

## CHAPTER 6

# NAFTA

## The Politics in the United States

The United States abstained from the drift toward trading blocs in the 1930s and the years after World War II. As chapter 4 explains, it instead pursued nondiscriminatory trade liberalization through the RTAA and five phases of multilateral negotiations in the GATT up to the Kennedy Round's completion in 1967. The automotive trade agreement with Canada was the first waiver from MFN the United States sought under Article XXIV—and its only one until 1985.

In those intervening two decades, the two main pillars of U.S. trade policy crumbled. The first to fall was the commitment to trade liberalization, as pressure for nontariff barriers erupted in the 1970s. Soon the second pillar, adherence to MFN, was cast aside when the United States began to seek free trade deals with selected countries. These initiatives culminated in agreements with Canada in 1988 and Mexico in 1993.

This shift from multilateralism to regionalism reflected, first and foremost, the changed market interests of firms in industries dependent on large-scale, multinational production. Competitive pressures caused U.S. companies to modify their strategies in two important ways after 1970. First, factories had to be rationalized and streamlined to better take advantage of large returns to scale. Increases in MES levels or failure to keep pace with rivals abroad amplified the need for larger volume in industries producing for the U.S. market; more frequently, overcapacity and duplication in multinational firms manufacturing in the United States, Canada, and Mexico left substantial scale economies unexploited. Companies that had not concentrated production in North America faced serious liabilities when optimal plant sizes grew larger or when foreign firms reached (and sometimes surpassed) U.S. scales of output. Second, firms moved labor-intensive stages of manufacturing out of the United States and outsourced components or final assembly to cut factor costs. As this

trend progressed, companies developed regional procurement networks to specialize production across different locations.

In industries restructuring along these lines, firms actively campaigned for free trade agreements. To consolidate manufacturing on a continental scale, producers needed unfettered access to all markets in the region. In addition to free trade, firms also wanted rules to govern FDI, TRIMs, intellectual property, and services. Multilateral discussions on these issues were floundering in the Uruguay Round; regional arrangements offered deeper integration than could be achieved in the GATT. Moreover, restructuring costs left firms vulnerable to foreign competition in the medium term. To provide shelter during reorganization, some industries sought exclusive measures against outside investors and suppliers of imports. Simply stated, many companies needed discriminatory liberalization to restructure manufacturing establishments more efficiently.

As firms with multinational operations and large returns to scale pursued regional free trade, labor-intensive industries, labor unions, and import-competing agriculture bitterly opposed free trade agreements with Canada and especially Mexico. Many of these dissenting groups received prolonged staging periods for tariff elimination, tough rules of origin, expanded Trade Adjustment Assistance, and other special measures to mollify their opposition. But this coalition was too poorly organized and its interests too diffuse to defeat NAFTA.

The evidence in this chapter indicates that NAFTA has promoted multilateral liberalization, at least in the industries that supported it. Most pro-NAFTA industries supported sweeping tariff cuts in the Uruguay Round, and they have continued to push for new trade agreements regionally and in the WTO. In contrast, industries that lobbied against NAFTA generally opposed the Uruguay Round agreements, and they have since lobbied to block further liberalization, whether regional or multilateral. Overall, free trade agreements enhanced the market position of firms in industries with large returns to scale and production-sharing networks. Meanwhile, industries with few opportunities to gain scale economies or outsource labor-intensive tasks saw their economic fortunes decline.

This chapter specifies how scale economies and production sharing influence trade preferences to explain why some industry groups in the United States sought a North American trading bloc while others opposed one. The chapter then addresses the politics of lobbying on the NAFTA treaty. The discussion concludes by evaluating how free trade agreements have affected domestic interests in multilateral liberalization.

## From Multilateralism to Regionalism

The U.S. government's conversion from multilateral liberalization to the pursuit of regional initiatives in the 1980s coincided with a series of dramatic external events. Competition from Europe and Japan, along with the emergence of the Asian "tigers," put growing pressure on U.S. industries, as these countries employed advanced manufacturing methods at considerably lower wage levels. The Kennedy Round tariff schedules pushed average duties below 10 percent, while the overvalued dollar sucked in imports and hindered exports, further exposing the U.S. market to foreign competition. Though the dollar's decline with the suspension of gold convertibility raised prices for foreign goods, import penetration continued to grow until it exploded under the Reagan administration's strong dollar policy.

Equally important were trends inside North America, as national responses to economic integration led to disputes between the United States and Canada, then later between the United States and Mexico. Canada's Foreign Investment Review Agency (FIRA), created to screen new investments and regulate foreign-owned firms, started to pressure U.S. multinationals to satisfy performance rules for local content and exports, transfer technology or patents to indigenous firms, hire Canadian management and labor, and conduct more R&D in Canada. This "aggressive application of industrial policy," the Commerce Department complained, threatened to "distort trade."<sup>1</sup> Canada also began to offer generous investment incentives to European and Japanese firms. For example, Michelin received \$73 million in grants and low-interest loans to build two tire plants in a depressed area of Nova Scotia. Volkswagen secured tariff rebates on imported parts used in exported vehicles in 1978, an offer later extended to Honda and Toyota. In return for local content and value-added commitments, foreign automakers could collect rebates of up to 100 percent on their imports.<sup>2</sup>

Canada's new regulatory posture provoked threats and occasional retaliation from the United States. The Treasury Department placed countervailing duties on steel-belted radial tires imported from Michelin's subsidiary in Canada—the first time trade remedy laws had been used against investment incentives. The Carter administration demanded consultations to express its

1. Untitled, undated memo, Joint U.S.-Canadian Committees on Trade and Economic Affairs, 1953–72, Box 2, RG 489.

2. Honda achieved full tariff remission status in 1985; Toyota was scheduled to soon follow. In 1987, Toyota and seven other foreign firms received 70 percent rebates on their imports (Fuss and Waverman 1987, 224–25).

disapproval of Canada's tariff rebates to foreign automakers, which were not designated for privileges under the APTA. These disputes peaked as the Reagan administration targeted FDI regulation as an unfair trade barrier. A number of bills in Congress sought to pressure foreign countries to grant reciprocity in investment, and revisions to Section 301 authorized retaliation. Officials in the United States pushed to add TRIMs to the agenda for the next trade round at the 1982 GATT ministerial meeting. The next year, the United States challenged Canada's local sourcing, import substituting, and export performance rules in GATT dispute settlement. When Canada renewed its undertakings with foreign automakers, the U.S. Trade Representative (USTR) concluded that countervailing duties were likely. Though U.S. officials did not know the scale of the probable damage (the remission agreements were confidential), an anti-subsidy complaint was inevitable once foreign-affiliated plants came onstream (Fuss and Waverman 1987, 224–26).

These events occurred as multilateral trade negotiations wallowed. After the Tokyo Round, it took seven years before the Uruguay Round's belated launch. As discussions for a new trade round dragged on, President Ronald Reagan announced that he would instruct "trade negotiators to explore regional and bilateral agreements with other nations" to pursue the broad liberalization in services, intellectual property, and FDI the United States hoped to achieve in the GATT.<sup>3</sup> The United States soon completed its first free trade agreement, with Israel.

With the multilateral process stalled, a Canadian Royal Commission concluded that bilateral negotiations with the United States were the best method to reduce nontariff barriers and resolve investment disputes. Though more than three-quarters of Canada-U.S. trade was duty-free,<sup>4</sup> conflicts persisted over softwood lumber, Atlantic groundfish, and potash. Moreover, the Royal Commission found, industrial policy had failed to reorient the branch factory system, and Canadian manufacturing productivity had declined over the previous decade. Multinationals from the United States and many Canadian firms testified that opportunities to exploit scale economies were considerable if they could sell more of their output abroad. Opening the U.S. economy to Canadian goods, these firms asserted, would allow them to specialize for a larger market.

The Royal Commission's report helped to persuade the Canadian government to seek a free trade agreement with the United States. Canadian officials

3. "Remarks at a White House Meeting with Business and Trade Leaders, 23 September 1985," Official Web Site of the Ronald Reagan Presidential Library, <http://www.reagan.utexas.edu/resource/speeches/1985/92385a.htm>.

4. In the United States, tariffs on imports from Canada averaged 0.9 percent, while Canadian tariffs on U.S. imports averaged 2.4 percent (Royal Commission on the Economic Union 1985 1:263–65).

believed that with mutual free trade, branch plants would specialize for an enlarged continental market instead of downsizing or leaving. Canada's U.S. ambassador explained, "Canadian industry must have open and secure access to U.S. markets to achieve economies of scale and effective rationalization of product lines needed to remain competitive" (Granatstein 1985, 47). In October 1987, the treaty's twenty chapters were completed, and the Canada–United States Free Trade Agreement (CUSFTA) was signed in January 1988.

Relations between the United States and Mexico followed a similar trajectory. From 1962 to 1981, the Mexican government initiated several industrial programs to promote import substitution in capital-intensive activities. After the 1982 debt crisis, protected industries were rapidly exposed to foreign competition to promote macroeconomic stabilization.<sup>5</sup> New measures to generate foreign exchange accompanied import liberalization. The 1983 Automotive Decree required multinationals to export \$2.50 for each dollar of imports and imposed domestic content rules of 60 percent. The 1984 Pharmaceutical Decree mandated greater local production of chemical intermediates, more R&D spending, and higher export-to-sales ratios (USITC 1990a, chap. 4, 7–11).

As with Canada, the United States warned Mexico not to extend performance rules in automobiles to other sectors, and when these efforts failed, it pushed to scale back investment controls.<sup>6</sup> Bilateral discussions produced a "Framework of Principles and Procedures for Consultation Regarding Trade and Investment Relations" in 1987. Parallel "Trade and Investment Facilitation Talks" addressed nontariff barriers, FDI, services, and intellectual property (USITC 1990a, chap. 2, 3–6). In the spring of 1990, Mexican president Carlos Salinas de Gortari proposed free trade negotiations. Discussions opened in June 1991 and ended with the signing of the NAFTA treaty in October 1992. When NAFTA entered into force on the first day of 1994, the United States had free trade agreements with countries accounting for one-third of its total trade.

The book's analytical framework illuminates two key incentives for industry groups to seek regional trade liberalization: market pressures to capture unexploited scale economies or to reduce labor costs by expanding regional production sharing. These considerations were critical to political demands in the United States for free trade in North America. The next two sections discuss the sources of each of these motives.

5. Mexican tariffs declined from 27 percent in 1982 to 13 percent in 1990. Mexico also dismantled quantitative controls and liberalized FDI to allow full foreign ownership in three-quarters of all industrial activities (USITC 1990a, chap. 4, 3–4).

6. Mexico did not join the GATT until 1985, so these laws could not be challenged in dispute settlement.

### **Industries with Large Returns to Scale**

For a number of reasons, scale economies became more important to U.S. firms after 1970. Normally, firms can exploit large returns to scale without trading blocs if the national market is sufficiently large compared to MES production. The high rate of consumption in the United States, chapter 4 argues, made U.S. producers less interested in trading blocs in the interwar and early postwar periods. To be sure, the United States remained the world's largest market for most goods during the period covered in this chapter. However, production was no longer as effectively concentrated to maximize the scale of output at the plant level.

In a few industries, the failure of domestic demand to keep pace with increases in the MES motivated firms to seek larger markets. In other cases, producers lost their scale advantages over foreign rivals as import penetration fragmented the domestic market, making regional expansion attractive as a complement to national trade protection. But the most significant factor was that U.S. companies with FDI in Canada and Mexico experienced intense pressure to reduce duplication and centralize dispersed production in one location—a strategy that could be implemented only if the barriers separating these markets were eliminated.

In addition to concerns about scale economies, high labor costs propelled U.S. companies to move production outside the United States. As a result, subcontracting and intrafirm trade with Canada and Mexico expanded rapidly. These markets were more attractive locations than Asia or South America because of their geographic proximity, particularly if goods produced close to home received free access to the U.S. market. Offshore manufacturing operations functioned most efficiently when they were closely integrated with plants in the United States. Companies involved in production sharing and intrafirm trade therefore could benefit from the removal of barriers to the movement of goods across the borders linking various stages of manufacturing. In many cases, this amplified the need for regional trade liberalization to gain scale economies; in a few industries with smaller returns to scale, the growth of procurement networks outside the United States created an additional constituency for free trade agreements.

### **Returns to Scale and MES Production**

A large MES compared to home consumption constrains firms in their efforts to expand capacity and reduce unit costs because it is more difficult to find profitable outlets for surplus production. As a result, firms in industries with large MES production levels tend to benefit the most from access to a larger

than national market. In addition, large returns to scale impose steep penalties, in terms of higher unit costs, on companies that have not exhausted the potential scale economies. Thus, businesses with a large MES are more likely to support regional trade liberalization the larger the returns to scale. This makes it important to determine which industries have these characteristics.

Previous chapters rely on engineering estimates of the returns to scale in manufacturing different products. However, data available for the United States allow more direct measurement at the industry level. In this method, variations in value added per worker in plants of different sizes provide estimates of the elasticity of unit costs with respect to scale.<sup>7</sup> The results of this measure are consistent with engineering estimates: returns to scale are largest in chemicals, electrical and industrial machinery, motor vehicles, nonferrous metals, and certain consumer goods such as tobacco and grain products; in contrast, textiles, apparel, rubber, plastic, and leather have small and sometimes negative returns to scale.

Proxy measures for MES production, unfortunately, are not so reliable, and time-series data are not available to substantiate the earlier claim that MES levels generally were growing larger. Table 27 presents MES engineering estimates as a share of U.S. consumption, with industries ordered vertically according to the returns to scale. Despite the product coverage limitations in the MES data, these thirty-seven industries accounted for 52.3 percent of domestic sales in 1987.

The area of table 27 inside the dashed line highlights the industries with the strongest incentives to support regional free trade to take advantage of scale economies. The cut point was set at 3 percent because no industries fell between 2 percent and 3 percent; only five (marked with an asterisk) were between 3 percent and 4 percent. The data show that the sectors likely to benefit the most from an increase in market size cluster in the transportation, machinery, electrical, chemical, and primary metal industries. These industries require large fixed investments in plant and equipment or high R&D costs.<sup>8</sup> In

7. For a description of this method, see Chase 2003, 149–51.

8. There is reason to question the estimates of low returns to scale in blast furnace and basic steel, household audio and video equipment, and plastics materials and synthetics. In steel, mini-mills refining scrap into finished steel achieved higher levels of output per worker than integrated firms. Consistent with this observation, electrometallurgical products (SIC 3313) showed negative returns to scale, while blast furnaces and steel mills (SIC 3312) had positive returns to scale (7.2 percent). Similarly, returns to scale were large (9.3 percent) in household audio and video equipment (SIC 3651) but negative in prerecorded records and tapes (SIC 3652). Finally, plants were larger, but value added per worker lower, in cellulosic manmade fibers (SIC 2823) than in noncellulosic organic fibers (SIC 2824), where returns to scale were 15.3 percent. Thus, refined industry classifications suggest significant economies of scale in segments of all three industries.

**TABLE 27. Returns to Scale and Market Size in the United States, 1987**

	MES Less than 3% of Domestic Consumption	MES at Least 3% of Domestic Consumption
<i>Returns to scale</i>		
Large (>14%)	Paperboard mills Bakery products Grain mill products Sugar and confectionery products Dairy products Paper mills Paints and allied products Soaps, cleaners, and toilet goods	Tobacco products Agricultural chemicals* Primary nonferrous metals* Drugs* Electronic components Computer and office equipment Farm machinery Motor vehicles and equipment
Moderate (7–12%)	Beverages Footwear, except rubber Miscellaneous electrical equipment Iron and steel foundries	Engines and turbines Communications equipment Industrial organic chemicals* Household appliances Aircraft and parts Tires and inner tubes*
Small (<6%)	Carpets and rugs Cotton fabrics Preserved fruits and vegetables Manmade fiber and silk fabrics Yarn and thread mills Meat products Knitting mills Petroleum refining	Blast furnace and basic steel Audio and video equipment Plastics materials and synthetics

Source: Data from U.S. Bureau of the Census 1997.

\*The five entries marked with an asterisk were between 3 percent and 4 percent.

contrast, textiles, apparel, rubber, plastic, and leather lacked significant returns to scale, while industries such as paper, processed food, household chemicals, and metal manufactures enjoyed a large domestic market.<sup>9</sup> In short, industries on the lefthand side of table 27 would derive little or no gain from increases in the scale of output. Industries to the right, on the other hand, could benefit from the creation of a larger market through free trade agreements.

It is important to specify the nature of these benefits more clearly. Firms

9. It is possible that the MES data are inaccurate because opportunities to gain scale economies in some of these activities increased with technological changes and the development of capital-intensive and knowledge-based techniques. For example, producers of textiles introduced new methods for designing products, handling materials, and monitoring assembly through the use of computers, automation, and microelectronic technologies. But even if optimal scales were larger than estimated, in most of these cases domestic demand still provided ample room for hundreds of plants in the U.S. market.



with production located primarily in the United States would have opportunities to expand exports through greater market access in Canada and Mexico. If they could gain market shares, either by displacing producers in the region (trade creation) or taking customers from firms outside the region (trade diversion), it would be possible to expand and ride down their cost curves. However, companies with multiple plants in North America did not have to increase market shares to gain scale economies. Rather, they could reduce costs in a wider market by specializing manufacturing facilities and consolidating production for the entire region. Thus, the potential benefits were greatest in industries with large returns to scale *and* multinational operations. It is therefore necessary to consider the effects of FDI in North America.

#### Foreign Investment and Scale Economies

Increasing returns to scale production in North America was progressively fragmented during the postwar period and could not achieve optimal levels of concentration because national regulations and barriers to regional trade compelled production in multiple locations. In Canada and Mexico, U.S. companies faced high trade barriers, so many established foreign affiliates to locally produce goods that could not be exported from the United States. These “miniature replicas” manufactured the same product line as the parent firm in small factories with short production runs. Unit costs were high; these inefficient operations were profitable only because tariff protection and entry barriers enabled foreign affiliates to charge high prices in the local market.

By the 1980s, small-scale factories in Canada and Mexico had become a severe liability. They had lost much of the tariff protection that initially made local production attractive. Moreover, plants in the United States suffered from excess capacity and intense competition from Asia and Europe. Opportunities to gain scale economies existed if manufacturing facilities could be streamlined and rescaled for the regional market. Pressure to rationalize operations was particularly acute for multinational companies producing goods with large returns to scale in all three countries. As long as barriers to trade segmented the North American market, plants in the region could not be specialized and inefficient product lines closed down.

In Canada, miniature replica production was longstanding, as chapter 4 shows. Throughout Canadian industry, small-scale branch plants manufactured behind high tariff walls. Multinationals from the United States generally resisted market integration between the United States and Canada because tariffs created substantial rents for their branch plants. Neither the multinationals nor

the Canadian and U.S. governments wished to modify this relationship before 1970. The exception was automobiles: rents declined when the market available to the branch plants receded after the war, while new regulatory rules disrupted production and raised the threat of U.S. retaliation—causing automakers to push for the APTA.

But after 1970 it became more difficult for the branch plants to prosper while manufacturing diverse product lines for the small Canadian market. Canada retained substantial trade protection in manufacturing after the Kennedy Round, but it accepted deeper tariff cuts in the Tokyo Round in an effort to encourage industry (particularly the branch plants) to specialize and lengthen production runs. Unproductive branch plants were exposed to competitive pressures as lower tariffs were phased in, so they could no longer mark up prices to compensate for high costs (Royal Commission on the Economic Union 1985 1:228–29).

In addition, FIRA was a major irritant for U.S. firms. Though FIRA approved 80 percent of FDI proposals, companies usually had to accept performance requirements in return; a proposal's denial or withdrawal signaled, in effect, that the applicant did not anticipate returns sufficient to justify the undertakings. Because TRIMs were formulated case by case, the commitments of foreign-owned firms often varied.<sup>10</sup> In some cases, new entrants gained an advantage by negotiating less restrictive undertakings than incumbent firms had to satisfy; in others, latecomers were placed at a disadvantage. Moreover, because screening applied to incumbent firms and new entrants alike, multinationals already based in Canada could not escape review unless they eschewed mergers and expanded only in core product lines. As a result, foreign-owned firms could be subjected to a new set of regulations after substantial investment in local production already had been sunk.<sup>11</sup>

Canadian incentives to attract European and Japanese investment were another problem. These measures subsidized rival firms as they developed modern production facilities. Once established, European and Japanese affiliates

10. Some performance requirements were very precise: for example, Apple Computer promised to reach 38 percent Canadian value added in its first year in operation and to increase local content over time according to a schedule imposed by FIRA, and it agreed to sell 80 percent of its products through Canadian retailers and perform 80 percent of its repairs in Canada (Morici, Smith, and Lea 1982, 43).

11. For example, Chrysler was assessed \$243 million in back tariffs in 1978 for failing to meet APTA safeguards. In return for a waiver of these tariffs and a \$200 million loan guarantee, the firm agreed to invest an additional \$5 billion in Canada and to increase Canadian employment to one job for every nine workers it employed in the United States. It also could not close Canadian factories without prior approval (Hufbauer and Samet 1982, 136–37).

not only competed in the Canadian market with the outmoded branch plants but also built substantial export capacity for the U.S. market. In the Michelin case, 90 percent of the firm's Canadian exports went to the United States. Similarly, tariff rebates for Volkswagen, Toyota, and Nissan required the Big Three, already reeling from the energy crisis, to compete with foreign companies that were not bound by the APTA undertakings.<sup>12</sup>

As Canada reduced tariff protection, extracted new commitments from incumbent firms, and courted third-country investors, U.S. multinationals were stuck with sunk costs in inefficient, small-scale affiliates with high local content. A few companies attempted to streamline operations and eliminate duplication between parent factories and branch plants. GE-Canada, for example, closed down several product lines and lengthened production runs to gain scale economies (Royal Commission on the Economic Union 1985 1:323–27, 346–48). Dupont petitioned the Canadian government for a special license to import nylons duty-free so it could phase out certain product types and rescale others for the North American market; when this request was denied, the firm decided that restructuring would not be profitable (Parliament of Canada 1982, 51). The branch plants could not survive in the Canadian market without trade protection, but the alternative, costly investments in restructuring to promote specialization and gain scale economies, was too risky as long as trade barriers existed between Canada and the United States.

In Mexico, U.S. firms faced similar dilemmas. While FDI flooded into Mexico in the decade after the debt crisis, many of these funds went to the maquiladoras, which produced intermediate components and performed labor-intensive assembly.<sup>13</sup> But most U.S. multinationals also operated fully integrated plants in Mexico's interior, with sales oriented exclusively to the domestic market. As the Mexican government opened the economy to foreign competition after the debt crisis, suddenly these affiliates had to compete with imports from lower-cost locations. Moreover, little time was allowed to adjust because trade liberalization and the new industrial decrees came to pass in such a short spell.

12. A federal task force, which included the Big Three, the UAW, and parts producers, recommended a framework to require new entrants "to make binding commitments comparable to the commitments now being made by the vehicle manufacturers operating under the APTA." The report concluded (Federal Task Force on the Canadian Motor Vehicle and Automotive Parts Industries 1983, 107): "an effective compliance procedure must be developed by the Canadian government that will ensure that these comparable commitments will be fulfilled by 1987."

13. Inside the maquiladora zone (an area stretching twenty-five miles south of the U.S. border), foreign companies were permitted to fully own their affiliates, and they could earn rebates on import duties for products that were reexported after processing.

Problems were most acute in the industries with special development programs. Multinationals in automobiles, pharmaceuticals, computers, telecommunications, and electronics originally invested in response to the lure of financial incentives and trade protection. Foreign-affiliated factories outside the maquiladoras manufactured diverse product lines on a small scale. Foreign automakers, for example, produced five different models per factory, compared to one or two in home country plants. "Inefficiencies caused by making too many models," the U.S. International Trade Commission (USITC) (1993, chap. 4, 8) noted, "are made worse because the Mexican market is relatively small, thus making it hard to produce enough automobiles to benefit from economies of scale." These firms produced 281,200 automobiles, half of MES output levels; this amounted to just 14,800 cars per assembly line, or 5,300 per model. Elsewhere conditions were similar: five computer firms made 110,000 personal computers, fifty-nine different models in all, and foreign companies produced 752,000 television sets, divided between color and monochrome, less than two-fifths of the MES for each type (Peres 1990, 96–97, 107, 122–23).

Some U.S. firms resisted the policy changes at first. Fourteen multinationals filed suit against the Pharmaceutical Decree for violating intellectual property, and exports-to-sales fell well short of government targets. Computer firms that had invested under the previous industrial regime pushed to continue import permits for five more years because production was still in its "infancy." A few companies gave up altogether: Apple divested from Mexico because it could not meet local content targets, particularly after rival IBM negotiated a more favorable deal with the Mexican government (Peres 1990, 90–91, 103).

But most U.S. multinationals had made commitments to Mexican production that were too large to terminate. For many firms, the solution was to relocate manufacturing or assembly to Mexico—and then export back to the United States. This strategy worked particularly well for firm-specific components with no external market, which could be sold to the parent company at transfer prices. For example, automakers installed thirteen new engine plants with a total capacity of 2.4 million units; 85 percent of this output was exported to the United States (Peres 1990, 116–21).<sup>14</sup> In other cases, firms ended fully integrated production and focused on intermediate goods or final assembly in Mexico. In consumer electronics, Zenith, Matsushita, and Philips stopped manufacturing complete TV sets in Mexico and built large assembly

14. New factories specialized for the U.S. market made existing affiliates more profitable because companies that surpassed export targets were permitted to maintain lower local content and offer more product lines for sale in Mexico.

plants directed to export markets. Computer firms phased out the production of personal computers and specialized in disk drives and components (Peres 1990, 92–93).

This reorientation of corporate strategies to compensate for inefficient scale and low export volumes in Mexican factories was costly and painful. Multinationals from the United States had considerable room to reduce costs if they concentrated production at the regional level, but this could occur only if the policy externalities that had fragmented production in the first place were eliminated. Specializing Mexican affiliates was feasible only if phased-out product lines could be imported from the United States and new capacity dedicated to export had free access to the U.S. market, where tariffs remained in place and administered trade restrictions were a constant threat. Finally, there was the risk that industrial decrees would be revised after capital had been sunk in new production arrangements: as an automobile executive explained, “what one thought was a good deal could turn out badly . . . because of changes in decrees” (Guisinger 1985, 114).

In sum, North American manufacturing was fragmented because trade protection in Canada and Mexico encouraged entry at an inefficient scale, which caused firms to produce in multiple locations. After 1970, foreign competition, activist industrial policies, and market opening exposed U.S. affiliates in the region to outside pressure. In industries with small-scale production and high U.S. ownership in Canada and Mexico—such as computers, automobiles, consumer electronics, telecommunications equipment, home appliances, pharmaceuticals, and petrochemicals (as shown in table 28)—manufacturing could be integrated across borders among the different divisions of multinational firms, allowing companies to capture restructuring benefits from policy changes. Increased certainty and an open market environment would allow multinationals to phase out noncore product lines in foreign plants, expand production runs, and consolidate into fewer locations to maximize scale economies.

Trade and regulatory liberalization raised two problems, however. First, it could not be immediate: a rapid removal of trade barriers would further expose foreign affiliates to competition in once-protected host markets. Liberalization in stages would minimize the disruption and provide breathing room while restructuring took place. Second, trade liberalization could not be multilateral: multinationals would be vulnerable to external competitive pressures while they reorganized their operations. If third-country producers increased exports or invested in the region, North American firms would be pushed up their cost curves. Companies would have few incentives to begin costly restructuring without measures to prevent new entrants from capturing the benefits of trade

**TABLE 28. FDI in Industries with Economies of Scale, 1989**

Industry	Foreign Production Divided by Total Shipments
<i>High FDI</i>	
Computer and office equipment	53.2
Motor vehicles and equipment	41.7
Communications equipment <sup>a</sup>	34.3
Drugs	32.9
Household appliances	32.6
Tobacco products	30.7
Farm machinery	28.3
Industrial organic chemicals <sup>b</sup>	27.9
Tires and inner tubes <sup>c</sup>	27.1
Electronic components	26.7
<i>Low FDI</i>	
Agricultural chemicals	13.5
Engines and turbines	13.4
Aircraft and parts <sup>d</sup>	2.6
Blast furnace and basic steel <sup>e</sup>	2.0

*Source:* Data from U.S. Bureau of Economic Analysis 1992; U.S. Bureau of the Census 1997.

<sup>a</sup>Communications equipment and audio and video equipment.

<sup>b</sup>Industrial inorganic chemicals, plastics materials and synthetics, and industrial organic chemicals.

<sup>c</sup>Rubber products.

<sup>d</sup>Other transportation equipment.

<sup>e</sup>Ferrous metals.

liberalization. In short, there needed to be a mechanism to exclude outsiders. Thus, a regional arrangement, not multilateral liberalization, would provide larger gains for industries with large returns to scale.

### North American Production Sharing

Restructuring affiliates in Canada and Mexico to gain scale economies often re-oriented production from finished goods to intermediate components: factories making a full line of color televisions instead would concentrate in cathode-ray tubes, fully integrated automobile plants began to manufacture engine blocks or transmissions, affiliates producing complete refrigerators shifted to condensers, and so on. These adjustments accelerated the trend toward outsourcing and production sharing in North America. In these strategies, a corporate parent and its affiliates (or original equipment manufacturers and arms-length sub-

contractors) trade unfinished products, with each division adding value along the way, and the outputs of geographically dispersed operations are brought to one location only at the final assembly stage.

Production sharing generally takes advantage of differences in low-skill labor costs between the United States and developing countries. As import competition from Japan and Asia increased in the 1970s, firms facing cost pressures moved manual tasks to labor-rich areas and vertically integrated across borders to maintain their competitive position. "As domestic labor-intensive production became less and less economical," Grunwald and Flamm (1985, 10) explain, "U.S. firms began to look to other countries, breaking production into stages and carrying out the labor-intensive processes in countries where wages were low." In these arrangements, factories in the United States performed stages that required long production runs, large amounts of capital, or skilled labor, while affiliates in Mexico, South America, the Caribbean, and Asia made labor-intensive parts and assembled finished products.

Policy measures assisted the rise of production sharing. Sections 9802.00.60 and 9802.00.80 of the Harmonized Tariff System (formerly Sections 806.30 and 807.00 of the Tariff System of the United States) established the Offshore Assembly Program (OAP), which allows firms exporting products for foreign processing to pay tariffs only on the value added abroad (not U.S. content) when these goods reenter the United States. As U.S. multinationals invested in export-processing zones in Asia, Mexico initiated the Border Industrialization Program in 1965 to attract manufacturing into the border region. Firms that combined these privileges with OAP could send a product to the maquiladoras and then return it to the United States, paying tariffs only on the value added in Mexico. As a result, intermediate goods trade between the United States and Mexico expanded dramatically. OAP imports from Mexico were one-fifth those from Hong Kong and one-quarter those from Taiwan in 1966; by 1970, Mexico's OAP trade doubled Hong Kong's and quadrupled Taiwan's (Grunwald and Flamm 1985, 137).

At about the same time, U.S. multinationals began to rationalize product lines between parent factories and the branch plants in Canada. In this case, production-sharing motives were different than in Mexico—Canadian branch plants moved to a narrower range of products for the combined Canada-U.S. market to exploit scale economies; Mexican maquiladoras specialized in manufacturing processes with high labor content and few economies of scale. But the effects were similar: the development of a regional supply network and growing cross-border trade. Policy initiatives such as the APTA assisted this trend, and OAP trade with Canada was substantial in office machinery, engines, tractors, and other types of machinery.

With the market-opening measures in Mexico after the debt crisis, multinationals started to rearrange affiliates in Mexico's interior by reducing product lines, lengthening production runs, and reorienting sales to the regional economy. This further increased production-sharing trade in North America. By 1987, Mexico and Canada accounted for 60.3 percent of OAP trade and 44 percent of the foreign content of this trade. Under the APTA, another \$28.1 billion (equal to 41 percent of OAP trade) entered the United States from Canada. Overall, 60.5 percent of the intrafirm trade of U.S. companies involved Mexico and Canada.<sup>15</sup> These figures help to explain why some firms would be interested in trade liberalization and policy harmonization regionally more than multilaterally.

The industries most active in developing regional supply chains had technological features conducive to offshore manufacturing: production techniques divisible into stages that could be performed at different times and locations, low-skill components and processes that could use cheaper foreign labor, and low weight-to-value ratios for intermediate goods, which create low shipping costs between separate locations. The semiconductor industry was the first to move abroad, starting in 1961 with Fairchild Semiconductor's establishment of an affiliate in Hong Kong, as foreign assembly and packaging helped to reduce factor costs and enhance price competitiveness. Offshore manufacturing also expanded in electrical items such as radios, televisions, personal computers, and home appliances, where firms could match long production runs in the United States with cheap foreign workers for labor-intensive soldering, assembly, and testing. The manufacture of components for automobiles, machinery, and instruments moved abroad in this period as well.

The first column of table 29 presents the intrafirm trade of U.S. companies as a share of domestic sales in 1987. Manufacturers of computers, automobiles, consumer electronics, and electronic components engaged in the largest amounts of intrafirm trade. Trade with foreign affiliates was less common in paper, nonmetallic minerals, plastics, furniture, and lumber. Leather, apparel, and textiles recorded large increases in intrafirm trade in the 1980s, but levels remained low relative to total sales.

The second column of table 29 reports OAP trade as a percentage of total sales. Most of this trade was concentrated in the five industries heavily engaged in intrafirm trade—particularly automobiles and consumer electronics. In addition, however, the leather, apparel, and furniture industries registered no-

15. The figures in this paragraph are from the sources for tables 28 and 29.



**TABLE 29. Intrafirm Trade and Offshore Assembly, 1987**

Industry	Intrafirm Trade as a Percentage of Total Shipments	OAP Trade as a Percentage of Total Shipments <sup>a</sup>
<i>High</i>		
Computer and office equipment	27.6	2.7
Motor vehicles and equipment	24.3	20.7
Household audio and video equipment	23.5	8.5
Electronic components	22.6	4.9
Farm machinery	10.4	2.9
Construction machinery	9.3	1.7
Industrial inorganic chemicals	8.7	0.0
Drugs	6.7	0.0
Household appliances	5.7	0.6
Industrial organic chemicals	5.1	0.0
Plastics and synthetics	5.1	0.0
<i>Low</i>		
Paper and allied products	1.6	0.0
Leather and leather products	1.4	2.3
Apparel	1.1	0.8
Stone, clay, and nonmetallic minerals	0.9	0.1
Plastics products	0.9	0.1
Textiles	0.6	0.1
Furniture and fixtures	0.6	0.8
Lumber and wood products	0.5	0.1
Ferrous metals	0.2	0.1

*Source:* Data from U.S. Bureau of Economic Analysis 1992; U.S. Bureau of the Census 1997.

<sup>a</sup>Foreign content of OAP trade with Canada and Mexico in 1987. Data provided courtesy of the authors of Feenstra, Hanson, and Swenson 2000.

table levels of OAP trade despite little intrafirm trade.<sup>16</sup> Moreover, outsourcing was growing rapidly in these industries: over the next five years to 1992, OAP trade increased 231 percent in apparel and 175 percent in leather.

Production sharing and outsourcing also were concentrated in North America. Among the industries with high levels of outsourcing, at least one-third of OAP trade occurred with Mexico and Canada in every case except

16. There is overlap between OAP trade and intrafirm trade, yet the two measures differ in important ways. First, OAP trade includes subcontracting between unaffiliated parties in addition to trade between affiliated firms. When firms do not own their suppliers, OAP trade picks up cross-border production not accounted for in intrafirm trade. Second, OAP trade crosses the U.S. border twice, once leaving and again reentering the United States. Thus, it does not capture production-sharing arrangements that involve one-way movements of goods (from the parent to affiliates or from affiliates to the parent). Thus, the two datasets are best used in conjunction with one another; not all intrafirm trade enters under OAP provisions, nor does all OAP trade remain within the firm, even if there are incentives to combine the two.

apparel and leather, where firms preferred to outsource to Asia. Industries with substantial intrafirm trade outside North America (computer and office equipment, electronic components, farm and garden machinery, drugs, industrial chemicals, and instruments) traded intensely with regional affiliates as well. In most cases, the North American operations of U.S. multinationals were not closely integrated with affiliates outside the region.<sup>17</sup> Thus, industry interests in free trade between parent firms and their affiliates outside North America were not as widely distributed as those for liberalizing trade with Mexico and Canada.

In sum, the growth of production-sharing networks in North America made the United States, Canada, and Mexico highly interdependent in manufacturing, not merely consumption. These production linkages were concentrated in a few industries, so the private risks fell on a handful of U.S. multinationals. Five firms—Chrysler, GM, Ford, IBM, and Volkswagen—shipped one-fifth of Mexico's foreign sales in 1990. Chrysler, GM, and Ford, respectively, exported 42 percent, 36 percent, and 31 percent of their Mexican production, of which 91 percent, 100 percent, and 100 percent went to the United States. IBM sold 95 percent of its Mexican output abroad (U.S. General Accounting Office 1992).

Though the maquiladora zone in Mexico and OAP provisions in the United States had reduced barriers to production-sharing trade, multinationals still had to pay tariffs on Mexican content in both countries. Moreover, it was difficult to reorganize corporate activities because only plants in the border region received maquiladora privileges and the maquiladoras could not sell in the domestic market, so they were cut off from plants in Mexico's interior. Finally, production-sharing arrangements, once established, were vulnerable to anti-dumping actions in the United States, new regulations on foreign investors in Mexico and Canada, and trade disputes between these countries. A regional arrangement would solve these lingering problems and allow multinational companies to extend and more closely integrate North American production networks.

### **Nationally Oriented Industries with Small Returns to Scale**

Industries with few scale economies and negligible production sharing have little to gain from regional trade liberalization: longer production runs do not reduce unit costs, and technology makes moving abroad to cut labor expenses

17. An exception is chemicals, particularly pharmaceuticals, industrial chemicals, plastics, and synthetics, as companies exported ingredients to Europe but had little scope for offshore processing in low-wage areas. In computers, consumer electronics, and electronic components, firms conducted substantial trade with affiliates in Asia in addition to Mexico and the Caribbean.

difficult. Still, some can expect to be harmed more than others. Preexisting trade patterns and protectionist barriers provide insights into trade preferences because industry groups are likely to oppose free trade agreements if they anticipate increased import penetration and to support it if they expect new export opportunities.

Table 30 shows the industries with the highest rates of import penetration from Canada and Mexico—the ones most likely to oppose free trade agreements. Canadian competition concentrated in natural resources and resource-intensive manufacturing: nonferrous metals, paper, lumber, furniture, and steel. These industries enjoyed some natural protection because of high transport costs in goods with high weight-to-value ratios. But import penetration was especially severe in northern U.S. markets near the border, and Canada was the main source of competition in nonferrous metals, paper, and lumber.

As the last column in table 30 illustrates, the U.S. market already was open to Canadian trade in the industries that faced the most competition: tariffs were low and, aside from countervailing duties on softwood lumber, few non-tariff barriers existed. Moreover, there were large disparities in market access, as Canadian duties on paper (5.2 percent), processed wood (8 percent), and furniture (10.3 percent) exceeded U.S. rates by a factor of at least three. Only in steel and nonferrous metals was the Canadian market more open than the U.S. market. Canada's strong position in these two industries suggests that U.S. producers were not likely to reap large gains from trade creation under a free trade agreement.<sup>18</sup> Thus, incentives to oppose free trade were most salient in steel and nonferrous metals, despite large returns to scale, and also lumber.

Import penetration from Mexico was most significant in leather goods, apparel, glass and glassware, and rubber products. Compared to the case of Canada, however, a very different pattern emerges. Mexican imports surpassed 2 percent of consumption in only one manufacturing industry, leather: Asia, not Mexico, was the principal source of competition.<sup>19</sup> Yet these were the most labor-intensive industries in the United States, and they were significantly protected: tariffs on leather products were 8.9 percent, and export restraints applied

18. Canada's status as one of the few major producers outside the multilateral steel arrangement was an additional threat to U.S. steel companies, which had only tariffs to protect them against Canadian goods.

19. Import penetration also was severe in food products such as fruits and vegetables. Mexico has abundant arable land for tropical produce, and proximity to the United States reduces transport time for goods with limited shelf life. In addition, tomatoes, cucumbers, broccoli, radishes, onions, and the like require picking, trimming, and packing by hand. This labor intensity makes U.S. farmers susceptible to low-wage competition from Mexico; indeed, many U.S. firms have relied on migrant Mexican workers to perform these tasks (U.S. Congress 1992, 197).

to South Korean footwear; apparel tariffs averaged 18.0 percent, and the MFA covered 80 percent of imports; in rubber and glass products, tariffs were 7.7 percent and 7.0 percent, respectively. Even so, all had experienced steady import growth after the Kennedy and Tokyo Round tariffs cuts. Most exports to Mexico were semifinished products in need of further processing before returning to the United States. Since producers in these industries faced price pressures from low-wage areas generally and depended on barriers to imports originating both inside and outside North America, they had powerful reasons to fight free trade agreements.

To complicate matters a bit, it is worth noting that outsourcing trade was on the rise in the apparel and leather industries, as table 29 illustrates. Because of this trend, these two industries were becoming increasingly bifurcated. In

**TABLE 30. Import Competition from Canada and Mexico**

Industry	Imports from Canada	Imports from All Countries	U.S. Tariff Rate <sup>a</sup>
Nonferrous metals	7.4	15.5	1.1
Paper and allied products	6.4	8.3	0.5
Lumber and wood products	5.0	7.4	1.7
Furniture and fixtures	2.7	11.0	2.7
Ferrous metals	2.3	12.2	4.2
Rubber products <sup>b</sup>	1.9	18.0	7.7
Glass and glassware	1.6	9.1	7.0
Leather and leather products	0.9	49.0	8.9
Miscellaneous manufacturers	0.8	35.2	3.6
Apparel	0.5	28.7	18.0
Textiles	0.1	7.4	13.1

  

	Imports from Mexico	Imports from All Countries	U.S. Tariff Rate <sup>a</sup>
Leather and leather products	3.1	49.0	8.9
Apparel	1.5	28.7	18.0
Glass and glassware	1.4	9.1	7.0
Rubber products <sup>b</sup>	1.4	18.0	7.7
Furniture and fixtures	1.3	11.0	2.7
Miscellaneous manufactures	1.1	35.2	3.6
Nonferrous metals	0.9	15.5	1.1
Ferrous metals	0.7	12.2	4.2
Textiles	0.4	7.4	13.1
Lumber and wood products	0.3	7.4	1.7
Paper and allied products	0.3	8.3	0.5

Source: Data from USITC Trade DataWeb, <http://dataweb.usitc.gov>; U.S. Bureau of the Census 1997.

<sup>a</sup>Duties collected divided by total imports.

<sup>b</sup>Excludes tires and inner tubes.

apparel, for instance, large producers of standardized products such as blue jeans and underwear left technology- and skill-intensive cutting, finishing, pressing, and laundering in the United States but moved high-volume sewing operations abroad or subcontracted to independent firms; smaller manufacturers of “fashion-sensitive goods” such as women’s wear continued to sew entire garments with U.S. labor (U.S. Congress 1992, 175–82). Multinational companies therefore had motives to support free trade agreements that were not salient to small, nationally oriented firms.

Finally, industries facing little Mexican competition were not likely to have a strong position on free trade. Though the U.S. textile industry was heavily protected, it was North America’s most efficient producer of yarns and fabrics; Mexican costs, despite low wages, were 25–150 percent higher (Hufbauer and Schott 1992, 267). In steel, U.S. quotas limited Mexico’s import share with or without tariffs. In both cases, greater access to the Mexican market would more than offset the elimination of U.S. tariffs, particularly if the textile MFA and the multilateral steel arrangement remained in place.<sup>20</sup> Incentives to oppose free trade with Mexico therefore were not as great as in glass and rubber, nor were the sorts of cleavages anticipated in apparel and leather likely to surface.

### **U.S. Labor Unions**

Two calamities hit U.S. labor unions after 1970. First, wage gaps between skilled and unskilled workers widened as trade exposure increased and firms moved production offshore. Second, heavy job losses hit labor unions as some employers restructured and downsized, while others went out of business altogether. In response to rising unemployment in import-sensitive sectors, the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) turned against trade liberalization in 1969. Since then, labor unions have campaigned against tariff cuts, FDI, and reverse imports (that is, domestic sales of products manufactured abroad by U.S. multinationals).

With trade liberalization, whether regional or global, workers could expect more of the same: growing wage inequality and localized unemployment. In industries where firms produced labor-intensive goods primarily with domestic labor, the principal threat was import competition. In these cases, labor unions shared a common interest with their employers, so labor and capital were likely to join together against regional free trade. When firms are multinational,

20. USITC 1990a, chap. 2, 5–6. These quotas had been modestly liberalized on a bilateral basis in 1985 and 1988.

however, restructuring occurs across borders. The costs of these adjustments are externalized to workers, particularly unskilled labor in high-wage countries. Thus, production sharing will tend to split the preferences of businesses and labor unions: workers have incentives to oppose free trade agreements to prevent firms from moving labor-intensive processes abroad. Either way, U.S. labor unions had strong motives to lobby against free trade with Canada and especially Mexico.

### **Domestic Groups and Regional Trade Liberalization**

In the United States, trade lobbying occurs in three phases. In the first phase, Congress must delegate to the president the authority to begin negotiations. At this point, interest groups mobilize to pressure Congress to grant or deny delegation and to influence the specific terms the president must satisfy in using this authority if approved. In the second phase, interested parties present their negotiating objectives to the agencies responsible for formulating trade strategy and conducting negotiations, the USTR and the USITC. This gives private actors an opportunity to push for treaty provisions favorable to their interests. Finally, the fast-track provisions of the 1974 Trade Act introduced a third phase of lobbying: once a treaty has been negotiated, Congress must approve or reject it. This enables interest groups to influence the chances of ratification based on the extent to which a trade agreement's terms satisfy their objectives.

Statutory procedures ensure that domestic interests have opportunities to wield influence at each of these three stages through a formal advisory framework of private-sector committees. These private-sector advisory groups provide information and advice to the executive branch and Congress, both of which must consult regularly during and after trade negotiations. This allows firms, trade associations, and labor unions to present their concerns and propose remedies; it also helps trade negotiators learn what terms must be included to dissuade certain groups from trying to block a trade agreement (O'Halloran 1994, 144–45).

Private actors have numerous informal means to influence policy: they can meet with USTR and USITC officials, or they can contact members of Congress, who can exert pressure on executive agencies. Fortunately, many channels of influence are public: Congress convenes hearings before trade negotiations start and after they are finished; USTR and USITC reports provide additional insights into communications between private actors and trade negotiators. Testimony and written submissions by organized groups regarding

their objectives in trade negotiations and their views of the completed treaties provide a basis to evaluate industry preferences on North American free trade.

### Ordered Probit Analysis

The ordered probit analysis in table 31 examines industry preferences on free trade with Mexico and Canada. The units of analysis are three-digit SIC codes. The dependent variable is coded as “1” if industry groups supported free trade, “-1” if they opposed free trade, and “0” if industry groups did not lobby. Industries are coded as not lobbying unless a trade association (or at least two firms responsible for 25 percent of industry sales or more) testified or submitted material for the record in a congressional or USITC hearing (see Chase 2003, 154–55).

The models employ the measure of *returns to scale* previously described (see table 27) to estimate the importance of scale economies. For production sharing, models 1 and 3 use *intrafirm trade*, and models 2 and 4 use *OAP trade* with Mexico and Canada (see table 29). All models include *import competition* and *export dependence* as proxies for factor costs.

**TABLE 31. Ordered Probit Estimates for NAFTA and CUSFTA Lobbying**

Variable	NAFTA Lobbying		CUSFTA Lobbying	
	(1)	(2)	(3)	(4)
Returns to scale	4.93*** (1.17)	4.74*** (1.14)	3.04*** (1.06)	2.93*** (1.04)
Intrafirm trade	10.28*** (3.11)		11.85*** (3.00)	
OAP trade		30.60** (13.97)		35.99** (14.72)
Import competition	-3.98*** (0.83)	-3.27*** (0.76)	-2.57*** (0.73)	-1.90*** (0.68)
Export dependence	3.66** (1.58)	5.48*** (1.45)	-2.11 (1.56)	0.53 (1.38)
Threshold 1	-0.44 (0.19)	-0.41 (0.19)	-1.02 (0.20)	-0.92 (0.20)
Threshold 2	0.91 (0.20)	0.91 (0.20)	0.74 (0.19)	0.74 (0.19)
Log likelihood	-117.05	-120.61	-116.70	-122.47
Model $\chi^2$	56.56***	49.44***	34.38***	22.83***
Pseudo R-squared	0.19	0.17	0.13	0.09

Note: Cell entries are maximum likelihood estimates obtained using ordered probit analysis, with asymptotic standard errors in parentheses.  $N = 134$ .

\*\*\* $p < .01$     \*\* $p < .05$     \* $p < .10$

In the analysis of NAFTA lobbying in model 1 and model 2, all variables are correctly signed and statistically significant. The coefficients for *returns to scale*, *intrafirm trade*, and *OAP trade* confirm that concentrating production and expanding regional procurement were important considerations for NAFTA supporters. *Export dependence* also increases support for free trade with Mexico; *import competition* is associated with opposition to NAFTA.

The results are similar in model 3 and model 4, which evaluate industry positions on the CUSFTA treaty. The coefficients for *returns to scale* and *import competition* are smaller but still significant. *Export dependence* is no longer statistically significant; it even has an incorrect negative sign in model 3.

The substantive importance of these variables is more apparent when maximum likelihood coefficients are translated into predicted probabilities of industry support for free trade. Table 32 shows predicted probabilities of support for NAFTA (based on the averages of model 1 and model 2) and CUSFTA (based on the averages of model 3 and model 4). When returns to scale are large and production sharing is significant, predicted support is 64.3 percent for NAFTA and 55.3 for CUSFTA. Industries with large returns to scale but little production sharing lobbied for NAFTA 39.5 percent of the time and CUSFTA 27.4 percent of the time. The figures are similar when production sharing is significant but returns to scale small, 28.4 percent for NAFTA and 32.9 percent for CUSFTA. Support is lowest, 11.4 percent and 12 percent, respectively, when returns to scale are small and production sharing is minimal. These findings strongly support hypothesis 1 and hypothesis 3.

The data analysis provides a compelling snapshot of industry lobbying for regional free trade. Among industries with similar economic characteristics,

**TABLE 32. Predicted Probabilities of NAFTA and CUSFTA Support**

Returns to Scale	Production Sharing	
	High	Low
<b>Large</b>	(1)	(2)
	NAFTA: 64.3% CUSFTA: 55.3%	NAFTA: 39.5% CUSFTA: 27.4%
<b>Small</b>	(4)	(3)
	NAFTA: 28.4% CUSFTA: 32.9%	NAFTA: 11.4% CUSFTA: 12.0%

*Note:* Cell entries are predicted probabilities from the models in table 31, minus and plus one standard deviation of returns to scale and production sharing, holding other variables constant at their mean values.



however, the motives for free trade, or the mechanisms sought to cushion the blow of liberalization, sometimes differed. It is therefore worth taking a deeper look at how industry groups justified their positions on free trade with Mexico and Canada.

### Multinational Firms with Large Returns to Scale

Firms and trade associations in industries with large returns to scale and investment in Canada provided the strongest support for CUSFTA. Most enthusiastic about free trade were producers of automobiles, computers, electronic components, consumer electronics, telecommunications equipment, home appliances, industrial chemicals, plastic and synthetic materials, and farm and construction machinery. At the outset of negotiations, representatives of these industries emphasized that while they wished to see tariffs eliminated between the United States and Canada, tariff cuts alone would not win their support. Instead, multinational companies wanted a comprehensive arrangement that removed tariff and nontariff barriers, liberalized foreign investment rules, opened procurement markets, and protected intellectual property.

A major concern was Canada's treatment of FDI. Though the Conservative government had scaled back screening and assigned FIRA a more welcoming name, Investment Canada, this relaxed stance could be reversed with little warning. Interviews with Canadian affiliates indicated that "the lack of consistent, long-term government economic policies made it difficult . . . to engage in long-range planning. A stable policy environment was preferred" (Daly and MacCharles 1986, 79). Companies would restructure only after receiving credible assurances of policy liberalization—otherwise, long-term plans would be vulnerable to a resurgence of the regulatory activism of the 1970s. Therefore U.S. multinationals sought to end screening and abolish TRIMs to "provide assurances against a return to the FIRA-based deterrence environment," as an executive of Procter and Gamble put it (U.S. Senate 1987, 308).

Regulatory certainty was especially important to automotive firms. New rules requiring Canada to end export-based duty remissions and phase out tariff rebates for foreign multinationals were integral to the support of the Motor Vehicle Manufacturers Association (MVMA). Trade groups such as the Chemical Manufacturers Association and the Computer and Communications Industry Association also cheered the elimination of export performance and local content requirements (U.S. House of Representatives 1988, 349–50, 662, 751).

Intellectual property was another concern of U.S. multinationals. Efforts in the GATT to improve the protection of copyrights, patents, and trademarks

were floundering. Fearing that the Uruguay Round would adopt weak standards, producers of chemicals, computers, communications equipment, and electronic components pushed for strong intellectual property rules in the CUSFTA talks. When the treaty included many of the desired provisions, the American Electronics Association expressed hope that it would “set a critically important example of multilateral negotiations going on in the GATT” (U.S. House of Representatives 1988, 316). Public procurement also was an issue, particularly in telecommunications, as AT&T, GTE, and Rockwell International had filed a complaint with the USTR prior to the negotiations on discriminatory practices favoring Bell-Canada. These firms approved of provisions in the CUSFTA treaty that opened procurement markets to producers unable to qualify under the strict criteria then in force (U.S. House of Representatives 1986, 510–13; U.S. Senate 1987, 7–8).

While multinational companies favored free trade and comprehensive rules for FDI, their support for the CUSFTA treaty was contingent on transitional protection and measures that discriminated against producers outside North America. Several firms emphasized that they had structured investments to comply with regulatory mandates in a protected market and they did not want new entrants to establish modern facilities in the region to capture free trade benefits. Moreover, once trade protection was gone, branch plants would be at a competitive disadvantage until they were reorganized or closed. Multinationals therefore sought exclusive provisions, restrictions on outsiders, and transitional protection to place limits on external competition during the period when investments were being restructured.

The most important entry restrictions were origin rules that mandated 50 percent North American content to receive CUSFTA treatment. Canadian negotiators proposed a 35 percent requirement so foreign multinationals would not be deterred from making new investments. However, firms in automobiles, electronics, machinery, and chemicals insisted on tougher safeguards to prevent European and Asian companies from setting up screwdriver factories to earn free trade privileges. For example, Zenith and GE insisted on 50 percent local content to block Asian firms from expanding production of “snap-together” television receivers in Canada. Automakers also backed the 50 percent rule, though they preferred a 60 percent standard.<sup>21</sup>

21. Labor unions and suppliers of auto parts, picture tubes, and electronic components pushed for origin rules higher than 50 percent because they feared that Japanese, European, and North American multinationals would increase subcontracting outside the region. Original equipment manufacturers, however, opposed stringent limits that would hinder their ability to outsource production. U.S. House of Representatives 1988, 344–45; U.S. Senate 1986, 306–8.

In addition, special provisions were negotiated for automotive trade so that the Big Three's long-standing production arrangements would not be upset. Officials in the United States initially proposed that free trade in automotive products apply only to Canada-U.S. trade so that foreign automakers could no longer earn tariff rebates and export-based duty remissions through separate undertakings with the Canadian government. However, this position ran afoul of the MVMA, which told negotiators it was "extremely alarmed" by the proposal (Wonnacott 1988, 105–7). Automakers also urged Congress to block any deal that changed "existing trade arrangements on which MVMA member companies have structured long-term competitive strategies" (U.S. Senate 1987, 232). As a result, negotiators agreed that the Big Three could continue duty-free imports of non-U.S. parts into Canada as long as they adhered to the safeguards specified in the 1965 letters of undertaking. These provisions allowed the Big Three to maintain their special treatment, while they also made Japanese and European multinationals ineligible for the same privileges.

Finally, the CUSFTA treaty included phase-out periods of up to ten years for eliminating trade barriers. Producers did not need transition periods to open the U.S. market to Canadian goods because their factories in the United States already produced on a large scale. But Canadian affiliates with high unit costs would suffer if they were exposed to free trade too quickly. Whirlpool, for instance, argued that rapid tariff elimination "would be unreasonable and not economically or politically acceptable to Canadian appliance manufacturers" (U.S. House of Representatives 1988, 770). To mitigate adjustment costs and prevent a flood of imports into the Canadian market, U.S. multinationals pushed to eliminate trade barriers gradually to allow the branch plants time to reorganize before facing free trade conditions.

As with the free trade agreement with Canada, the most enthusiastic advocates of free trade with Mexico were industries seeking to concentrate production and expand regional supply networks. Producers of automobiles, computers, consumer electronics, telecommunications equipment, farm and construction machinery, pharmaceuticals, and chemicals were the NAFTA treaty's strongest supporters. Representatives of these industries suggested that free trade with Mexico would facilitate changes in the structure of manufacturing in the region, helping to reduce unit costs and enhance the competitive position of firms. Companies especially welcomed opportunities to gain scale economies and outsource labor-intensive components to Mexico.

Multinationals from the United States wanted more than tariff-free trade, however. To accommodate the restructuring they desired, these firms also sought to end industrial and regulatory policies that forced multinationals to

purchase high-cost local inputs or sell unprofitable exports; freer access to government procurement markets, which were biased in favor of national firms; fewer equity restrictions on FDI; and improved standards for intellectual property protection. Emphasis varied with the level of regulation (most onerous in motor vehicles, computers, electronic equipment, and pharmaceuticals), dependence on R&D (particularly great in pharmaceuticals, computers, and electronic components), and the importance of government procurement (highest in telecommunications and petroleum equipment). The Uruguay Round at the time had not effectively addressed these issues—and many firms hoped the NAFTA treaty would provide a model for improved trade laws in the GATT.

As part of the NAFTA treaty, U.S. multinationals pushed vigorously to get rid of investment restrictions and performance requirements in Mexico. Before the negotiations began, automobile firms demanded an end to Mexico's trade-balancing and local content requirements. Other industries, including computers, organic and petroleum-based chemicals, and farm and construction machinery listed liberalized regulatory rules as preconditions for their support for a free trade agreement (U.S. House of Representatives 1991, 181–83, 188–90, 792, 945–46). When the draft treaty was released, the Chemical Manufacturers Association asserted that its treatment of FDI “breaks new ground” (U.S. House of Representatives 1992b, 477). The Motor and Equipment Manufacturers Association hailed the phasing out of performance requirements as “the single most significant accomplishment of the NAFTA automotive negotiations” (U.S. House of Representatives 1992b, 300).

Enhanced protection of intellectual property was another important feature of NAFTA. The chemicals and electronics industries advocated a free trade agreement to strengthen patents on new chemicals, protect against software piracy, and prevent the unfair use of inventions (U.S. House of Representatives 1991, 181–83; 1993b, 769). The pharmaceuticals industry conditioned its support on the enactment of “adequate, world-class” patent laws in Mexico (USITC 1990b, chap. 2, 19). Finally, firms in telecommunications and petroleum equipment sought provisions for more open government procurement (U.S. Senate 1992, 194–96). As one telecom firm asserted, “a comprehensive FTA agreement would open markets reciprocally for both the United States and Mexico, permitting manufacturers . . . to increase their competitiveness and economies of scale” (USITC 1990b, chap. 2, 9).

While U.S. multinationals enthusiastically supported the NAFTA negotiations, they also sought exclusive provisions in the final treaty and prolonged periods for the phase out of tariff protection in Mexico. These firms emphasized to the USITC (1990b, chap. 2, 7) that Mexican industrial programs had

left them with large sunk costs in poorly specialized, inefficient-scale factories. Computer producers complained that they had “high costs imposed on them by the Computer Decree that would not be borne by new competitors.” The Automobile Manufacturers Association similarly noted that Mexican affiliates that “operate at less than maximum scale of efficiency” were at a disadvantage (U.S. House of Representatives 1993a, 150). While U.S. companies wanted to rid themselves of these vestiges of import substitution, they needed to make sure that outsiders could not gain market shares at the expense of Mexican affiliates.

In particular, firms pushed for gradual movement to free trade to shelter their Mexican affiliates during the transition to free trade and minimize the disruption to foreign plants. For example, computer producers IBM, Hewlett-Packard, and Data General were “strongly supportive of an FTA,” but they wanted “some phase-in of tariff reductions to prevent dislocation to their Mexican operations” (USITC 1990b, chap. 2, 7). Automakers also requested long tariff phaseouts for their affiliates (U.S. House of Representatives 1993a, 146–47). In home appliances, GE and Whirlpool (which owned factories in Mexico) sought to delay exposure to free trade, while Amana and Maytag (which did not own factories in Mexico) pushed to accelerate the schedule for tariff elimination (USITC 1993, chap. 16, 2 n. 3).

Multinationals from the United States also sought discriminatory measures in the NAFTA treaty to block new entrants from seizing market shares. These companies feared that competitors would build integrated, state-of-the-art production facilities in North America while they attempted to restructure. Automakers, for example, pushed to delay NAFTA treatment for firms that had not invested in Mexico under its Automotive Decrees.<sup>22</sup>

While these sorts of restraints on FDI were not incorporated into the final treaty, rules of origin were crafted to ensure that new entrants would not be able to share in the benefits of free trade without having to pay the same restructuring costs. Without discrimination to ensure excludable benefits for incumbents, established investors most likely would not have supported regional free trade so enthusiastically. Automakers received a 62.5 percent origin rule to force Asian companies to source inputs locally in return for free trade privileges. Other provisions required that televisions traded under NAFTA include

22. Specifically, they sought provisions to require new investors to comply with Mexico’s value-added and trade-balancing requirements for five years, and they wanted future entrants to have to wait ten years to gain the free trade privileges that incumbent firms (the Big Three, plus Volkswagen and Nissan) would receive immediately (“Vehicle Dispute Drives a Wedge through NAFTA Talks,” *Financial Times*, October 25, 1991, 6).

picture tubes manufactured in North America. Only the global supply operations of certain large multinationals, which did not want their outsourced products excluded from free trade treatment, acted as a brake on the trend toward tough rules of origin. For instance, IBM “had a fit” over proposals that would have required North American production of motherboards, screens, and hard drives for personal computers (Cameron and Tomlin 2000, 90). And GM endorsed lower rules of origin than did Ford and Chrysler (60 percent versus 70 percent) so that its joint ventures with Toyota and Suzuki would not be disadvantaged (Hufbauer and Schott 1992, 162–70).

#### Nationally Oriented Industries with Large Returns to Scale

Most industries with large returns to scale but little production in Canada did not lobby on CUSFTA. Those that did generally were not as enthusiastic about it as multinational firms. Though free trade opened the Canadian market to U.S. goods, it also exposed producers in the United States to competition from Canada. Where the U.S. market was well protected and producers in Canada already had attained a large scale, this was an unattractive proposition. Moreover, a comprehensive arrangement covering FDI, government procurement, and intellectual property offered firms with purely domestic operations few additional benefits.

The steel industry was split over free trade with Canada. In August 1987, AISI sought an exemption from trade negotiations because producers “strongly opposed steel trade liberalization talks with Canada (or with any other country) as long as the U.S. and the world steel crises continue unresolved.” Though the group conceded that free trade was not likely to increase import competition, it wanted to leverage the talks into an extension of steel VERs. The AISI remained “skeptical” of CUSFTA in April 1988 because Canada had not joined the new multilateral steel program. Nevertheless, nine large firms in the National Steel Producers Association testified more favorably. In their view, high Canadian tariffs meant that Canada’s refusal to negotiate quotas with foreign countries should not derail efforts to liberalize trade bilaterally. The Specialty Steel Industry Association also did “not object” to the CUSFTA treaty because free trade would alleviate market access disparities that firms believed had exacerbated the unfavorable balance in mutual steel trade (U.S. Senate 1989b, 4–57).

Nonferrous metals producers presented a more unified front against CUSFTA. The Nonferrous Metals Producers Committee complained about inadequate disciplines against Canadian subsidies and suggested that dispute settlement

rules would undermine the use of unfair trade laws to combat this subsidization. Firms in lead and zinc alloys opposed free trade even more intensely, arguing that they could not survive beyond the third year of the treaty's ten-year tariff phasing schedule (U.S. House of Representatives 1988, 283–99).

As NAFTA negotiations got underway, however, these industries took a more favorable position because Mexican competition was less intense and producers south of the border had not reached comparable scales of output. Steelmakers even recommended free trade with Mexico in their CUSFTA testimony. As negotiations proceeded in 1991, the AISI signaled the USTR that it backed NAFTA as long as the treaty did not weaken U.S. trade remedy laws. Steel companies especially wanted the Mexican government to liberalize procurement in the petroleum sector and eliminate duty drawbacks on exports by foreign steel firms in Mexico (Hufbauer and Schott 1992, 250).

Nonferrous metals producers also supported free trade with Mexico to eliminate disparities in Mexican and U.S. tariffs. The Nonferrous Metals Producers Committee and the Aluminum Association viewed the NAFTA negotiations as an opportunity to redress their complaints with the CUSFTA treaty (U.S. House of Representatives 1991, 748–50, 915–25; 1992b, 568–71). Though the Committee on Pipe and Tube Imports objected to (and petitioned to accelerate) lengthy tariff phaseouts for Mexico, it endorsed the opening of Mexico's procurement market (U.S. House of Representatives 1992b, 485–89). As a result, these groups were more favorable to free trade with Mexico than they had been with Canada.

#### Industries with Constant Returns to Scale

Industries intensively using natural resources were the most active lobbies on the CUSFTA treaty. The lumber industry predictably opposed free trade with Canada. A bevy of trade associations—the Coalition for Fair Lumber Imports, the Northwest Independent Forest Manufacturers, the Inland Forest Resource Council, and the American Plywood Association—demanded that Canada eliminate “stumpage rates,” which enabled producers to purchase timber at low prices. When the CUSFTA treaty failed to address timber subsidies to their liking, these groups opposed its passage (U.S. Senate 1986, 58–76, 210–14; U.S. House of Representatives 1988, 331–36).

The furniture and paper industries, however, backed free trade with Canada. From the standpoint of hypothesis 4, this is puzzling given that these two industries already faced intense import competition from Canada. The congressional testimony of representatives of these industries suggests that import-competing

industries with little trade protection have less to lose from regional trade liberalization—and they may have incentives to join with advocates of free trade agreements when foreign trade barriers are high. Though the U.S. furniture industry had faced import pressures and declining employment over the previous decade, the American Furniture Manufacturers Association blamed Canada's high tariffs for the bilateral deficit in furniture trade. The American Paper Institute also was unconcerned with Canadian import competition because Canada's tariffs were two to three times higher than U.S. rates. In addition, furniture producers expected lower timber prices due to free trade in lumber (U.S. Senate 1986, 77–78; 1989a, 91–93).

Of the major labor-intensive industries, only the American Textile Manufacturers Institute (ATMI) openly opposed free trade, as representatives argued that the Canadian market was too small to yield benefits sufficient to compensate for opening the U.S. market (U.S. House of Representatives 1988, 620–21). Other industries with constant returns to scale did not lobby, as producers of glass and glassware, rubber and plastic products, leather goods, ceramics, and apparel took no position on the CUSFTA treaty.

If these industries appeared indifferent to free trade with Canada, they made it known that they staunchly opposed free trade with Mexico. Lobbying against NAFTA concentrated in labor-intensive manufacturing and temperate agriculture, reflecting differences between the United States and Mexico in endowments of unskilled labor. Industry groups highlighted Mexican wage levels in arguing that lower living and regulatory standards would attract labor-intensive production from the United States under free trade. Increased import competition was the principal concern of these producers. The textile and apparel industries, the ATMI explained, “together suffer an unremitting and oppressive burden of imports into their home market . . . [and] Mexico has been a contributor to this injury” (U.S. House of Representatives 1991, 763). “With so very little of our market left,” the Footwear Industries of America argued, “we must strongly oppose an FTA with Mexico, which would lead to a further erosion of our market” (U.S. House of Representatives 1991, 843).

Labor-intensive industries started by seeking special exemptions in the NAFTA negotiations. The Work Glove Manufacturers Association demanded that fabric gloves be excluded on the grounds that these products were exempt from the Generalized System of Preferences (GSP) and the Caribbean Basin Initiative and because they had received the ten-year maximum phasing schedule under CUSFTA due to import sensitivity (U.S. Senate 1991, 504). The glass-



ware industry likewise argued that the USITC's prior rejection of GSP status for Mexican and South American household glassware justified taking these products off the table for the NAFTA talks (U.S. House of Representatives 1991, 855–61). Trade associations in leather goods, ceramic floor and wall tiles, and brooms and brushes also strenuously opposed tariff reductions under NAFTA.

In textiles and apparel, a few pressure groups dropped their opposition to free trade with Mexico after the NAFTA treaty incorporated stringent rules of origin. A key concern of these industries was that foreign producers would use Mexico as an “export platform” to circumvent U.S. quotas under the MFA. Early in the talks, the ATMI and other trade associations opposed NAFTA because the absence of “effective customs enforcement” would give Asian firms investing in Mexico a back door into the U.S. market (U.S. House of Representatives 1991, 764).

The solution that these industries favored was stringent rules of origin, which would divert trade and thereby stave off outside pressures for adjustment as long as external barriers remained in place. Textile firms advocated a “yarn forward” origin rule to force production to stay in the region by granting tariff-free treatment only to fabrics made from North American yarn (U.S. House of Representatives 1992b, 278–81, 562–63). Once Mexico and Canada accepted these provisions, the majority of ATMI members voted to support NAFTA. In contrast, the Association of Importers of Textiles and Apparel—an early supporter of free trade with Mexico—denounced NAFTA as “a North American protection agreement” because it penalized firms sourcing fabrics in Asia (U.S. House of Representatives 1992b, 287–88).

The apparel industry remained more divided over NAFTA, however. Garment producers pushed for “fabric forward” origin rules to require that finished clothing use North American yarn and fabric, along with safeguards against import surges. When the final treaty and its side agreements included these terms, apparel companies that could outsource to Mexico adopted a more favorable position. Yet the Apparel Manufacturers Association reported, “Supporting NAFTA was not an easy decision for our organization and some members, frankly, still disagree” (U.S. House of Representatives 1993a, 581). Small shops that produced mostly in the United States continued to oppose free trade with Mexico. Thus, the National Knitwear and Sportswear Association (which represented smaller firms) denounced NAFTA as “a bad agreement” (U.S. House of Representatives 1993a, 117). The Work Glove Manufacturers Association also refused to reconsider its opposition.

### Labor versus Business

Every labor union that testified to Congress opposed the CUSFTA and NAFTA treaties. Since business groups and labor unions only united against free trade agreements, but never in favor, political cleavages between capital and labor were neither purely factor based nor sector based. This is a puzzle for standard trade theories, which predict one or the other type of cleavages (not both). Yet labor lobbied as a factor of production, while capital lobbied as sectors.

Labor groups unanimously objected to CUSFTA, even though opposition from industry groups was rare. In industries with production sharing, labor unions argued that free trade would enable foreign-owned firms to establish production in the region. Labor unions in consumer electronics contended that Asian firms such as Mitsubishi would launch an export assault from Canada, leading to more layoffs for U.S. workers.<sup>23</sup> The UAW even sought a U.S.-content rule (which negotiators rejected) to discourage Honda, Toyota, and Hyundai from expanding assembly operations in Canada. In addition, unions argued, U.S. companies would increase outsourcing if intermediate products obtained abroad could be traded freely between the United States and Canada. Thus, the UAW objected to the 50 percent origin rule because automobile firms could manufacture the power train, the most expensive component, outside North America and still qualify for free trade (U.S. House of Representatives 1988, 338–41). Electronics workers likewise complained that TV manufacturers importing picture tubes and components from Asia could still achieve 50 percent content.

In labor-intensive industries such as apparel, textiles, leather, and plastic goods, labor groups stressed basic concerns about import penetration. The unions did not claim that Canada had an advantage in low-wage activities. Instead, they emphasized the threat of increased imports from outside the region “to take advantage of an enlarged market and the inability of Customs to properly monitor the trade flows across our huge border.” The Amalgamated Clothing and Textile Workers Union declared that free trade would “hurt workers on both sides of the border” (U.S. House of Representatives 1988, 611). But the larger problem for unions was the extension of free trade to countries other than Canada. As the AFL-CIO noted, workers were “concerned that this proposed agreement will be used as a blueprint for bilateral negotiations with

23. The Committee to Preserve American Color Television asserted: “free trade arrangements are not appropriate where the conditions of trade are such that third countries not party to the free trade arrangement will benefit. . . . Japan has a substantial stake in the proposed United States-Canada free trade arrangement and will receive substantial benefits from it” (U.S. Senate 1986, 177).

other countries as well as the Uruguay Round” (U.S. House of Representatives 1988, 162). Apparel and textile unions especially feared that CUSFTA signaled the end of the MFA and future trade concessions for Mexico, Japan, and other Asian countries. The International Leather Goods, Plastics, and Novelty Workers Union declared: “the cumulative effects of this duty-free trade will kill us” (U.S. House of Representatives 1988, 174). In short, labor unions were girding for larger battles ahead—a free trade agreement with Mexico and multilateral liberalization in the GATT.

Thus, it is not surprising that labor unions joined labor-intensive employers in an unremitting campaign against NAFTA. In industries in which companies engaged in production sharing, workers feared job losses to foreign countries. In these cases, labor unions emphasized their concern with H. Ross Perot’s “giant sucking sound” of U.S. jobs moving to Mexico. Where outsourcing was less significant, however, unions and their employers embraced protectionism equally. Both suffered from import competition in labor-intensive products, so both benefited from trade restrictions. In these cases, labor unions objected not to the migration of U.S. companies abroad but to the pain of import competition unleashed through trade liberalization under the GATT, the GSP, the Caribbean Basin Initiative, and free trade agreements with Israel, Canada, and Mexico. Business associations in these industries echoed their complaints.

### **The Politics of Free Trade**

The preceding analysis demonstrates that industries with large returns to scale and production-sharing arrangements supported free trade agreements. This discussion generally supports the book’s hypotheses about the specific motives for firms to seek trade liberalization regionally instead of globally. But it is also important to understand how domestic preferences influence national policy choices. Thus, the book’s secondary objective is to explain how economic considerations filter through political processes to affect policy outcomes.

Only one-third of all manufacturing industries publicly supported NAFTA. To be sure, the pro-NAFTA lobby received significant support from nontradable services such as banking, finance, insurance, telecommunications, and computer software—but the free trade coalition was numerically inferior in manufacturing. However, industry groups vary in their capacity to organize. Table 33 demonstrates that the pro-NAFTA industries were more concentrated in terms of output (share of sales by the twenty largest firms) and employment (percentage of workers in plants with more than one thousand employees) than the

industries that did not lobby. Because concentrated groups can more easily absorb the costs and internalize the benefits of political activity, they are less prone to free riding. NAFTA opponents were modestly concentrated in terms of sales, but not employment (because they operated small plants). However, NAFTA opponents were more localized geographically than NAFTA supporters and groups that did not lobby. Presumably this spatial concentration increased political pressure on executive agencies and Congress to add provisions favorable to these industries, even if it did not defeat NAFTA altogether.

This suggests that in addition to organizational abilities across industries, the actual content of the NAFTA treaty is important to understanding why it was ratified. Specific provisions in the final treaty and its side agreements were critical to blunt anti-NAFTA pressure. To minimize domestic opposition, the USTR negotiated tariff phaseouts of up to fifteen years to delay free trade in import-sensitive products, stringent rules of origin for products with large U.S.-Mexico tariff differentials, and safeguards against import surges. Table 33 confirms that industries that lobbied against NAFTA received tariff-phasing schedules four to seven times longer than industries that favored free trade or did not lobby. Moreover, prolonged phasing schedules, tariff-rate quotas, and escape clauses helped to neutralize powerful agricultural opposition in sectors such as sugar, peanuts, and winter fruits and vegetables (Orden 1996). Finally,

**TABLE 33. Economic and Political Characteristics of Lobby Groups**

Variable	Lobbied for NAFTA	Did Not Lobby	Lobbied against NAFTA
<i>Group preferences</i>			
Returns to scale	0.127***	0.075	0.036*
Foreign production	0.210***	0.120	0.090
Intrafirm trade	0.045**	0.018	0.026
OAP trade	0.012	0.006	0.007
Import competition	0.120	0.135	0.230**
U.S. tariff rate	0.025	0.028	0.094***
<i>Ability to organize</i>			
Sales concentration	0.704**	0.623	0.693*
Employment concentration	0.267***	0.146	0.087
Geographic concentration	0.426	0.414	0.492***
<i>Policy outcomes</i>			
NAFTA phasing	0.888	0.516	3.938***
<i>Number of industries</i>	46	55	36

Note: Significance levels are based on a two-tailed *t*-test for equality of means, with "did not lobby" as the comparison group.

\*\*\**p* < .01    \*\**p* < .05    \**p* < .10

the side agreements, by dividing the environmental lobby, muted pressure on members of Congress to vote against NAFTA.

### **NAFTA and External Trade**

The pursuit of regional arrangements in U.S. policy coincided with rising protectionism and threats of retaliation against countries that maintained allegedly unfair trade barriers. During the dollar's appreciation after 1981, industries turned en masse to trade remedy laws, which had just been revised to favor complainants. Forty-four antidumping and thirty-five countervailing duty claims were filed per year in the decade up to 1990, and more than half of these cases won affirmative decisions for import relief.<sup>24</sup> Many others were withdrawn once foreign governments agreed to export limits, as negotiated trade restraints emerged in steel, machine tools, automobiles, semiconductors, videocassette recorders, microwave ovens, televisions, footwear, textiles, and apparel (GATT 1992 1:114–17). These shifts in U.S. trade policy are widely viewed as the inspiration for Canada and Mexico to pursue free trade agreements to ensure unfettered access to their largest export market.

Though the NAFTA treaty included protectionist elements, trade and investment diversion were not primary objectives. NAFTA established a low common external tariff for computers and semiconductors (U.S. Department of Commerce 1993, chap. 9, 3). As NAFTA was being implemented, Canada cut tariffs on automobile engines and parts from 9.2 percent to 2.5 percent. Supporters of NAFTA in electronic components, computers, chemicals, and farm and construction machinery sought only mild restrictions, if any, on foreign firms. There were exceptions to be sure, such as provisions that prohibited Mexico and Canada, for ten years, from reducing tariffs on picture tubes without U.S. approval (U.S. Department of Commerce 1993, chap. 5, 2–3).<sup>25</sup>

Evidence from lobbying activity suggests that U.S. industry exerted less pressure for protectionism after NAFTA. The reports of industry-sector advisory committees show that most NAFTA supporters strongly backed the Uruguay Round agreements. Many of these industries thought NAFTA would improve the chances for success in the Uruguay Round because it could pro-

24. Legislative changes eased the standards for determining injury from imports and the methods for calculating dumping margins. See Destler 1995, 145–52.

25. Suppliers such as Corning hoped NAFTA would halt the explosion of Japanese and South Korean imports via Mexico. Still, these firms sought tariff cuts in the Uruguay Round because trade protection was not viable as long as foreign multinationals could invest around restrictions at the North American border (U.S. Senate 1994, 69–70).

vide a model for the GATT in areas such as services, TRIMs, intellectual property, national standards, technical barriers, and dispute settlement (USTR 1994). The chemical industry accepted deep cuts in U.S. tariffs because the Uruguay Round would “have many times the benefit of any regional trade agreement” (U.S. House of Representatives 1994b, 100) as long as “free riders” could be persuaded to join in multilateral liberalization (U.S. House of Representatives 1994a, 255). Producers of construction and farm machinery also pushed for tariff reductions in the GATT. The automobile industry supported the Uruguay Round agreements and advocated NAFTA provisions for the staged removal of TRIMs “as the standard for our talks with other countries” (U.S. House of Representatives 1994a, 291). In these and other cases, protectionist tendencies moderated after the NAFTA treaty.

By comparison, industries that opposed NAFTA also opposed multilateral trade negotiations in the GATT. Textile and apparel lobby groups fought proposals to end the MFA because liberalization would enable Asian countries to “capture whatever markets Mexico might have gained under NAFTA” (U.S. House of Representatives 1992a, 172). Textile producers also objected to Uruguay Round cuts in Canada’s MFN tariff rate (U.S. House of Representatives 1992b, 280–81). Glassware producers told Congress that they opposed not only the NAFTA treaty but also the Uruguay Round and all other reductions in trade barriers (U.S. House of Representatives 1991, 854–63, 903–14). Along with producers of leather goods, rubber and plastic products, and ceramics, these industries sought broad exemptions and prolonged phase-in periods for tariff cuts. Free trade agreements subjected labor-intensive producers to even tougher import competition, inciting more intense protectionist pressures.

Data on tariff changes in the Uruguay Round support this anecdotal evidence. Table 34 presents two sets of OLS regression results: models 1 and 2 analyze tariff rates in 2000; models 3 and 4 examine tariff changes from 1992 to 2000.<sup>26</sup>

In the book’s theory, industries with relatively large-scale production and large returns to scale should have less trade protection at any given time, and trade protection should be declining in industries that are gaining scale economies (hypothesis 5). Because changes in relative scale are difficult to calculate, the analysis uses *returns to scale* to distinguish the industries most likely to ex-

26. The dependent variable is duties collected divided by imports from all countries other than Mexico, Canada, and Israel so that the effects of free trade agreements will not bias the evaluation of multilateral trade policies. Tariff data are from the USITC Trade DataWeb, <http://dataweb.usitc.gov>.

**TABLE 34. OLS Regression Results for U.S. Tariffs**

Variable	Tariff in 2000		Change in Tariff, 1992–2000	
	(1)	(2)	(3)	(4)
Returns to scale	−0.13*** (0.04)	−0.13*** (0.04)	−0.75** (0.33)	−0.73** (0.34)
Intrafirm trade	−0.23*** (0.06)		−1.32** (0.55)	
OAP trade		−0.83*** (0.31)		−0.96 (2.90)
Import competition	0.13*** (0.02)	0.11*** (0.02)	0.50*** (0.19)	0.33* (0.18)
Geographic concentration	0.13*** (0.03)	0.15*** (0.03)	0.57** (0.27)	0.62** (0.27)
Industrial concentration	0.04** (0.02)	0.04** (0.02)	0.46*** (0.17)	0.38** (0.17)
NAFTA phasing			0.03*** (0.01)	0.03*** (0.01)
Constant	−0.04*** (0.01)	−0.05*** (0.01)	−0.89*** (0.13)	−0.91*** (0.14)
F-ratio	19.47***	16.65***	8.39***	7.12***
Adjusted R-squared	0.41	0.37	0.25	0.22

Note: Cell entries are OLS regression coefficients, with standard errors in parentheses.  $N = 134$ .

\*\*\* $p < .01$  \*\* $p < .05$  \* $p < .10$

perience cost reduction from regional free trade. Industries heavily involved in *intrafirm trade* or *OAP trade* also should have low, and declining, levels of trade protection (hypothesis 6). Since import penetration should stimulate protectionist pressure (hypothesis 4), industries facing *import competition* will tend to receive high tariffs and tariff increases (or at least smaller than average tariff cuts). The analysis controls for collective action costs by including *industrial concentration* and *geographic concentration*, both of which should be positively associated with trade protection.<sup>27</sup>

In models 1 and 2, all variables are statistically significant with the correct signs. Scale economies lead to lower tariffs; tariffs decline in both models by 1.1 percentage points with each one standard deviation increase in *returns to scale*. Production sharing also produces lower tariffs, though the effect is greater for *intrafirm trade* (1.3 percentage points) than *OAP trade* (0.8 percentage points). *Import competition* is associated with higher tariff rates, as tariffs rise by 2.1

27. Industrial concentration is measured as the percentage of industry sales by the twenty largest firms. The geographic concentration variable is from Busch and Reinhardt (1999), and it is available at <http://userwww.service.emory.edu/~erein/research/#geocon>.

percentage points (model 1) and 1.8 percentage points (model 2). Tariffs also increase with *geographic concentration* and *industrial concentration*.

Models 3 and 4 include an additional control variable, *NAFTA phasing*, which is the number of years to tariff elimination in the NAFTA treaty (see Chase 2003, 160–61, for a description). The analytical approach suggests that industries liberalized rapidly in NAFTA would have been more likely to experience cost reduction, while those for which free trade was delayed would have had less impetus to restructure. Industries with shorter phasing schedules therefore should have greater liberalization in external tariffs, while industries with long phasing schedules should receive smaller tariff cuts.

The results show that industries with delayed tariff phaseouts were liberalized less after the Uruguay Round, while deeper tariff cuts occurred in industries that were rapidly exposed to free trade under NAFTA. Holding other variables constant at their mean values, a one standard deviation increase in *NAFTA phasing* increases tariffs by 8.1 percent in model 3 and 9.2 percent in model 4. *Import competition* also increases tariffs, though the effect is greater in model 3 (8 percent) than model 4 (5.3 percent). *Geographic concentration* and *industrial concentration* likewise have positive effects on tariff changes.

At the same time, industries with large returns to scale experienced larger tariff cuts. All else equal, tariffs dropped by 6.1 percent and 6 percent in the two models with each increase of one standard deviation in *returns to scale*. This supports the expectation that industries with large returns to scale—particularly those that were liberalized rapidly in NAFTA—were able to gain scale economies and reduce unit costs. *Intrafirm trade* had a negative effect on tariff changes as well, as tariffs dropped by 7.1 percent with each incremental increase. *OAP trade* was negatively associated with tariff changes, though the effects were neither statistically significant nor substantively large.

### **Conclusion: Multinationals and NAFTA**

Technological changes after 1970, along with Mexican and Canadian trade and industrial practices, encouraged the pursuit of regional free trade in industries such as automobiles, computers and office equipment, electronic components, telecommunications, chemicals, and farm and construction machinery. Once Canadian and Mexican tariffs declined, U.S. multinationals that had invested in inefficient-scale facilities to serve protected markets became vulnerable to foreign competition. With these “miniature replica” factories a major burden, multinational companies could benefit from streamlining operations, specializing plants for particular product lines, and closing down inefficient produc-



tion. Many firms also had outsourced intermediate manufacturing to Mexican maquiladoras, which increased intrafirm trade across North American borders. As production sharing expanded, so did the incentives to eliminate the remaining barriers to cross-border trade and investment. These two trends gave rise to political pressure in the United States for free trade with Canada and Mexico.

Free trade agreements also helped to enhance the competitive position of many U.S. companies by making it easier to take advantage of scale economies and extend regional supply chains. Most supporters of NAFTA favored liberalization in the GATT, while opponents of free trade with Mexico fought the Uruguay Round with equal vigor. Evidence to date therefore suggests that regional arrangements in North America have promoted multilateral liberalization rather than inhibiting it.