 See 19 U.S.C. 2413(a).

56 19 U.S.C. 2411(c)(1),(3).

57 Office of the United States Trade Representative, "Section 301 Table of Cases," computer printout dated Jan. 17, 1991. This classification involved some judgment calls, so other analyses may give different figures.

58 As a quid pro quo for GATT coverage and effective GATT dispute resolution mechanisms, the United States would consider forgoing unilateral retaliation under Section 301.

59 Some of the cases dealt only in part with manufactured goods. Those cases are included in the table, but only those aspects of the case concerning manufactured goods are reported.

60 Normally these findings were made in the context of the Section 301 case. In Case No. 68, dealing with Argentina's patent protection for pharmaceuticals, the petition was withdrawn before such findings were made, but the USTR's annual reports, *National Trade Estimate Report on Foreign Barriers*, identified Argentina's inadequate patent protection for pharmaceuticals as a foreign market barrier. In Case No. 70, dealing with the EC's export restrictions on copper scrap, there were no published findings, but the U.S. Government took the case to GATT to get the foreign practice stopped.

61 Up to 1988, whenever a GATT dispute resolution mechanism was applicable, Section 301 had an open-ended time limit allowing as much time as needed for the GATT process to conclude. Under that regime, Section 301 cases during 1980-1985 covered by GATT dragged on an average of almost 4 years, compared to about 1 year for other Section 301 cases. U.S. Congress, General Accounting Office, *International Trade: Combating Unfair Trade Practices*, NSIAD-87-100 (Gaithersburg, MD: U.S. General Accounting Office, Mar. 17, 1987), pp. 18-19. In 1988, Congress imposed an 18-month limit to avoid such long delays.

62 19 U.S.C. 2414(a)(l),(2) (investigation, negotiation, and determination of sanctions), 2415(a) (application of sanctions). In certain circumstances these deadlines are shortened. For example, 3 to 6 months less time is allowed for cases involving intellectual property. 19 U.S.C. 2414(a)(3).

63 After receiving a petition, the USTR has 45 days in which to decide whether to start an investigation. 19 U.S.C. 2412(a)(2).

64 Nine out of 15 cases initiated in 1988 through 1990 were started without an industry petition. Office of the United States Trade Representative, "Section 301 Table of Cases," op. cit.

65 Omnibus Trade and Competitiveness Act of 1988, Public Law 100-418, section 1301, adding a new Section 310 to the Trade Act of 1974, codified at 19 U.S.C. 2420.

66 The retaliation itself could be of some help if it limits imports of products made by the complaining U.S. industry, or downstream products.

67 U.S. retaliation under Section 301 has twice provoked a GAIT complaint by other countries, though no GATT panel has yet ruled on the issue.

68 Prestowitz, Jr., op. cit., pp. 67-68.

69 See, for example, ch. 6; Bela Balassa and Marcus Noland, *Japan in the World Economy* (Washington DC: Institute for International Economics, 1988), chapter 3; Advisory Committee [to the USTR] for Trade Policy and Negotiations, *Analysis of the U.S.-Japan Trade Problem* (February 1989), ch. 5; Prestowitz, Jr., *ibid.*, especially pp. 78-81, 94-99, 281-283.

These market barriers occur in the context of Japan's overall trade and industry policy, which is described in ch. 6. Other reasons for the bilateral trade deficit-including Japan's better financing for long-term investment, better education better diffusion of technology to small business, and more aggressive support for commercially oriented R&D projects--are discussed in U.S. Congress, Office of Technology Assessment *Making Things Better*, op. cit.

70 Prestowitz, Jr., *ibid.*, pp. 96-99.

71 "Back to Business," *Business Tokyo*, July 1990, p. 40.

72 Sam Besachio, Director, Financial Management, Office of the U.S. Trade Representative, personal communication% Aug. 7, 1991. The USTR office has 160 full-time equivalent positions authorized, but only 151 filled. The USTR estimates that roughly 10 percent of its staff effort concerns Japan. Probably at most half of this effort concerns manufactured goods.

73 Prestowitz, Jr., op. cit., pp. 276-277.

74 *Ibid.*, pp. 257-260.

75 *Report of the Advisory Committee for Trade Policy and Negotiations*, op. cit., pp. xvi-xvii.

76 U.S. Congress, General Accounting Office, *U.S.-Japan Trade*, op. cit. *passim*.

77 *Ibid.*, pp. 20-21; Ryuji Katayama et al., "Motorola's on the Line: Will Japan Pick Up?" *Business Tokyo*, vol. 4, September 1990, pp. 39-40.

78 Joint Report of the U.S.-Japan Working Group on the Structural Impediments Initiative, June 28, 1990, Introduction, second paragraph.

79 *Ibid.*, *passim*.

80 *Ibid.*, Introduction.

81 *First Annual Report of the U.S.-Japan Working Group on the Structural Impediments Initiative, May 22, 1991*, **comments** of the U.S. Delegation, pp. 1-2.

82 Rudiger Dombusch, "The SII Talks Are a Joke," *The International Economy*, vol. 4, February/March 1990, pp. 47-90.

83 U.S. Government Task Force on the EC Internal Market, through Office of the U.S. Trade Representative, *EC 1992: An Assessment of Economic Policy issues Raised by the European Community's Single Market Program* (Washington DC: U.S. Government Printing Office, May 1990), pp. 31-33; Youri Devuyt, "The United States and Europe 1992," *World Competition; Law and Economics Review*, vol. 13, No. 1, Sept. 1989, pp. 30-31.

84 19 U.S.C. 1677(5)(A), 1303(a)(l).

85 *Final Affirmative Countervailing Duty Determination and Countervailing Duty Order; Carbon Steel Wire Rod From New Zealand, 51 Federal Register 7972* (Mar. 7, 1986). The payment was in the form of a tax credit; if the credit exceeded the amount of tax due, the difference was paid to the firm.

86 GATT Article XVI; GATT Subsidies Code, Article 9. (GATT Codes are explained in box 4-A.)

87 19 U.S.C. 1677(5).

88 GATT Subsidies Code, Article 11, paragraph 1.

89 *Ibid*, paragraph 2. Accordingly, the Code's signatories have agreed to "seek to avoid causing such effects through the use of

subsidies."

90 GATT Article VI, paragraph 1.

91 See GATT Antidumping Code, Article 2, paragraph.

92 GATT Article VI, paragraph 1. Under U.S. law, foreign producers are assumed to have a minimum of 10 percent administrative overhead and 8 percent profit. 19 U.S.C. 1677b(e)(l)(B).

93 Mark Koulen, "Some Problems of Interpretation and Implementation of the GATT Antidumping Code," in John Jackson and Edwin Vermulst (eds.), *Antidumping Law and Practice: A Comparative Study* (Ann Arbor, MI: University of Michigan Press, 1989), pp. 367-369.

94 GATT Article VI

95 A price difference between the two markets that is greater than shipping costs from the low-priced market to the high-priced one is not sustainable absent market barriers. If such a difference existed and no market barriers were present, third parties would buy the good in the low-priced market and resell in the high-priced market, hinging down the price there.

96 The protection could be due to a variety of factors, including explicit government regulation informal administrative guidance given to firms, and firms' own habits of doing business.

97 The law actually covers subsidies from private as well as government sources. See 19 U.S.C. 1303(a)(l).

98 For this plan to succeed, it is not necessary for the firm to drive its competitors out of business (which would constitute predatory pricing); it can be sufficient to capture substantial additional market share.

One special case of this approach is life cycle pricing, or charging a constant price throughout a product's whole life cycle so as to yield a normal profit over the cycle as a whole. This typically involves below-cost pricing at the start of the cycle, when the manufacturing costs are highest.

99 U.S. Congress, Office of Technology Assessment, *Making Things Better*, op. cit., ch. 3.

100 Thomas R. Howell et al., *Steel and the State: Government Intervention and Steel's Structural Crisis* (Boulder, CO: Westview Press, 1988), pp. 6,4145,94-98,207-215, 254-256,301-302,332-334, 347-349, 360-361.

101 If fixed costs are particularly high the incentive to dump may be particularly strong. This might be the case, for example, in Germany and Japan where employees are not as readily laid off during slack times as in the United States.

102 Jackson, op. cit., p. 244 (emphasis in original).

103 The U.S. law is found at 19 U.S.C. 1303, 1671 -1677k.

104 The final action is normally an order to impose antidumping or countervailing duties; but sometimes the additional duties are not imposed in exchange for an agreement by foreign exporters to raise prices or discontinue receiving subsidies, or an agreement by the foreign government to discontinue subsidies or limit quantities exported.

105 These figures and tables are based on semiannual filings that signatories to the GATT Subsidies Code and the GATT Antidumping Code are required to file. It is possible that other countries also instituted cases during this period. Also, the signatories are required to include only cases against other signatories, and some countries' filings omit cases against non-signatories. For additional analysis of global usage of antidumping cases, see U.S. Congress, General Accounting Office, *International Trade: Use of the GATT Antidumping Code, NSIAD/90-238FS* (Gaithersburg, MD: U.S. General Accounting Office, July 25, 1990).

106 See for example Robert Ford and Wim Suyker, "Industrial Subsidies in the OECD Economies" (January 1990), table 2 (covering years 1970-88), paper No. 74 in *OECD Department of Economics and Statistics Working Papers*; Gary C. Hufbauer and Joanna Shelton Erb,

Subsidies in International Trade (Washington DC: Institute for International Economics, 1984, distributed by MIT Press, Cambridge, MA), p. 3 (covering years 1952-80).

107 U.S. Congress, General Accounting Office, *International Trade: Use of the GAIT Antidumping Code*, op. cit., p. 4.

108 GATT Article VI, paragraph.

109 19 U.S.C. 1671d(b)(I), 1673d(b)(I). This difference in wording can be important. Suppose that dumped or subsidized goods caused material injury to U.S. firms but would have caused substantially the same injury if they had been sold in the U.S. market without dumping. Then at least arguably, the "dumped goods" did cause injury but the "dumping" did not.

110 See 19 U.S.C. 1303(a),(b), 1671(a),(b). In some cases, U.S. law denies the injury test to some GATT signatories that have not signed the GATT Subsidies Code. This provision of U.S. law was enacted before the GATT agreement, and is allowed under a GATT grandfather clause found in GATT's Protocol of Provisional Application paragraph (I), item (b).

111 See 19 U.S.C. 1671c(b),(c).

112 See 19 U.S.C. 1673c(b),(c).

113 In early 1987 Torrington faced stiff price competition for every major account. The competition came from foreign firms that were slashing prices despite exchange rate shifts that should have made foreign goods much more expensive. To meet price competition, the firm took substantial losses. David Gridley, Industry Marketing Manager, The Torrington Company, personal communication, Aug. 6, 1991. The Commerce Department found large dumping margins. 54 *Federal Register* 20900-20910 (May 15, 1989).

114 Gridley, *ibid*.

115 In some cases, petitioners could purchase the required data. Some economic consulting firms specialize in collecting and analyzing data for subsidies and dumping cases.

116 United States International Trade Commission, New *Steel Rails From Canada: Determination of the Commission in Investigation Nos. 701-TA-297 (Final) and 731-TA-422 (Final)*, USITC Pub. No. 2217, September 1989.

117 William Hoppe, General Manager, Industry Affairs, Bethlehem Steel Corp., personal communication, Aug. 29, 1991.

118 Gridley, op. cit.

119 See U.S. Congress, General Accounting Office, op. cit., pp. 13-15.

120 Public Law 100-418, Sec. 1614, amending 19 U.S.C. 1339.

121 Bureau of National Affairs, "Auto Parts Industry Panel Requests Section 301 Probe of Japanese Imports," *International Trade Reporter*, vol. 8, No. 26, June 26, 1991, pp. 978-979.

122 The statutory time limits for the Commerce Department's preliminary determination are 160 days after the filing of the petition for dumping cases and 85 days for subsidy cases. 19 U.S.C. 1673b(b)(I)(A) (dumping), 1671b(b)(I)(A) (subsidies). The Commerce Department usually takes all or virtually all of the time allowed.

123 19 U.S.C. 1671 b(d),(e), 1673b(d),(e).

124 The statute provides another 75 days for the final determination and another 7 days to publish an order reflecting the new subsidy value or dumping margin. 19 U.S.C. 1671d(a), 1671e(a) (subsidies), 1673d(a), 1673e(a) (dumping). While the difference between the preliminary duty and the final duty is refunded on importations during the interim if the new duty is lower, the difference is not collected if the new duty is higher. 19 U.S.C. 1671f(a) (subsidies), 1673f(a) (dumping).

125 In the 1980s, petitioners often had to wait several years for annual reviews.

126 45 *Federal Register* 30,618 (May 9, 1980).

127 52 *Federal Register* 1504 (Jan. 14, 1987). This annual review,

which covered imports during the period May 1981 through April 1982, was several years late. Such delays in annual reviews were common in the 1980s, but recently the Commerce Department has worked to reduce the backlogs.

128 *Smith Corona Corp. v. United States*, 915 F.2d 683 (Fed. Cir. 1990). The court's opinion summarizes the history of the case.

129 The customs entries for the intervening imports had been "liquidated," meaning that it was no longer possible to collect antidumping duties retroactively. The Court of Appeals for the Federal Circuit pointed out that in February 1989, the Court of International Trade, a lower reviewing court, should have ordered liquidation suspended; had it done so, antidumping duties could have been collected retroactively to that date.

130 Statement of Senator Carl Levin before the Senate Committee on Governmental Affairs, Subcommittee on Oversight of Government Management, on Oversight and Enforcement of Antidumping and Countervailing Duties, June 13, 1991.

131 See "Request for Antidumping Monitoring Program Covering Certain Ball Bearings and Parts Thereof," submitted to the U.S. Commerce Department International Trade Administration, on Apr. 20, 1990, by Stewart and Stewart, Washington, DC, on behalf of the Torrington Co. In 1989, Torrington had obtained antidumping orders on ball bearings from nine countries. Torrington requested that the Commerce Department monitor imports from 14 countries not included in the 1989 orders to determine if those imports were also dumped. When the Commerce Department denied this request, Torrington filed antidumping petitions for the 14 countries. Torrington never got the chance to prove dumping, because the ITC found at a preliminary stage that there was "no reasonable indication" that the imports complained of had caused or threatened material injury to the U.S. industry. U.S. International Trade Commission, *Ball Bearings, Mounted or Unmounted, and Parts Thereof from Argentina, Austria, Brazil, Canada, Hong Kong, Hungary, Mexico, The People's Republic of China, Poland, The Republic of Korea, Spain, Taiwan, Turkey and Yugoslavia*, USITC Pub. 2374, April 1991. (One Commissioner dissented.) Torrington has appealed this ruling, and maintains that the U.S. industry is worse off than in 1989 when the ITC did find injury. Gridley, op. cit. The 1989 antidumping orders are found at 54 *Federal Register* 20900-20910 (May 15, 1989).

132 Howell et al., op. cit., pp. 526-534.

133 "President's Steel Decision," pp. 1-2, attached to Office of the United States Trade Representative, "Brock Announces President's Steel Decision," Sept. 18, 1984 (press release). As requested, Congress then empowered the President to negotiate bilateral agreements to limit other countries' total steel exports to the United States.

134 A previous order concerning only the imported finished product would not apply if the parts are imported instead (although sometimes cases initially cover both a product and its components); a previous order concerning only imported parts would not apply if the finished product is imported instead; and an order applying to a product assembled in one foreign country would not apply to the end product assembled in another foreign country.

135 These provisions are found in Public Law 100-418, Sec. 1321, codified at 19 U.S.C. 1677j. As of June 1991, the Commerce Department had twice ruled on whether these provisions applied and both times decided that they did not. 56 *Federal Register* 9667 (Mar. 7, 1991), 55 *Federal Register* 52066 (Dec. 19, 1990) (color picture tubes from Canada, Japan, Korea, and Singapore); 55 *Federal Register* 6028 (Feb. 21, 1990), 54 *Federal Register* 50,260 (Dec. 5, 1989) (fork-lift trucks from Japan). The anticircumvention provisions apply only if the difference in value between the components and the end product is "small." In both cases, the Commerce Department found this requirement not satisfied; in the fork lifts case, the value added in the final assembly, including profit, was approximately 25 to 40 percent. Another limitation is that the provisions do not appear to apply when parts from one foreign country are initially assembled in another foreign country,

as often happens today in the Pacific Rim.

The anticircumvention provisions also address cases, such as Smith Corona's electric typewriters case, in which merchandise subject to an order is slightly altered or is replaced with a later-developed product. In such cases, the provisions might be more effective.

136 A March 1990 GATT panel decision found the EC's anticircumvention provisions to violate GATT. "EEC Regulation on Imports of Parts and Components: Report by the panel," GATT Dec. L/6657, Mar. 22, 1990. While not directly relevant to the U.S. provisions, that decision does indicate that GATT will seriously scrutinize anticircumvention provisions if the matter arises.

137 19 U.S.C. 1671(a)(2), 1673(2), 1677(7).

138 Gridley, *op. cit.*

139 "Final Determination of Sales at Less Than Fair Value: Digital Readout Systems and Subassemblies Thereof From Japan," 53 *Federal Register* 47,844,47,847 (Nov. 22, 1988).

140 United States International Trade Commission, *Digital Readout Systems and Subassemblies Thereof From Japan: Determination of the Commission in Investigation No. 731-TA-390 (Final)*, Jan. 1989 (USITC Publication 2150), pp. 16-22. The Commissioners noted various indicators of health for the two industries. Sales in both industries had declined from 1985 to 1986, but rose in 1986, 1987, and the first three quarters of 1988. During this period, pre-tax profits as a percentage of net sales in the console industry rose steadily from 2.6 percent to 9.2 percent; in the transducer industry, pre-tax profits were 14.0 percent in 1985, fell to 10.3 percent in 1986, rose to 13.5 percent in 1987, and rose an amount not publicly disclosed in the first 3 quarters of 1988 as compared with the first 3 quarters of 1987. Other indicators of health considered by the Commissioners included production volume, capacity utilization, inventory levels, number of employees and hours worked, and investment in R&D.

141 *Ibid.*, pp. 42-53, 125-126.

142 *Ibid.*, pp. 42-53, 126-136.

143 By statute, the injury requirement is satisfied if the ITC finds that the U.S. industry is threatened with material injury, even if the U.S. industry is not yet materially injured. However, "actual injury" must be "imminent," and a finding of a threat of material injury "may not be made on the basis of mere conjecture or supposition." 19 U.S.C. 1677(7)(F)(2). Thus, projecting current trends to a conclusion of future long-term injury to the U.S. industry will not normally justify finding a threat of material injury.

144 *Ibid.*, p. 32.

145 U.S. International Trade Commission *Pressure-Sensitive PVC Battery Covers from West Germany*, Investigation No. 731-TA-452 (Preliminary), USITC Pub. No. 2265 (March 1990).

146 *Ibid.*, pp. A-2, A-6, A-7.

147 *Ibid.*, pp. 17-18.

148 *Ibid.*, pp. A-38, A-39; Post-Conference Brief of the Petitioner, National Label Co., in the matter of *Pressure-Sensitive PVC Battery Covers from West Germany*, Investigation No. 731-452 (Preliminary), Feb. 13, 1990, pp. 17-21.

149 U.S. International Trade Commission *op. cit.*, pp. A-39, A-40.

150 U.S. International Trade Commission *op. cit.*, p. 20. Eveready's statements were confidential and not revealed by the ITC. The ITC found that "Zweckform did not bid on any Eveready purchases" at the meeting, and "the discussions between the two parties (had not) reached the point where they were in sufficient detail and scope to provide an indication of price suppression." National Label argued that, even if Zweckform had not solicited Eveready's business, Zweckform's dumped sales to other firms in the U.S. market made National Label reasonably fear that Zweckform would seek Eveready's U.S. business. Post-Conference Brief of Petitioner, National Label Co., *op. cit.*, pp. 38-41. Therefore, according to National Label, Zweckform's dumping had in fact caused National Label to suffer injury by lowering its prices

to Eveready. The Commission did not address this argument.

151 Post-Conference Brief of the Petitioner, National Label Co., *op. cit.*, pp. 63-66; U.S. International Trade Commission *op. cit.*, p. A-46.

152 U.S. International Trade Commission, *op. cit.*, pp. 20-21.

153 The Commission's general practice is to permit outside attorneys and consultants to see other parties' confidential business information, but not to permit the parties' own personnel to see such information, for fear the information would be used improperly to gain business advantage.

154 James Shacklett, president, National Label Co., personal communication, Oct. 11, 1990.

155 The text of the agreement is contained in an exchange of letters on Sept. 2, 1986, between Japan's Ambassador Matsunaga and USTR Clayton Yeutter. An account of the U.S. negotiating strategy is given in Prestowitz, Jr., *op. cit.*, p. 62.

When a foreign country sends dumped or subsidized merchandise to a third country, the United States could ask the third country to conduct its own countervailing duty or antidumping investigation and under GATT Article VI paragraph 6(b) relief could be granted if the dumping or subsidies injured the U.S. industry. Under U.S. law, firms may petition the USTR to make such a request to foreign governments. 19 U.S.C. 1677k (added in 1988, Public Law 100-418, Sec. 1317). However, this has never been tried, and there is no guarantee that the third country would honor such a request.

156 See ch. 6. Cray Research, the principal U.S. supercomputer manufacturer, lacks the size and product diversity to similarly cross-subsidize.

157 Marie Anchordoguy, *Computers Inc: Japan's Challenge to IBM* (Cambridge, MA: Harvard University Press, 1989), pp. 72-75.

158 *Ibid.*, pp. 68,69 (table 3, total of gross sales minus trade-ins), 228-230 (app. C).

159 *Ibid.*, pp. 141-147.

160 See ch. 6.

161 These firms are Fujitsu, Hitachi, Mitsubishi, Toshiba, and NEC. Anchordoguy, *op. cit.*, p. 143. The 1989 computer, electronic devices, and consumer electronics revenues of Fujitsu, Hitachi, and NEC alone were \$13.7 billion, \$14.6 billion, and \$15.0 billion for the respective firms, totaling \$43.3 billion. See tables 6-1 and 6-3.

162 Subsidies law was designed on the premise that subsidies distort trade but do not change the underlying comparative advantage, so that discontinued subsidies have no more effect. This assumption has become increasingly mistaken. In the modern world, comparative advantage is often purchased by governments; for example, government money bought the United Kingdom a modern steel industry that could sell steel competitively in the world. Howell et al., *op. cit.*, pp. 171-173.

163 GATT Article VI, paragraph 3.

164 Section 19 U.S.C. 1677b(e). Other countries have argued that these floors are not proper and disadvantage firms, for example, in countries such as Japan where profit margins are often lower than 8 percent.

165 In July 1990, a panel of the GATT Committee on Antidumping Practices ruled that the Antidumping Code requires the investigating government to verify that an antidumping petition is supported by a majority of the domestic industry, and that the U.S. Commerce Department had not done so in an antidumping case involving stainless steel pipes and tubes from Sweden. As countries have often done with adverse GATT rulings during the Uruguay Round, the United States has said that it will bring its behavior in line with GATT norms, but only after the Uruguay Round is completed, when it is clear what the new norms will be.

166 These and other problems are discussed in N. David Palmeter, "The Capture of Antidumping Law," *Yale Journal of International Law*, vol. 14, No. 1, pp. 182-198 (reviewing Jagdish Bhagwati,

Protectionism (Cambridge, MA: The MIT Press, 1988)).

167 In light of this, the EC accuses the United States of a double standard in complaining about government subsidies to the members of Airbus Industrie, a European consortium challenging U.S. dominance.

168 Omnibus Trade and Competitiveness Act of 1988, Public Law 100418, section 1301, enacting new provisions at 19 U.S.C.2411(d)(3)(B)(ii), 2411(d)(3)(E). This use of Section 301 is not completely new. While Section 301 has most often addressed foreign countries' barriers to sales of U.S. goods in their markets, it has sometimes included foreign subsidies as they affect sales of U.S. goods in third country markets; those subsidies could fit the definition of export targeting.

169 Normally, GATT prohibits protection with the exception that tariffs maybe imposed as agreed upon in negotiating rounds. Aside from the escape clause, GATT permits additional protection in certain other contexts, such as national defense, agriculture in some cases (this exception was made at the United States' insistence), to meet a balance of payments crisis, and in response to subsidies and dumping. Protection is also allowed when compensation is negotiated under Article XXVIII (ch. 2).

170 GATT Article XIX.

171 Ibid.

172 19 U.S.C. 2251-2254.

173 19 U.S.C. 2252(b)(1)(B).

174 See 19 U.S.C. 2252(b)(1)(A).

175 19 U.S.C. 2252(c).

176 A petition may be filed "by any entity, including a trade association firm, certified or recognized union, or group of workers, which is representative of an industry." 19 U.S.C. 2252(a)(1). The great majority of investigations are triggered in this manner. An investigation can also be triggered by the President, the USTR, the House Ways and Means Committee, the Senate Finance Committee, or the ITC itself. 19 U.S.C. 2252(b)(1)(A).

177 19 U.S.C. 2252(b)(2).

178 19 U.S.C. 2252(e). The ITC can recommend protection adjustment assistance, or both. Adjustment assistance consists of: 1) payments, retraining, and/or job placement services for workers, and/or 2) financial help and/or technical assistance to firms. Even if adjustment assistance is recommended by the ITC and the recommendation is approved by the President, the petitioners must still apply for it to the Departments of Commerce and/or Labor. Generally, Section 201 petitioners desire import relief rather than adjustment assistance, for which they could apply independently without going through a Section 201 proceeding.

Recommendations for relief are made only by those Commissioners who voted to find injury.

If the vote on injury was tied, those Commissioners finding injury recommend relief; the President then has the choice of treating the Commission's vote as a vote to find no injury or a vote to find injury. 19 U.S.C. 1330(d)(1).

179 19 U.S.C. 2252(e).

180 19 U.S.C. 2252(f).

181 19 U.S.C. 2253(a)(4).

182 19 U.S.C. 2253(a).

183 19 U.S.C. 2253(a)(3). Congress can in principle override the President's decision and reinstate the relief recommended by the ITC, but never has done so. See 19 U.S.C. 2253(c).

184 19 U.S.C. 2253(e).

185 19 U.S.C. 2254(b).

186 U.S. General Accounting Office, *International Trade: Activity Under Section 201 of the Trade Act of 1974, NSIAD-87-96FS* (Gaithersburg, MD: U.S. General Accounting Office, Mar. 30, 1987), pp. 3, 6-9. This report lists all Section 201 cases brought during these

years, except for cases TA-201-61 and TA-201-62, which both ended with a finding of no injury as shown in the ITC Annual Reports for 1988 and 1990. Some form of protection was granted by the President in cases No. (201 -TA-) 5, 16, 18, 19,29,35,36,37,39,43, 47,48,51, and 56. In cases 29, 37, 39,47, and 56 the protection was by its terms less than that recommended (for example, lower tariffs, or shorter duration of the same tariffs). While the President sometimes granted a different type of relief that is not directly comparable with the protection recommended the President never granted protection that was by its terms greater than the relief recommended.

187 Section 201 has a higher standard of injury, and in that regard Section 201 relief is harder to get. However, before 1980, antidumping and countervailing duty cases had no time limits and no court review, and the Treasury Department, which handled those cases then, often put cases on indefinite hold. Section 201, in contrast, promised a decision within well under a year, and the required public hearing could help muster political support for relief.

188 The ITC found that the auto industry, while substantially injured by increasing imports, was injured more by a general economic recession in the country, and was thus ineligible for relief. U.S. International Trade Commission, *Certain Motor Vehicles and Certain Chassis and Bodies Therefor: Report to the President on Investigation TA-201-44 under Section 201 of the Trade Act of 1974*, USITC Publication 1110, December 1980, pp. 21, 67, 134, 173 (3-2 vote). In 1988, Congress specified that the ITC "may not aggregate the causes of declining demand associated with a recession or economic downturn in the United States economy into a single cause of serious injury or threat of injury." 19 U.S.C. 2252(c)(2)(A).

189 19 U.S.C. 2251.

190 In theory, the government could encourage a new industry to form by other means, such as R&D support, low-interest loans, and the promise of protection in the future if needed. When the new industry started to sell products, it would then exist and could be protected under Section 201. However, to use Section 201 in this way could violate GATT. GATT's escape clause requires that the injury be due to unforeseen increased imports. If the dominant foreign suppliers were already established when the U.S. industry started to form, it could be hard to argue that any increased imports were unforeseen. While U.S. law does not require that the increase in imports be unforeseen, an application of Section 201 to imports that were anticipated could provoke a GATT challenge. (However, the GATT provision requiring an unforeseen increase has fallen into disuse and might be eliminated in the Uruguay Round.)

191 The statute speaks in absolute, rather than relative, terms, directing Commissioners to consider, among other economic factors, "the significant idling of productive facilities in the domestic industry," "the inability of a significant number of firms to carry out domestic production operations at a reasonable level of profit," and "significant unemployment or underemployment within the domestic industry." 19 U.S.C. 2252(c). See, for example, U.S. International Trade Commission *Nonrubber Footwear: Report to the President on Investigation No. TA-201-50 Under Section 201 of the Trade Act of 1974*, USITC Publication No. 1545 (July 1984), pp. 11-19 (views of Chairwoman Stern, Vice Chairman Liebler, and Commissioner Rohr).

192 U.S. International Trade Commission, *ibid.*, p. 19 (views of Chairwoman Stern, Vice Chairman Liebler, and Commissioner Rohr) (quoting legislative history).

193 See U.S. International Trade Commission *Television Receivers, Color and Monochrome, Assembled or Not Assembled, Finished or Not Finished, and Subassemblies Thereof*, Report to the President on Investigation TA-201-19, USITC Pub. 808, March 1977, pp. 13-16; U.S. International Trade Commission, *Citizens Band (CB) Receivers, Report to the President on Investigation TA-201-29*, USITC Pub. 862, February 1978, pp. 7, 28. These cases are also discussed in Morris Morkre and David Tarr, *The Effects of Restrictions on United States Imports: Five Case Studies and Theory*, Staff Report of the Bureau of Economics to the Federal Trade Commission June 1980, chs. 4, 5.

194 U.S. International Trade Commission, Nonrubber Footwear, No. TA-201-50, op. cit., pp. 9-10, 23.

195 Ibid., p. 22.

196 Ibid., pp. 9-10.

197 U.S. International Trade Commission, *Nonrubber Footwear*, No. 221-201-55, op. cit., pp. 11-12 (views of chairwoman stern).

198 As used in this discussion of what the U.S. public sector purchases, "defense" purchases mean purchases classified as defense in Congressional budget authorizations. To a first approximation this includes all of the Defense Department (except the civilian side of the Army Corps of Engineers), plus defense programs of the Department of Energy and NASA.

199 Department of Commerce, Bureau of Economic Analysis, Government Division Table PMB-IIB, "National Defense Purchases by Subcategory in Constant Dollars," Computer generated on Feb. 28, 1991.

200 Computer and Business Equipment Manufacturers Association.

201 Department of Commerce, Table PMB-IIB, op. cit.

202 U.S. Department of Commerce, International Trade Administration, 1991 U.S. *Industrial Outlook*, S/NO03-009-00586-8 (Washington, DC: U.S. Government Printing Office, January, 1991), pp. 37-2.

203 Eric Nelson, Director, Market Research, North American Telecommunications Association, personal Communication Apr. 1, 1990.

204 Public purchasing reportedly accounts for 90 percent of the output of telecommunications equipment, measuring equipment, and electro-medical equipment. Commission of the European Communities (CEC), *Communication from the Commission on a Community Regime for Procurement in the Excluded Sectors: Water, Energy, Transport and Telecommunications*, COM (88) 376 (Brussels, Belgium: CEC, Oct. 11, 1988), table 4, telefaxed from Anna Snow, Delegation of the CEC, Washington, DC, May 29, 1991.

205 U.S. Department of Commerce, Bureau of Economic Analysis, *Government Transactions Methodology Papers: U.S. National Income and Product Accounts, BEA-MP-5 (Washington DC: U.S. Government Printing Office, November 1988)*, table III-6.

206 Robert LaucL, Library of Congress, Congressional Research Service, American Law Division, "The Buy American Act: Legislative History and 'Differential' Favoring Domestic Products," Oct. 25, 1975, p. 2. For a recent description of Buy American legislation, see Robert Lauck, Library of Congress, Congressional Research Service, American Law Division, "Buy American Legislation," Mar. 28, 1990.

207 Other laws include the Davis-Bacon Act, the Walsh-Healy Act, and the Miller Act. See Commission on Government procurement, *Report of the Commission on Government Procurement*, Stock No. 5255-00002 (Washington, DC: U.S. Government Printing Office, December 1972), vol. 1, app. G, p. 167.

208 Inclusive of duty.

209 48 C.F.R. 25.105.

210 48 C.F.R. 25.101 (definition of "domestic end product"). Costs other than components, such as direct labor and overhead for final assembly, are not counted at all for this test. Also, the test considers only major components-'those articles, materials, and supplies incorporated directly into' the final product. Ibid. (definition of "components") (emphasis added). Thus, the origin of subcomponents, which are first incorporated into major components, is not considered.

211 48 C.F.R. 25.104, 105.

212 48 C.F.R. 225.105.

213 U.S. General Services Administration, Federal Procurement Data Center, *Federal Procurement Report, Fiscal Year 1990 through Fourth Quarter* (Washington, DC: U.S. General Services Administration), pp. 74-75.

Additional detail on some of these preferences is given in U.S. Department of Defense, A Report to the United States Congress by the Secretary of Defense, *The Impact of Buy American Restrictions Affecting Defense Procurement* (Department of Defense, July 1989), app. E, p. 13; Section 8(a) of the Small Business Act of 1953, as amended, 15 U.S.C. 637(a); and 48 CFR 13.105, 13.106 (Oct 1, 1990).

214 Alfred Volkman, Director, Foreign Contracting, Office of Deputy Assistant Secretary of Defense (Procurement), testimony at hearings before the House Committee on Government Operations, Subcommittee on Legislation and National Security, Sept. 27, 1989, pp. 64, 72; see also ibid., p. 266. In this testimony, DoD said merely that "less than half" of defense procurement is opened under the MOUs. However, a DoD official clarified that the estimate was close to 50 percent. Personal communication July 19, 1991.

215 Joseph Kelly, Director, Security and International Relations Issues, U.S. General Accounting Office, testimony at hearings before the House Armed Services Committee, Subcommittee on Investigations, Apr. 30, 1991, p. 4.

216 For example, the United States does not waive restrictions on defense purchases of foreign machine tools. U.S. Congress, General Accounting Office, *Defense Procurement: DoD Purchases of Foreign Made Machine Tools*, GAO/NSIAD-91-70 (Gaithersburg, MD: U.S. General Accounting Office, February 1991), p. 22. Restrictions on defense purchases of supercomputers also are not waived.

217 The GATT Procurement Code took effect Jan. 1, 1981. It is described in U.S. Department of Commerce, International Trade Administration, Office of Policy, *Government Procurement* (July 1981) (prepared by Nancy E. Morgan) (vol. 2 of a series entitled *The Tokyo Round Trade Agreements*), which also gives the annexes specifying the Code's scope of application to particular countries.

218 Public Law 96-39.

219 The test here is the nature of the good rather than which agency buys it.

220 An SDR is a currency unit consisting of a basket of currencies from nations that are members of the SDR Department of the International Monetary Fund (IMF). It is also the unit of account for the IMF. In January 1991, one SDR was worth about \$1.40. Periodically the USTR publishes an updated dollar equivalent for 130,000 SDRs, to be used in assessing the Act's applicability to purchases by the U.S. Government.

221 Public Law 96-39. The Presidential authority to waive Buy American and other preferences comes from Section 301 of the Act, codified at 19 U.S.C. 2511.

222 These provisions are found in 19 U.S.C. 2511-2512 and 48 CFR 25.40.406. Generally, for purchases covered by the Trade Agreements Act, bids from non-covered countries will not be considered at all. 19 U.S.C. 2512; 48 CFR 25.402(c). Also, under the Trade Agreements Act a good's origin is determined by where it underwent its last substantial transformation instead of by the fifty-percent-of-components rule under Buy American. 48 CFR 25.401 (definition of "designated country end product").

223 Robin Zee, *Purchasing Preference Practices: A 50 State Overview*, Document No. C-130 (Lexington, KY: National Association of State Purchasing Officials (NASPO) and The Council of State Governments, 1989), pp. 22-24.

224 *Bethlehem Steel Cop. v. Board of Commissioners of the Dept. of Water and Power of the City of Los Angeles*, 276 Cal. App. 2d 211, 224, 80 Cal. Rptr. 800, 802 (1969).

225 Zee, op. cit.

226 Ibid., pp. 8-10.

227 The preference of 12 percent for goods produced in labor surplus areas raises prices paid by the government, but may save the country money by helping to reduce the costs of unemployment. Preferences for small and minority business raise prices paid by the

government but they serve definite social goals.

228 For example, bidders and agencies sometimes mistakenly count the cost of domestic labor for final assembly, plus associated overhead and general administrative expense, as part of the cost of domestic components. U.S. Congress, General Accounting Office, Report to the Secretary of the Interior, *Bureau of Reclamation: Misapplication of the Buy American Act*, GAO/NSIAD-90-32 (Washington DC: U.S. General Accounting Office, November 1989); U.S. Congress, General Accounting Office, Defense Procurement, 'DOD Purchases of Foreign Made Machine Tools', GAO/NSIAD-91-70 (Gaithersburg, MD: U.S. General Accounting Office, February 1991), pp. 25-27.

229 See, for example, U.S. Department of Defense, Office of the Secretary of Defense, *The Impact of Buy American Restrictions Affecting Defense Procurement* (U.S. Department of Defense, July 1989), p. 35.

230 Public Law 100-202 (FY-1988 Department of Defense Appropriations Act), Sec. 8112. This prohibition could be waived if the Secretary of Defense certified to Congress that a foreign acquisition is required for national security. This provision is still in effect. Public Law 101-511, Sec. 8034.

231 U.S. Congress, House Committee on Government Operations, *International Procurement and Waivers of the Buy American Act: U.S. Business at a Disadvantage*, House Report No. 101-989, Nov. 29, 1990, p. 22.

232 Preferences for small business, minority-owned business, and businesses in labor surplus areas have not drawn as much criticism, probably because such programs and the underlying social goals are shared by some other nations.

233 U.S. Congress, Committee on Government Operations, op. cit., p. 7.

234 At times foreign firms were treated even better than U.S. firms when bidding for defense contracts, because foreign firms' costs were subject to less stringent audits. Ibid., pp. 13-17.

235 Allan I. Mendelowitz, Director, Trade, Energy and Financial Issues, United States General Accounting Office, testimony at hearings before the House Committee on Government Operations, Subcommittee on Legislation and National Security, Sept. 27, 1989, p. 30; and answers by the Defense Department's Office of Foreign Contracting to questions from the Subcommittee, same hearings, pp. 266-267. The Defense Department cautioned against comparisons of such data because of differing national organization and procurement systems.

Defense spending is also higher as a proportion of GDP in the United States than for U.S. allies. For example, despite roughly equal GDP, the market for defense procurement in the EC is only 40 percent of that in the United States. U.S. Congress, Office of Technology Assessment, *Arming our Allies: Cooperation and Competition in Defense Technology*, OTA-ISC-449 (Washington DC: U.S. Government Printing office, May 1990), pp. 47-50.

236 U.S. Congress, General Accounting Office, *European Initiatives: Implications for U.S. Defense Trade and Cooperation*, NSIAD-91-167 (Gaithersburg, MD: U.S. General Accounting Office, Apr. 4, 1991), pp. 36, 39-42.

237 The 19 are Australia (nonreciprocal), Belgium, Canada (nonreciprocal), Denmark, Egypt, Germany, France, Greece, Israel, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom.

238 U.S. Congress, General Accounting Office, *European Initiatives*, op. cit., p. 37.

239 Matthew B. Coffey, President, National Tooling and Machining Association, testimony at hearings before the House Committee on Government Operations, Subcommittee on Legislation and National Security, Sept. 27, 1989, pp. 3840.

240 U.S. Congress, House Committee on Government Operations, op. cit., p. 21, citing U.S. Congress, General Accounting Office,

Industrial Base: Adequacy of Information on the U.S. Defense Industrial Base, NSIAD-91-167 (Gaithersburg, MD: U.S. General Accounting Office, November 1989). The Defense Department estimated that the ratio of defense exports to MOU partners to imports from those partners dropped from almost 8:1 in the late 1970s and early 1980s to about 2:1 in 1987; in 1987, exports were estimated at 8 billion, imports at 4 billion. These estimates are based on unverified procurement data collected by DoD and foreign defense ministries. For that reason, and because of specific problems with the data which GAO has identified, GAO considers these estimates unreliable. Testimony at hearings before the House Committee on Government Operations, Subcommittee on Legislation and National Security, Sept. 27, 1989, p. 266 (written answers to questions included in the hearing record); U.S. Congress, General Accounting Office, *European Initiatives*, op. cit., pp. 39-43, 61-62.

241 U.S. Congress, General Accounting Office, *European Initiatives*, op. cit., pp. 43-44.

242 House Committee on Government Operations, op. cit., pp. 11-13, 17-21.

243 U.S. Congress, General Accounting Office, *European Initiatives*, op. cit., p. 44.

244 The House Committee on Government Operations reported that the Administration had classified U.S. data derived from publicly available information and had classified data from other Code signatories after they declared the data no longer restricted. U.S. Congress, House Committee on Government Operations, op. cit., pp. 20-21.

245 U.S. Congress, U.S. General Accounting Office, *The International Agreement on Government Procurement: An Assessment of its Commercial Value and U.S. Government Implementation*, NSIAD-84-117 (1984), pp. 11-17. As used in this chapter, Code-covered procurement means procurement that under the Code must be both transparent and nondiscriminatory.

246 Allan I. Mendelowitz, Director, Trade, Energy and Financial Issues, United States General Accounting Office, testimony at hearings before the House Subcommittee on Legislation and National Security, Sept. 27, 1989, pp. 13-14. (This testimony gave a brief, qualitative unclassified summary of the classified data.)

247 In 1985, the total central government procurement expenditures (including goods and services) of all other Code signatories combined was at least roughly equal to that of the United States. Ibid., p. 24.

248 W. Douglas Newkirk Assistant U.S. Trade Representative for GATT Affairs, testimony at hearings before the House Committee on Government Operations, Subcommittee on Legislation and National Security, Sept. 27, 1989, p. 50; U.S. Congress, General Accounting Office, *The International Agreement on Government Procurement*, op. cit., p. 16. Probably almost half of defense procurement is now covered under MOUs. By 1981, 11 out of 19 countries had already signed MOUs.

249 However, the Code might have made it easier in the long term for foreign suppliers to form and maintain such relationships with the U.S. Government, thus increasing U.S. imports over the years.

250 U.S. Congress, U.S. General Accounting Office, *The International Agreement on Government Procurement*, op. cit., pp. 15-17.

251 Ibid, pp. 13-17.

252 For the 25 percent estimate, see U.S. International Trade Commission, *The Effects of Greater Economic Integration Within the European Community on the United States*, USITC Publication 2204 (Washington, DC: USITC, July 1989), p. 4-14 [one page]. Some sources cite estimates as high as 50 percent, such as Aviva Freudmann, "EC Takes Giant Step to Open Public Procurement Markets," *Atlantic Trade Report*, vol. 2, No. 5, Mar. 1, 1990, p. 1.

253 Statement of Bernard H. Falk, president National Electrical Manufacturers Association, on the Annual Report on Foreign Discrimination Against Procurement of U.S. Goods and Services, before the

House Committee on Government Operations, Subcommittee on Legislation and National Security, U.S. House of Representatives, May 1, 1990, p. 2.

254 Steve Thomas and Francis McGowan, *The World Market for Heavy Electrical Equipment* (Surrey, UK: Nuclear Engineering International Special Publications, 1990).

255 In 1987, digital switching systems in the EC reportedly cost between \$225 and \$500 per line, compared to an estimated price of around \$150 that would have resulted from competitive procurement. (The price in the United States was around \$100.) Paolo Cecchini with Michel Catinat and Alexis Jacquemin, *The European Challenge, 1992: The Benefits of the Single Market* (Aldershot, UK: Gower Publishing Co., 1988), p. 22.

256 U.S. Congress, General Accounting Office, *International Restraints to Competitiveness of the U.S. Heavy Electrical Equipment Industry*, NSIAD-83-51 (Gaithersburg, MD: U.S. General Accounting Office, Sept. 14, 1983), p. 14. These agencies were the Army Corps of Engineers; Tennessee Valley Authority; Western Area, Southwestern, and Bonneville Power Administrations; and Bureau of Reclamation.

257 Negotiations to amend GATT's Procurement Code have been going on in parallel with the Uruguay Round negotiations to amend the basic GATT agreement.

258 See U.S. International Trade Commission *The Effects of Greater Economic Integration Within the European Community on the United States: Third Followup Report*, USITC Publication 2368 (Washington, DC: USITC, March 1991), p. 6-4; U.S. International Trade Commission, *The Effects of Greater Economic Integration Within the European Community on the United States*, USITC Publication 2204 (Washington, DC: USITC, July 1989), p. 4-15.

259 Beverly Vaughan, Director of International Government Procurement Policy, Office of the United States Trade Representative, personal communication Mar., 25, 1991.

260 Public Law 100-418, Title VII.

261 Public Law 100-418, Sec. 7003, codified at 19 U.S.C. 2515 (see especially paragraph d(2)).

262 19 U.S.C. 2515(d), (f). For practices covered by the Procurement Code, the Code's dispute resolution procedures are to be tried for a year before the United States retaliates.

263 Office of the United States Trade Representative, *Information on Certain Foreign Government Procurement Markets* (Washington DC: Office of the USTR, Apr. 27, 1990).

264 Office of the United States Trade Representative, *Title VII Report* (Washington, DC: Office of the U.S. Trade Representative, Apr. 26, 1991).

265 Congress passed Title VII in the belief that a strategy of toughness, not patience, was more likely to open the foreign markets. This fundamental dispute—Congress advocating toughness on international trade issues while the Administration prefers patience—has long been a theme of U.S. trade policy.

266 The agencies represented are the Departments of Commerce, Agriculture, State, Treasury, Defense, Labor, Transportation, and Energy; the Office of Management and Budget; the Office of the U.S. Trade Representative; the Council of Economic Advisers; the Environmental Protection Agency, the Small Business Administration; the Agency for International Development the Export-Import Bank of the United States; the Overseas Private Investment Corporation; the U.S. Trade and Development Program, and the U.S. Information Agency. U.S. Department of Commerce, "Export Programs: A Business Directory of U.S. Government Resources," May 1991.

267 U.S. Commerce Department International Trade Administration, Office of Financial Management, personal communication, Aug. 2, 1991.

268 Negotiations with foreign governments are led by the Office of the U.S. Trade Representative (USTR), which is within the Executive

Office of the President.

269 *Export Promotion Activities of Major Competitor Nations, May 1988*. While the report was not released by the Commerce Department, it was provided under the Freedom of Information Act to the authors of *Government Export Promotional Programs in Nine Countries: The Cornell University/XPORT Report on Government Export Promotion Programs and Policies in Canada, the United Kingdom, France, West Germany, Japan, Taiwan, Singapore, South Korea, and Brazil* (Ithaca, NY: Cornell University, Johnson Graduate School of Management 1989); see page 7 of that report. The figures in the text and table 4-10 are drawn from table A on page 5 of that report, and app. 1 on page 54.

270 U.S. Congress, General Accounting Office, *Export Promotion: Problems in Commerce's Programs*, NSIAD-89-44 (Gaithersburg, MD: U.S. General Accounting Office, Jan. 26, 1989), pp. 16-17.

271 Ibid., p. 18. Similarly, Trade Development usually lacked funds to print attractive, professional-looking brochures to advertise trade shows. Ibid., p. 41.

272 U.S. Commerce Department, International Trade Administration, office of Financial Management, personal communication July 30 and Aug. 2, 1991. The combined budget for USFCS, TD and IEP increased from \$146 million in fiscal year 1987 to \$170 million in fiscal year 1991. The fiscal year 1987 figures are funds actually spent.

273 The program depended on ITA providing free publications. This stopped in 1981, causing program participation to wane. These two examples are taken from Ronnie L. Goldberg, BSI Consulting, Inc., "Federal programs for the Promotion of Manufactured Exports," contractor report prepared for the Office of Technology Assessment, June 1987, ch. 2, pp. 6-7.

274 U.S. Congress, General Accounting Office, *Export Promotion*, op. cit., passim.

275 Information about the USFCS' strategic review is taken from U.S. Department of Commerce, U.S. Foreign and Commercial Service, "Strategic and Technical Reviews Working Paper Export Assistance Needs: Working Group Recommendations SR 90-7," Mar. 1990; and interviews with USFCS staff.

276 See Organisation for Economic Co-operation and Development, *The Export Credit Financing Systems in OECD Member Countries* (Paris, France: OECD, 1990, 4th ed.).

277 Ibid., ch. 23.

278 Eximbank 1990 Annual Report, p. 27; Organisation for Economic Cooperation and Development, op. cit., p. 229. Eximbank was capitalized in 1945 with \$1 billion from the U.S. Treasury. James Jackson, Library of Congress, Congressional Research Service, Economics Division, "Export-Import Bank Financial Issues," IB88013, July 27, 1989, p. 2.

279 The Arrangement on Guidelines for Officially Supported Export Credits requires countries to announce contemplated export loans, to permit other countries to match the terms. The Arrangement is signed by 23 countries, including the major economic powers. The text of the Arrangement is found in Organisation for Economic Cooperation and Development op. cit., ch. 25. Notification is treated in sections 14-17.

280 Chief Accountant, Commodity Credit Corporation, U.S. Department of Agriculture, personal communication, July 22, 1991.

281 This figure of \$40 billion does not include some products eligible for financing assistance, such as wood products, seafood, and leather.

282 Public Law 91-181, amending Section 9 of the Export-Import Bank Act of 1945, codified at 12 U.S.C. 635g(d). The amendment also directed Eximbank to report on activities "to enhance the opportunity for growth and expansion of small businesses and entrepreneurial enterprises."

283 Eximbank's 1990 Annual Report(p. 14) merely lists the dollar

value of products exported with Eximbank's help that 1) meet the descriptions in the text (key linkage industry, high value added, etc.), or 2) are "related" to products meeting the descriptions in the text. This information by itself does not show how strategic concerns influence Eximbank's decisions, or what particular measures Eximbank has taken to meet the goals listed in the text.

284 Export-Import Bank of the United States, *Report to the U.S. Congress on Export Credit Competition and the Export-Import Bank of the United States for the Period Jan. 1, 1989 through Dec. 31, 1989* (August 1990), p. 4.

285 Ibid.

286 Organisation for Economic Cooperation and Development op. cit., ch. 25.

287 These were satellite earth stations, turbines, locomotives, and rail signaling equipment.

288 Export-Import Bank of the United States, *Report to the U.S. Congress on Tied Aid Credit Practices*, Apr. 20, 1989, ch. IV. The subsectors were central office switching equipment, satellite earth stations, radio communications, boilers, turbines, rail signaling equipment, and earth moving equipment. Earth moving equipment was not divided into subsectors, so it counts both as a sector and a subsector.

289 Ibid., ch. III.

290 Export-Import Bank of the United States, *Report to the U.S. Congress on Tied Aid Credit Practices*, op. cit., pp. 6, 14-15. The other major donors are Canada, France, Germany, Italy, Japan, and the United Kingdom.

291 Ibid., p. 16.

292 In 1988 Japan granted \$9.1 billion, the United States \$9.8 billion. Japan's share has been growing relative to the United States. U.S. Congress, General Accounting Office, *Economic Assistance: Integration of Japanese Aid and Trade Policies*, NSIAD-90-149 (Gaithersburg, MD: U.S. General Accounting Office, May 24, 1990), p. 6.

293 Ibid., p. 15.

294 Ibid., pp. 6-7.

295 Ibid., pp. 14-15; Export-Import Bank of the United States, *Report to the U.S. Congress on Tied Aid Credit Practices*, op. cit., p. 8.

296 U.S. Congress, General Accounting Office, *Economic Assistance*, op. cit., pp. 11-13.

297 Export-Import Bank of the United States, "Report to the Congress under Section 15(g) of the Export-Import Bank Act of 1945, As Amended," p. 1, attached to letters from John Macomber, President and Chairman, Export-Import Bank of the United States, to the President of the Senate and the Speaker of the House, Dec. 3, 1990.

298 Export-Import Bank of the United States, "Report to the Congress under Section 15(g) of the Export-Import Bank Act of 1945, As Amended," pp. 2-3, attached to letters from John Macomber, President and Chairman, Export-Import Bank of the United States, to the President of the Senate and the Speaker of the House, July 8, 1991.

299 These \$53.8 million counted against Eximbank's ceiling on direct loans of \$612 million for fiscal year 1990.

300 Export-Import Bank of the United States, "Report to the Congress under Section 15(g) of the Export-Import Bank Act of 1945, As Amended," pp. 2-3, Attachment 2 (this report was attached to letters from John Macomber, President and Chairman, Export-Import Bank of the United States, to the President of the Senate and the Speaker of the House, July 8, 1991).

301 Export-Import Bank of the United States, *Report to the U.S. Congress on Tied Aid Credit Practices*, op. cit., ch. 11 U.S. Congress, General Accounting Office, *Economic Assistance: Integration of Japanese Aid and Trade Policies*, op. cit., p. 6.

302 United States Trade and Development Program Annual Report, 1990, pp. 6-7.

303 Ibid., p. 35.

304 Ibid., pp. 19,21,

305 Ibid., p. 3.

306 Jonathan Raymond, Director, Congressional Affairs, U.S. Trade and Development Program, personal communication, Aug. 2, 1991. TDP's total budget, which includes administrative expenses, has run 5 to 10 percent higher.

307 150 U.S.C. App. 2401-2420. This Act's authorization lapsed as of Oct. 1, 1990, but President Bush continued its provisions in force by invoking the International Emergency Economic Powers Act, 50 U.S.C. 1702. See Executive Order 12730, "Continuation of Export Control Regulations," Sept. 30, 1990.

The export of purely military items is controlled by other statutes.

308 The Control List is found at 15 CFR 799 (Jan. 1, 1991). Additional controls on software, technical data, and know-how are specified in a separate list found at 15 CFR 779. These lists are found within the Export Administration Regulations, 15 CFR, ch. VII, subchapter C.

309 According to BXA statistics, in 1990 BXA granted approvals to individual license applications for \$63 billion worth of goods. However, this figure represents the amounts of goods authorized for shipment; not all amounts authorized were necessarily shipped.

Also, this figure does not include five types of special licenses covering many shipments at once. The most important of these is the distribution license, which enables exporters to ship a defied product line for up to two years. BXA's fiscal year 1990 annual report (ch. 2, in press) gives an "informal estimate" of \$17.9 billion for products shipped in fiscal year 1990 under distribution licenses. Acknowledgeable BXA official guessed that goods shipped during calendar year 1990 under all special licenses perhaps totaled between \$30 billion and \$40 billion. Personal communication Apr. 25, 1991.

Given this uncertain information a fair estimate for calendar year 1990 might be \$55 billion for goods shipped under individual licenses and \$35 billion for goods shipped under special licenses. The total then would be \$90 billion for goods shipped under license in 1990.

310 U.S. Commerce Department, International Trade Administration, Office of Trade and Investment Analysis, personal communication Aug. 2, 1991.

311 NAS Z (complete citation given in the next footnote), pp. 116-117.

312 Panel on the Impact of National Security Controls on International Technology Transfer, Committee on Science, Engineering, and Public Policy, National Academy of Sciences, National Academy of Engineering, Institute of Medicine, *Balancing the National Interest: U.S. National Security Export Controls and Global Economic Competition* (Washington DC: National Academy Press, 1987). In 1991 the National Academy of Sciences published a second report. Panel on the Future Design and Implementation of U.S. National Security Export Controls, Committee on Science, Engineering, and Public Policy, National Academy of Sciences, National Academy of Engineering, Institute of Medicine, *Finding Common Ground: U.S. Export Controls in a Changed Global Environment* (Washington, DC: National Academy Press, 1991). These reports are sometimes called the Allen Schmitt Reports, respectively, after panel chairmen Lew Allen and Roland Schmitt. These reports will be referred to here as NAS Z and NAS II.

313 This calculus of the costs and benefits of export controls will no doubt be affected by the attempted coup in the Soviet Union, and that Union's partial disintegration, in August 1991. As this report goes to press, it is unclear where these events will lead; they have the potential to both increase the urgency of technology transfer to promote social change and increase the risk of military conflict.

314 NAS I, op. cit., pp. 187, 191; NASH, op. cit., pp. 100-101. While some allies also imposed some reexport controls, they were less intrusive.

315 This term is an imprecise shorthand. The countries at issue

include former members of the defunct Warsaw Treaty Organization, the People's Republic of China, North Korea, and Vietnam, among others. Within these countries, CoCom for years has distinguished China as requiring less control than the Soviet Union; and recently CoCom has moved to reduce controls to Eastern European countries whose new governments represent a lesser strategic threat, provided that those countries institute export control systems of their own to keep technology from the Soviet Union and other, unreformed bloc members. So far, Czechoslovakia, Hungary, and Poland have qualified for this special treatment.

316 Title II of the Omnibus Trade and Competitiveness Act of 1988, Public Law 100-418.

317 S. 320. This bill passed the Senate on Feb. 20, 1991, and was referred jointly to the House Committee on Foreign Affairs and the House Committee on the Judiciary on Feb. 26, 1991. This bill resembles the conference version of H.R. 101-4653 and S. 101-2927, as passed by the House and Senate in 1990, but omits certain provisions that President Bush found objectionable in vetoing that bill. See President George Bush, Memorandum of Disapproval for the Omnibus Export Amendments Act of 1990, Nov. 16, 1990.

318 "Office of Licensing Statistics: CY 1990," n.d. (prepared by Bureau of Export Administration, U.S. Commerce Department). This percentage is by number of applications, not dollar value. (This figure includes all individual license applications, not just those required by East-West controls.)

319 Testimony of Dennis E. Kloske, Undersecretary for Export Administration, U.S. Department of Commerce, at hearings before the House Committee on Banking, Housing, and Urban Affairs, subcommittee on International Finance and Monetary Policy, Mar. 7 and 28, 1990, Serial No. 101-1030, p. 19. (The figures include all individual license applications, not just those required by East-West controls.)

320 CoCom Document CL (90) 42 (listing categories adopted on May 22, 1991 Preparatory Meeting).

321 Glennon Harrison, Library of Congress, Congressional Research Service, *The Bush Administration's New Approach to Export Controls and CoCom*, 90-316E, June 26, 1990, p. 4.

322 Ibid., pp. 4-5.

323 Senate Committee on Banking, Housing, and Urban Affairs, *Export Administration Act Amendments of 1990*, Report to Accompany S. 2927, House Report No. 101-399, pp. 41-43.

324 Ibid., p. 41.

325 William Clements, Director, Office of Technology and Policy Analysis, Bureau of Export Administration U.S. Department of Commerce, personal communication, June 4, 1991.

326 Public Law 100-418, sec. 2415, codified at 50 U.S.C. App. 2404(B)(2).

327 President George Bush, Memorandum of Disapproval for the Omnibus Export Amendments Act of 1990, Nov. 16, 1990.

328 There is some question as to whether the economically less advantaged CoCom members can implement a sufficiently reliable system of controls. If not, a two-tiered CoCom system could be required, with countries in the first, more reliable, tier still controlling exports to countries in the second tier. The EC, for which trade barriers between its member states are anathema, is helping less advanced nations to establish reliable control systems so as to avoid the need for a two-tiered CoCom.

329 The Allen Panel studied the export control systems of Canada, France, Japan, the United Kingdom, and Germany and concluded that "[w]ith limited exceptions, none of the[se] countries imposed controls that extend beyond the CoCom lists." NAS I, op. cit., p. 99.

330 The statutory provision is found at 50 U.S.C. App. 2404(c)(6). The 6-month period may be extended 6 months at a time based on a finding that the item is not sufficiently available from other countries to render the U.S. control ineffective; the control may also be extended by

at most 12 months to conduct negotiations to bring the item under multilateral control. An order removing East-West controls on many items 6 months after the Act is found at 54 *Federal Register* 8281 (Feb. 28, 1989).

331 50 U.S.C. App. 2404(f). The President could maintain the controls for at most an additional 18 months if he deemed it necessary for national security, provided that he negotiated with other countries to remove the foreign availability.

332 Public Law 100-418, sec. 2418, codified at 50 U.S.C. App. 2404(f).

333 BXA, Office of Foreign Availability, "Completed Assessments (Based on claims under Trade Act-As of May 15, 1991)." Sixteen of the assessments were requested by interested firms; one was requested by a Technical Advisory Committee.

334 BXA 1989 Annual Reports, pp. 29-31, 34; William Clements, Director, Office of Technology and Policy Analysis, BXA, personal communication Aug. 9, 1991. South Korea achieved this status only in December 1990; it and Singapore enjoy only the first of several levels of liberal treatment. Industry would like to see the level increased and to see other Southeast Asian nations brought in.

335 Public Law 100-418, section 2414, codified at 50 U.S.C. App. 2404(a)(4),(5).

336 BXA 1989 Annual Report, p. 26. Congress had instructed that these changes be implemented within 90 days of the Act, or by Nov. 21, 1988.

337 BXA Annual Reports: 1990, ch. 2 (in press); 1989, p. 22; 1988, p. 22. The 1991 figure is from William Clements, Director, Office of Technology and Policy Analysis, Bureau of Export Administration, U.S. Department of Commerce, personal communication, June 4, 1991.

338 The 1989 figures are from NAS II, pp. 80, 82; the 1990 figures are from "Office of Export Licensing Statistics: CY 1990," n.d. (prepared by BXA).

339 NAS I, op. cit., p. 114.

340 Ibid., p. 113.

341 Ibid., p. 191.

342 Ibid., p. 113.

343 NAS II, op. cit., pp. 98-99.

344 NAS I, op. cit., pp. 114-115.

345 Ibid., p. 114, footnote.

346 Ibid., p. 214.

347 Ibid., p. 114.

348 U.S. Congress, General Accounting Office, *Export Controls: Advising U.S. Business of Policy Changes*, NSIAD-90-201 (Gaithersburg, MD: U.S. General Accounting Office, May 18, 1990), pp. 4-9.

349 BXA Annual Reports: 1990, ch. 2 (in press); 1989, p. 16.

350 "Office of Export Licensing Statistics: CY 1990," n.d. (prepared by BXA).

351 BXA 1990 Annual Report, ch. 2 (in press).

352 William Clements, Director, Office of Technology and Policy Analysis, personal communication, Aug. 22, 1991.

353 Alan Macmillan and Michael Andrews, BXA, Office of Foreign Availability, "Foreign Availability Assessment: AT-Compatible Microcomputers" (December 1988); "AT Assessment Chronology," n.d. (prepared by BXA).

354 U.S. Department of State, "CoCom High Level Meeting: Fact Sheets," reprinted in Senate Report No. 101-399, p. 40.

355 Charlie Carter, Vice President for Technology, National Machine Tool Builders Association and industry member of the TAC for automated manufacturing, personal communication, Apr. 10, 1991; Representative of a high technology firm with representatives on several TACs, personal communication, Apr. 11, 1991.

356 50 U.S.C. App. 2409@.

357 "Fact Sheet on Export Control Procedures," White House Press Release, Dec. 13, 1990.

358 President George Bush, Memorandum of Disapproval for the Omnibus Export Amendments Act of 1990, Nov. 16, 1990.

359 William Clements, Director, Office of Technology and Policy Analysis, BXA, personal communication, Aug. 9, 1991.

360 Ibid.

361 William Clements, Director, Office of Technology and Policy Analysis, BXA, personal communication, June 4, 1991.

362 To decontrol an item controlled by CoCom, CoCom's permission is required. CoCom routinely reviews one-third of its list each year; to get CoCom to consider an item out-of-turn is possible, but requires special effort.

363 The only other basis for decontrol would be that an item is no longer strategic. Often foreign availability occurs before strategic value is lost.

364 Steven Goldman, Director, Office of Foreign Availability, personal communication, June 26, 1991.

365 This figure is for FY 1989. BXA 1989 Annual Report, p. 1.

366 Steven Goldman, op. cit.

367 NAS II, p. 98.

368 Ibid., p. 96.

369 50 U.S.C. App. 2504(g)(l).

370 NAS II, pp. 194-195.

371 Personal communication Aug. 27, 1991.

372 Personal communication, Apr. 11, 1991.

373 Personal communication, Apr. 10, 1991.

374 See U.S. Department of Commerce, Bureau of Export Administration, Office of Technology and Policy Analysis, *1990 Annual Foreign Policy Report to the Congress* (Jan. 21, 1990-Jan. 20, 1991), February 1990, chs. I-III.

375 Under Section 6 the President is supposed to consider foreign availability and the positions taken by other countries, and the impact of these factors on the controls' likely effectiveness. However, how these factors are weighed is up to the President's discretion. See 50 U.S.C. App. 2405(b),(h).

In addition, for many years the interagency review of license applications have been different for the two types of controls. However, in December 1990 the President directed that the procedures in place for Section 5 controls also be used for Section 6. "Fact Sheet on Export Control Procedures," White House Press Release, Dec. 13, 1990.

376 56 *Federal Register* 10,756, 10,760 (Mar. 13, 1991).

377 56 *Federal Register* 25053 (June 3, 1991). BXA originally found foreign availability on Sept. 25, 1989. See also "Semiannual Report to Congress—Report on the Operations of the Office of Foreign Availability: Apr. 1, 1990—Sept. 30, 1990," p. 12.

378 56 *Federal Register* 40494-40502 (Aug. 15, 1991). The regulation will later be extended to cover use in making missiles.

379 Clements, personal communication Aug. 27, 1991, op. cit. What duty of inquiry firms will have is unclear. However, Mr. Clements has strongly urged exporters to ask their lawyers what their legal exposure might be and what precautions they should take.

380 See "Fact Sheet on Enhanced Proliferation Control Initiative," issued by the White House Dec. 13, 1990, reprinted in Bureau of National Affairs, *International Trade Reporter*, Dec. 19, 1990, p. 1933.