

CHAPTER 2

The Argument

Domestic Groups and Regional Arrangements

The emergence of trading blocs has been an unmistakable development in recent years. Policy analysts, economists, and international relations theorists have widely examined the current drift toward regionalism, as well as past outbreaks of trade discrimination such as the interwar years. These studies generally focus on the economics or the geopolitics of trading blocs, but not the political economy of these arrangements.

This chapter presents a political economy framework to evaluate domestic factors in the design and evolution of trading blocs. Explaining how market interactions affect policy involves several steps. The first step is to characterize the trade preferences of domestic actors. Second, we need to understand why these domestic actors favor particular trade strategies to achieve their objectives. This requires insight into why some private interests prefer regional trade liberalization, a puzzle that is not resolved in existing studies. Third, we must analyze how domestic actors organize into groups to advance their policy goals and how the institutional process of policy-making influences which interests in society receive their desired policy response from the government.

Moving in sequence through each of these steps helps to unravel how market interactions affect domestic actors, how the preferences of domestic actors are aggregated into groups, and how organized groups influence national policy. The purpose is to answer two questions: Why do some domestic groups campaign for regional trade liberalization when there are unilateral and multi-lateral policy alternatives? Under what conditions will domestic groups seek to increase or decrease regional trade barriers toward the rest of the world after the formation of a trading bloc? This chapter lays out an analytical approach to these questions and the specific arguments that later chapters evaluate in a comparative analysis of trading blocs across regions and time.

The Dependent Variables

There are two dependent variables to be explained. The primary dependent variable is the trade preferences of domestic actors, expressed in terms of organized political behavior. These preferences vary along two dimensions. First, they can be liberalizing or protectionist: liberalizing policies reduce trade barriers to relatively low levels; protectionist policies raise trade restrictions to relatively high levels. Second, trade preferences can be discriminatory or nondiscriminatory. Nondiscriminatory trade policies adhere to MFN principles; discriminatory trade policies place some portion of trade outside MFN channels.

The secondary dependent variable is trade policy at the national level.¹ Policy outcomes are a function of the trade preferences of domestic actors, their capacity to organize collectively, and the intervening effects of political institutions in mediating group preferences. Policy outcomes also vary along the two dimensions outlined in the preceding.

For clarity, domestic actors' trade preferences (and national policies) can be situated in a two-by-two matrix, as in table 1. The level of liberalization or protection varies along one axis and the level of discrimination along the other. Moving clockwise, closed trading blocs, open trading blocs, free trade, and trade protection occupy the four cells. It is these gradations of policy preferences—and, by extension, policy outcomes—that the book seeks to explain.

The Method of Analysis: The Political Economy of Trade

The political economy of trade makes up a rich literature that has grown spectacularly over the last twenty-five years. Research in this area is divided among scholars who analyze state institutions and those who examine domestic groups in trade policy-making.² Disciples of both research traditions agree that the two approaches complement one another, as each focuses on a separate

1. This variable is secondary because the study does not account for all of the factors that affect trade policy. In addition to trade preferences and domestic actors' ability to organize, there are legislative and bureaucratic factors, strategic concerns, elite interests, and myriad other considerations in national policy. This book examines the *product* of national decisions and evaluates the extent to which it is understandable in terms of the variables under consideration, but it does not examine the decision-making *process* of public officials. As a result, it cannot provide an exhaustive description of the influences on trade policy. Instead, it seeks to account for as much variance as possible with a few simple explanatory factors.

2. There are too many contributions to this body of work to list here. Important work on interest groups includes Gourevitch 1986; Milner 1988; Rogowski 1989; Magee, Brock, and Young 1989; Frieden 1991; Alt and Gilligan 1994; Frieden and Rogowski 1996; and Hiscox 2002.

stage of the policy process. Thus, it is axiomatic that a full model of national policy must specify both the demands of policy coalitions and the institutional constraints that determine a government’s inclination to satisfy domestic group needs.

The argument in this book begins with domestic actors and builds upward to derive expectations about national trade policy. The starting point is that “actors are regarded as having preferences for outcomes” (Frieden 1999, 40). Fundamentally, I assume that market actors—firms and workers—prefer more profits (or wages) to less. This material interest yields preferences over national policy: firms prefer policies that enable them to earn more profits to those that cause them to earn less; workers prefer policies that promote higher wages to those that restrain wages. While market actors’ policy preferences normally cannot be observed, the lobbying strategies they employ to advance these interests are revealed in the political setting. Analysts can gain explanatory leverage over this behavior if “preferences can be deduced from prior theoretical principles” (Frieden 1999, 41). Explaining why market actors want the policies they seek and employ the political strategies they pursue to this end illuminates the pressures on governments to supply one set of policies rather than another. It is then possible to evaluate the direction and intensity of these pressures, and hence the policy decisions that are likely to result, by linking a deductive theory of preferences to a “complementary theory of the aggregation of preferences, from individuals and firms up to groups, sectors, classes, and nations” (Frieden 1999, 65).

The analytical framework focuses, first, on the trade preferences of domestic actors. In this exercise, I characterize domestic actors’ trade preferences along the two dimensions in table 1: (1) the degree to which they advocate or oppose regional trade liberalization and (2) the level of their support for increased trade protection or further trade liberalization after regional integration. This is the most challenging task, and it receives the greatest attention in this chapter.

TABLE I. Typology of Dependent Variables

Degree of Discrimination	Degree of Liberalization	
	Low	High
High	(1) Closed trading blocs	(2) Open trading blocs
Low	(4) Trade protection	(3) Free trade

The second part of the explanation examines preference aggregation as domestic actors organize into groups. Here the key issue is whether businesses will act individually or lobby through industry associations. This section also addresses how organizational abilities and the design of state institutions affect the ability of domestic groups to obtain the trade policies they seek.

In the pursuit of a compelling political economy approach to trading blocs, I do not contend that group lobbying provides an exhaustive account of every regional arrangement formed over the years. States negotiate trade agreements for many reasons. Balassa (1961, 4) writes, “The considerations that have prompted . . . plans for the integration of independent national economies are by no means uniform; various factors must be given different weights in the movement toward economic integration in Europe and on other continents.” No doubt political motives, not solely political economy ones, play an important role. Indeed, among the trade agreements negotiated of late are several purely political undertakings—peace, friendship, and cooperation pacts—with little economic substance or meaning.³ After surveying this landscape, Gilpin (2001, 344) concludes: “The diversity of regional arrangements makes broad generalizations and overarching theories or explanations of regionalism impossible.”

Even if generalization is difficult, it is not impossible; scholars can do more than merely provide limited evaluations of the effects of regional arrangements while taking their design as exogenously given. Clearly, free trade between the United States and Israel cannot be viewed in the same way as free trade between the United States and Mexico; the EC offered entry to Spain and Portugal for reasons different from those for it to extend an invitation to Malta. But even when close political relations or favorable strategic conditions permit regional initiatives to proceed, domestic pressures will come to the fore the more significant the arrangement economically. Outlining the private interests engaged in this process, and where they lead when domestic groups express them in the political arena, is indispensable to any explanation of the development, design, and evolution of trading blocs.

The Argument

The book’s argument emphasizes how dynamic considerations motivate domestic groups to lobby for regional trade liberalization. The static effect of

3. One account characterizes several trade agreements recently under consideration as “soundbite economics” for “ministers . . . desperate to be seen to be active.” See “Asian Ambition: Frustration with Deadlock at the WTO and a Fear of Becoming Isolated Have Prompted Pacific Rim Nations to Seek Security in Regional Free Trade,” *Financial Times*, November 28, 2000, 24.

trade creation and trade diversion is not a strong motive for regional integration. Rather, the principal attraction of regional arrangements is the opportunity they create for businesses to reorganize operations. These restructuring gains are most significant when production technologies require a larger-than-national market to be profitable. Producers will exert pressure to eliminate barriers that restrict the range of the available market if subsequently they can employ these technologies more effectively. Producers that cannot make use of these technologies, however, will be less interested in regional integration; indeed, they might have reasons to oppose it.

Building from these basic propositions, the task is to specify the types of businesses that are technologically constrained by the geographic scope of the national market and those that are not. Attention to the dynamic effects of trading blocs helps to explain why some domestic groups lobby for regional trade liberalization while others fight it. The book makes two specific points.

First, producers seek trading blocs when access to a larger market enables them to take advantage of economies of scale in production. Firms with steep cost curves and a small domestic market will find it difficult to exploit scale economies. As a result, they will support regional arrangements to gain access to a wider market. If the domestic market is large or the potential economies of scale small, however, firms will be less constrained by national boundaries and less interested in an enlarged market.

Second, producers seek trading blocs when an integrated regional market enables them to move stages of production across borders. Because barriers to trade and investment restrict opportunities to take advantage of differences between countries in wages, skills, and capital costs, businesses that can redeploy intermediate production benefit from regional trade liberalization. Firms unable to move production abroad due to technological constraints are not affected by these barriers, so they have less incentive to push for their elimination.

Standard trade models ignore dynamic effects because they are derived from endowment-based theories of trade. Yet even casual observers recognize that the importance of this type of trade is declining. For one, trade less often follows the conventional pattern of countries with different factor endowments exchanging labor-intensive for capital-intensive goods. Instead, countries with similar endowments often exchange similar products: for example, the United States and Germany trade Ford and GM automobiles for BMWs and Volkswagens. Economies of scale and product differentiation are the factors most commonly adduced to explain this apparent anomaly.

In addition, production is not country specific: it is dispersed across borders, with different stages located where they can be performed most efficiently. Even

a Barbie doll travels through six countries before reaching its final sales destination.⁴ A firm engaged in the process variously described as *foreign assembly*, *offshore manufacturing*, *outsourcing*, or *production sharing* transfers intermediate goods between countries, often through intrafirm trade. In this case, two-way trade occurs as part of an integrated production process within a firm. For example, 34 percent of U.S. trade in 2000 involved affiliates of the same multinational firm rather than separate, independent firms (Zeile 2003, 22–23).

While theoretical accounts of these trends are growing, economics has not yet produced a “new” trade model with the rigor to supplant established approaches.⁵ Efforts to incorporate these factors into empirical work on the political economy of trade therefore rest on a less secure theoretical foundation. Nevertheless, it is possible to draw analytical first principles from this literature to illuminate how domestic actors evaluate their trade preferences when there are opportunities to take advantage of scale economies or production sharing. In advancing this argument, I seek to provide a persuasive account of the formation of trading blocs and to advance the case for including new variables in the political economy of trade.

The next section draws from trade models in economics to develop the logic underlying my expectations about producer support for trading blocs. The section that follows develops expectations about how regional trade liberalization is likely to affect the preferences of domestic groups toward trade with countries outside the regional arrangement. After that, I address how the interests of domestic actors aggregate at the associational level and work through the institutional process to affect policy outcomes.

Domestic Actors and Policy Preferences

The Standard Trade Model

In the standard political economy of trade, domestic actors demand liberalization or protection based on the income distribution effects of trade exposure. In essence, trade preferences are a function of comparative costs; political cleavages reflect the mobility of factors of production. If factors are mobile, the factor that is abundant in an economy experiences an increase in its income, and the scarce factor suffers a reduction in its income. In a two-factor model, trade divides capital and labor: the scarce factor will seek trade protection, while the abundant factor will support trade liberalization. If factors are fixed, then trade increases

4. “Barbie and the World Economy,” *Los Angeles Times*, September 22, 1996.

5. Helpman and Krugman (1985, 1989) attempt to integrate new approaches into standard trade theory.

incomes for capital and labor producing export goods and decreases incomes for capital and labor producing importable goods. In this case, trade divides sectors: import-competing sectors will seek trade protection; export-oriented sectors will lobby for trade liberalization.⁶

Traditional trade models illuminate motives for trade liberalization or protection, but they do not explain why domestic actors would want free trade regionally but not globally. To be sure, preferential trade among a set of countries causes factor prices within the group to converge, which benefits export-oriented-specific factors and harms import-competing-specific factors. But if regional trade liberalization pushes relative prices and incomes in the same direction as global trade liberalization, then regional free trade is nobody's first choice. Exporters that gain from regional free trade would benefit more from worldwide free trade; regionalism is only a "second-best" alternative to multilateral liberalization. At the same time, generally regional free trade will injure import competitors, even if they may be harmed less than under global free trade; these groups therefore would want to block global and regional trade alike.

An exception is when all members of a trading bloc have high comparative costs in an industry. In this case, regional free trade creates rents: if there are barriers to divert external trade, the most productive import-competing industry (or the country in which regionally scarce factors are most abundant) can sell overpriced exports to its regional partners. Grossman and Helpman (2002, 208) summarize:

Producers in the country that exports to its partner under [a free trade agreement] sometimes gain and never lose. These producers are one potential source of political support for an agreement. On the other hand, the producers in the country that imports from its partner under the agreement never gain and sometimes lose. Here we find potential resistance.

In short, standard trade models highlight three classes of preferences toward regional trade liberalization. First, producers with a comparative advantage at the regional but not the global level will favor regional trade liberalization to earn rents (cell 1 in table 2). External trade liberalization, however, would drive down regional prices and bid these rents away.⁷ Second, low-cost exporters may support regional trade liberalization to advance toward global free trade

6. These two approaches build from the same endowment-based theory of trade; they simply make different assumptions about the ability of factors to move between industries in response to relative price changes. See Hiscox 2002.

7. This is the core of political economy models of protectionist trading blocs in chapter 1.

TABLE 2. Industry Preferences in the Standard Trade Model

Revealed Comparative Advantage (inside region)	Revealed Comparative Advantage (outside region)	
	Low	High
High	(1) Regional free trade External protection	(2) Regional free trade External free trade
	(4) Regional protection External protection	(3) Regional protection External free trade

piecemeal (cell 2). Since these producers can sell abroad without special privileges, a trading bloc serves as a “stepping stone” to more sweeping trade liberalization multilaterally.⁸ Third, producers that compete with imports from countries in the region will oppose regional free trade (cells 3 and 4). The income effect is more negative, and opposition to regional trade liberalization more intense, the larger the share of national consumption that regional competitors can satisfy.

In these models, producers experience one-time income effects as prices adjust to the opening of regional trade. Endowments are fixed in the short run, comparative costs change slowly, and benefits from trade liberalization do not cumulate over time. The effects could be substantial for a small country that gains the opportunity to trade at the relative prices of a large neighbor. But static benefits are not likely to provide a powerful engine for regional integration among larger economies or between countries with competitive rather than complementary production structures. Clearly there must be other reasons why regional arrangements are so widespread and numerous.

In my argument, the critical motives are the restructuring effects of regional integration. When regional trade is liberalized, domestic actors adjust their market behavior to the new policy environment. This changes production patterns and yields new business arrangements. The effects are more significant than the interindustry adjustment that occurs when there are no scale economies and factors of production cannot move across borders, as in standard trade models. Some domestic actors benefit from this restructuring; others are harmed. The former group will campaign for regional trade liberalization; the latter will tend to fight it.

8. However, efficient exporters may be cautious if regional free trade were likely to provoke retaliation since trade protection or discrimination in other regions would hurt their products.

Studies of regional integration identify three kinds of dynamic processes.⁹ First, there is increased competition, which breaks up monopolies; this reduces prices and enhances consumption efficiency. Second, there is increased market size; this promotes intraindustry specialization and cost reduction through economies of scale. Third, there is a reallocation of factors of production, as factor price differences stimulate capital and labor flows between countries. In keeping with my focus on producer incentives rather than consumer interests, my framework focuses on the second and third of these processes—scale economies and factor movements, principally capital flows.

Trade with Imperfect Competition

Students of economics have long recognized that certain methods of production exhibit increasing returns to scale. John Stuart Mill's classic *Principles of Political Economy* notes, "The larger the scale on which manufacturing operations are carried on, the more cheaply they can in general be performed."¹⁰ Adam Smith's famous pin factory in *The Wealth of Nations* demonstrates how large-scale production can achieve lower costs per unit than an establishment with specialized labor tasks but short production runs. In general, scale economies reflect "indivisibilities," that is, fixed costs that are indivisible with respect to output. At the factory level, indivisible costs include capital requirements for plant and equipment, which can be amortized more rapidly when spread over large volumes to minimize costs per unit.¹¹ For a firm, indivisibil-

9. See Balassa 1961. Different regional arrangements trigger more or fewer of these dynamic effects depending on a number of considerations—incomes, production structures, market sizes, external trade policies, policies toward factor movements, the investment climate, and so on. Economic approaches take these variables as given and attempt to measure the size of the dynamic benefits in specific cases. In my framework, domestic actors base their trade preferences on expectations about the dynamic consequences of regional integration and the anticipated effects on their assets.

10. John Stuart Mill, *Principles of Political Economy, with Some of Their Applications to Social Philosophy* (book 4, chap. 2, 9), Library of Economics and Liberty, <http://www.econlib.org/library/Mill/mlP57.html>. Mill adds: "I cannot think, however, that even in manufactures, increased cheapness follows increased production by anything amounting to a law. It is a probable and usual, but not a necessary, consequence."

11. In steel and rubber, there are "economies of vertical integration" because the application of heat can be reduced when all stages of production are performed at one time and place. Chemicals, petroleum, and other refining activities exhibit "economies of increased dimensions" because tank construction costs are a function of surface area, while capacity is a function of volume. In automobiles, machinery, and many electronics, long production runs of standardized articles compensate for indivisibilities in fixed machinery by limiting downtime for recalibration. In each case, overhead costs (for energy, plant, or equipment) increase at less than a one-to-one relationship with output (see Pratten 1971, chap. 1).

ities arise from expenditures for research and development (R&D), product design, and advertising and marketing.¹²

The recognition that most international trade today does not follow patterns of factor scarcity and abundance prompted economists to introduce imperfect competition and scale economies into a series of “new” trade models developed since 1980. These models overturn many of the central tenets of standard trade theory: when markets are imperfect, free trade is not always optimal; comparative advantage, rather than being inherited from factor endowments as part of a country’s immutable genetic code, can be shaped by government policy; and historical “accident,” first-mover advantages, path dependence, and learning-by-doing upset otherwise predictable patterns of production and trade. Grossman (1992, 1) concludes: “imperfect competition enhances the potential gains from trade but also adds to the list of possible exceptions to the rule.”

Three classes of strategic trade models exist in this body of work.¹³ Under monopolistic competition, governments can capture economy-wide externalities by assisting activities that disseminate technology and knowledge to upstream or downstream industries. In profit-shifting models (Brander and Spencer 1992), subsidies can deter foreign market entry or limit the output of foreign firms, enabling domestic firms to expand and earn larger profits. In export promotion models (Krugman 1992), import protection encourages domestic firms to increase production of goods with scale economies, reducing their marginal costs until they can profitably export. While these models differ in their assumptions, each concludes that state intervention (under the right conditions) can improve national welfare.¹⁴ Empirical tests are less certain, however: even if strategic policies create spillovers or shift profits, they also distort resource allocation and cause consumption inefficiencies (see Baldwin and Krugman 1988, 1992; Dixit 1992; Dick 1994). Most economists therefore conclude that state intervention under imperfect competition is no better for national welfare than when markets are perfect.

In my argument, producers have incentives to seek government support to

12. Once fixed costs have been paid, there is little marginal cost to deploy R&D embodied in a new invention or to expend advertising and marketing used to create a brand name.

13. According to Brander (1995, 1), “strategic trade policy . . . amounts to the study of trade policy in the presence of oligopoly.” These models are “strategic” because producers take into account the behavior of foreign firms and foreign governments when they set prices and output.

14. In the monopolistic competition model, price equals average costs; perfect competition and zero profit conditions hold, but technological spillovers that are *external* to firms exist at the economy-wide level. In the profit-shifting and export promotion models, the excess of price over average cost creates pure profits or rents; competition is imperfect, and the scale economies are *internal* to firms.

help them earn “excess profits,”¹⁵ even if this would attract resources from more productive activities or impose welfare costs on consumers and taxpayers. In particular, I generalize from export promotion models. The potential gains for producers are greatest when the conditions of these models apply. First, scale economies are internal to firms, so the benefits of export promotion policies accrue to incumbent producers in an industry and are not externalized to the economy as a whole. Second, internal economies of scale create entry barriers, so established producers can capture any increase in excess profits because it is costly for new entrants to begin production. Since the potential benefits are large and highly concentrated, the incentives for collective action to influence policy are high.¹⁶

Economies of Scale

Economies of scale are important to the political economy of trade for two reasons. On the one hand, trade enlarges the available market, which affects plant size. As a result, increased production due to trade reduces unit costs and in so doing yields excess profits. On the other hand, import competition makes it more difficult for domestic producers to price above marginal cost. Trade therefore can limit opportunities to expand production and reduce unit costs, which may force producers to sustain losses.

Theoretical first principles drawn from strategic trade models and studies of industrial organization help to explain domestic support for trading blocs. Figure 2 depicts a stylized cost curve relating average costs to the scale of production. The “minimum efficient scale,” or MES (A, A^*), is the level of output that minimizes average costs, or the point at which the potential economies of scale have been exhausted. For producers that remain on the downward-sloping portion of the cost curve (for example, at B, B^*), some scale economies remain unexploited.

15. I use *excess profit* instead of the more conventional *rent* to avoid confusion between motives for protection in alternative trade models. Excess profits exist when price exceeds marginal cost, so producers earn more excess profits the greater their price-cost margin.

16. To extend this reasoning, I would not expect intense policy demands when scale economies are external to firms. In this case, gains from strategic trade policy accrue to producers in upstream industries (when there is technological spillover) or to new entrants (when returns increase with industry size). This limits the benefits of collective action because established firms cannot recoup their lobbying costs. As a result, my focus is the case of internal scale economies, imperfect competition, and pure profit. Within this class, the profit-shifting model is a highly stylized representation, and its results tend to be sensitive to assumptions. Outside of highly concentrated global industries such as aircraft, output and pricing are not so sensitive to government policy because strategic interdependence is less significant with many firms. Thus, I expect domestic interests to be channeled into export promotion.

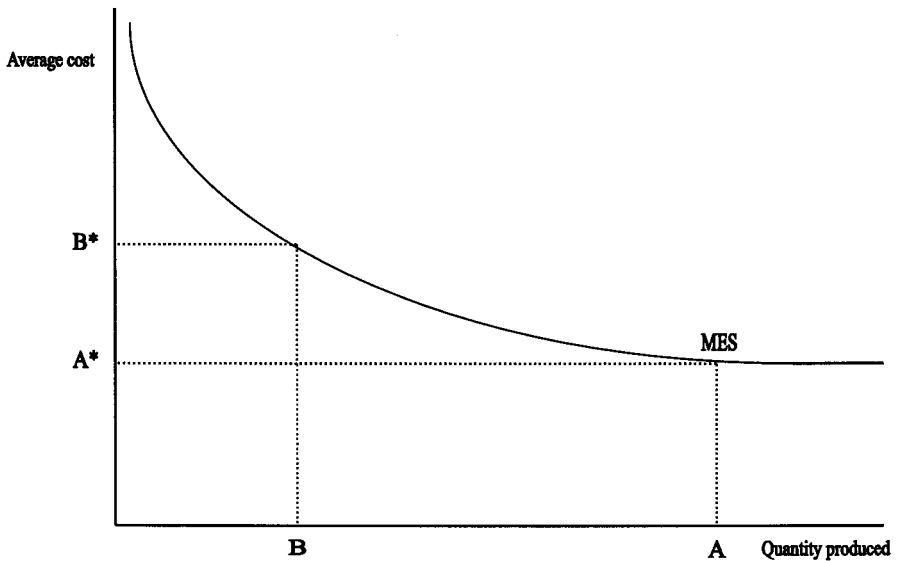


Fig. 2. Average cost with economies of scale

When scale economies have not been fully captured, producers have incentives to seek out a larger customer base to expand product runs. Regional arrangements can provide the larger markets necessary to gain these scale economies. On the one hand, regional trade liberalization opens up new export opportunities. This allows producers to reduce unit costs as output increases to serve regional partners.¹⁷ On the other hand, trading blocs retain barriers against outside competition. External protection ensures that producers in the region fully internalize the scale effects of larger markets, making it possible to leapfrog foreign competitors through import protection as export promotion (cf. Krugman 1992). Regional trade liberalization therefore provides benefits that are not attainable through multilateral liberalization: under MFN rules, external trade barriers must be reduced equally for the imports of all countries; trading blocs, however, allow external protection to remain in place.

In short, producers are more likely to seek trading blocs the greater the cost

17. Corden (1972) identifies two effects when an enlargement of the market enables producers to exploit scale economies. First, there is "cost reduction" when increased output in one country replaces higher-priced, lower-scale production in the region. Second, there is "trade suppression" when increased production in the region replaces imports from outside the region. While these two effects have different implications for consumption, trade, and welfare, both involve unit cost reduction and excess profits for producers. As a result, I do not differentiate between them.

reduction effects they anticipate from regional trade liberalization. These gains are a function of two conditions. The first is the slope of the average cost curve, or simply the *returns to scale*. Second is the *size of the domestic market* available to them.

The *returns to scale* are important because producers gain more from increased scale the steeper the cost curve: each marginal increase in plant size yields more excess profits the larger the returns to scale. The difference in unit costs between producers of different sizes (for example, between A^* and B^* in fig. 2) denotes the “penalty,” or the “cost in terms of reduced efficiency” (Bain 1959, 149), when scale economies are not fully exploited. When the cost curve is steep, this penalty is great, so producers reap large benefits from the opportunity to trade in a broader market. When the cost curve is flat, this penalty is small, so increased scale yields little cost reduction and little additional excess profits.

As a result, producers benefit more from an increase in plant size the steeper the cost curve. According to Silberston (1972, 377–78), “The more steeply the scale curve falls, the greater will be the opportunity for economies of scale, and the greater the impetus for firms to seek markets which transcend . . . national boundaries.” If returns to scale are large, producers will support regional trade liberalization to increase output, reduce unit costs, and earn more excess profits. If returns to scale are small, producers will have little interest in a trading bloc because they can derive no benefit from longer production runs or increased capacity utilization. This reasoning leads to the first hypothesis:

HYPOTHESIS 1: Support for trading blocs increases with the level of the returns to scale.

Second, *domestic market size* influences support for trading blocs. “International economic competition,” Gilpin (2000, 43) explains, “necessitates the availability of large domestic markets that enable domestic firms to achieve economies of scale.” A market that is small compared to the potential scale economies “may not permit output at the minimum optimal scale at all, or may only permit output at this scale from a comparatively small number of firms” (Silberston 1972, 389). Producers are at a disadvantage when limited demand prevents them from concentrating production: if there is not enough room in the domestic market to exploit scale economies, they will have high unit costs; this makes it difficult to gain market share abroad to increase output and ride down the cost curve. Producers therefore will be hesitant to expand capacity, purchase new plant and equipment, and the like—even if such

investments would maximize efficiency over the long run—because the potential is too great for short-run adjustment costs due to export competition and unused capacity. Instead, they are likely to produce at a suboptimal scale for the home market to minimize risk.

When technology creates opportunities for scale economies but the market is too limited, producers have strong motives to support trading blocs. Simply, an enlarged market allows producers to approach the MES more readily because “[s]teady economic expansion . . . tends to reduce the incidence of uneconomically small operations” (Bain 1959, 167). Opening the regional market while continuing to protect it from external competition makes it easier for businesses to expand production runs, increase capacity utilization, and rationalize production facilities. These in turn reduce unit costs and increase excess profits.

Producers in a geographically limited domestic market might still benefit from a trading bloc even if they already manufacture on a large scale. When small home demand requires producers to export to utilize existing capacity, any loss of foreign market share spreads overhead across a smaller volume of output, which raises unit costs. The risk of this sort of vicious cycle could cause producers to refuse foreign orders that require new plant and equipment or significant retooling. A trading bloc, however, guarantees stable access and insures against the threat that market closure abroad will create unused capacity. This allows large-scale producers in small national markets to make illiquid investments that rely on economies of scale.¹⁸

To sum up, small-scale producers in small home markets reap the largest benefits from trading blocs because they will have the greatest opportunity to expand capacity and concentrate production. But large-scale producers with small home markets will value the security of a regional arrangement as well, to the extent that they need to maintain foreign market share to capture scale economies. This leads to the second hypothesis:

HYPOTHESIS 2: Support for trading blocs increases the smaller the domestic market relative to MES.

Table 3 summarizes the main hypotheses about scale economies and producer support for trading blocs. For simplicity, the table shows continuous variables as binary outcomes. In terms of comparative static analysis, produc-

18. Hence the motives for small countries to reach “safe-haven” arrangements to guarantee secure access to a large market that might soon close (Hindley and Messerlin 1993).

ers with unexploited scale economies have greater incentives to seek regional arrangements the larger the returns to scale and the larger the MES relative to domestic market size. Stated as comparative dynamics, regional trade liberalization becomes more attractive as the MES increases as a share of the domestic market, as the gap between the MES and the scale of production attained widens, and as the returns to scale grow larger.

To provide real-world examples of these outcomes, each of the cells in table 3 includes examples drawn from NAFTA lobbying in chapter 6, since this case will be familiar to many readers. Industries in the United States with large returns to scale and large MES included pharmaceuticals, semiconductors and integrated circuits, computer equipment, farm and construction machinery, automobiles, and home appliances. As the hypotheses predict, representatives of these industries—trade groups such as the Pharmaceutical Manufacturers Association, the Semiconductor Industry Association, and the Automobile Manufacturers Association and companies such as IBM, Hewlett-Packard, Caterpillar, GM, Ford, GE, and Whirlpool—campaigned forcefully for NAFTA. Support for NAFTA was less intense when returns to scale were large but MES small relative to market size (for example, paper products and processed foods) and when MES was large but returns to scale small (plastic products, steel, and consumer electronics). When both MES and returns to scale were small (many

TABLE 3. Economies of Scale and Preferences for Trading Blocs

Returns to Scale	MES Relative to Domestic Market Size	
	Small	Large
Large	(1) Weak support for trading blocs	(2) Strong support for trading blocs
	NAFTA examples: Paper and paperboard Grain mill products Sugar and confectionery Dairy products Household chemicals Beverages	NAFTA examples: Pharmaceuticals Semiconductors Computers Construction machinery Automobiles Home appliances
Small	(4) Weak support for trading blocs	(3) Weak support for trading blocs
	NAFTA examples: Cotton fabrics Manmade fiber fabrics Knitted goods	NAFTA examples: Steel Consumer electronics Plastic products

textile and apparel products), support was tepid, where it existed, and many groups opposed NAFTA.¹⁹

Cross-Border Capital Flows

Outsourcing and production sharing across borders have grown dramatically in recent years.²⁰ Standard trade models omit international flows of capital and labor so that trade is simply an exchange of factors of production embodied in finished goods. Neoclassical approaches that allow international factor movements predict capital flows from rich to poor nations in response to barriers to trade in capital-intensive goods.²¹

Clearly, barriers to trade in goods are not the main cause of trade in factors in production. Rather, production sharing occurs because cross-national differences—usually disparities in factor prices—allow certain tasks to be completed more efficiently abroad than at home. In developed countries, manufactured goods with labor-intensive aspects tend to face low-wage competition, especially when technology is standardized, production is difficult to automate, and sales are price-sensitive. Transferring labor-intensive tasks to labor-rich areas enables firms to reduce input prices and cut factor costs. When intermediate production moves to a location where it can be performed more efficiently, the capital- and skill-intensive processes left in the home country become more profitable.

Technological changes have caused production sharing to expand of late. Innovations in shipping, freight, and air travel have reduced the time and cost involved in moving products over long distances. With the advent of computers, satellites, and broadband connectivity, it is easier to coordinate the activities of far-flung affiliates. However, not all producers can relocate abroad to ex-

19. For more on the derivation of these expectations in the NAFTA case, see chapter 6 and especially table 27. The correlation is not perfect; after all, it is not reasonable to expect the theory to explain every case of industry lobbying. Moreover, some industries that the theory would expect to oppose NAFTA still supported it due to considerations not related to scale economies. For example, strict rules of origin and increased outsourcing opportunities (factors discussed in the ensuing sections) eventually won over some sectors of the textile and apparel industries.

20. Feenstra, Hanson, and Swenson (2000, 85) define *outsourcing* as “the practice in which firms divide production into stages and then locate each stage in the country where it can be performed at least cost.” I use *production sharing* generally to refer to the participation of multiple countries in different stages of a manufacturing process.

21. This is the “Mundell equivalency,” which states that either trade or factor flows can equalize factor prices (Mundell 1957). However, it does not explain why most capital flows occur between developed countries with similar factor endowments.

exploit these opportunities. Production sharing requires the physical separation of different stages of manufacturing, the capacity to specialize discrete processes between locations, and the ability to move intermediate components at acceptable cost. This is most feasible when production involves physically discrete steps, when different stages use different mixes of capital and labor, and when intermediate goods have high market value relative to weight (Grunwald and Flamm 1985).

Across industries, components-intensive electronics, semiconductors, and automobiles tend to be more conducive to production sharing than resource-intensive and energy-intensive metal, rubber, and paper.²² Because opportunities to specialize across borders are unevenly distributed among industries and firms, production sharing has important effects on the trade preferences of domestic actors.

Production Sharing

Firms engaged in production sharing across borders transfer goods between a corporate parent and its foreign affiliates through intrafirm trade, or they import these inputs from unaffiliated suppliers. Intermediate components tend to be highly specialized and unique to a production process; indeed, many firms invest large sunk costs in products and processes for which no external market exists. Adjusting to any disruption in the flow of inputs across borders requires firms to externalize the market for intermediate goods—that is, share proprietary technology and information with local suppliers, which raises the risk of opportunism and market failure—or to interrupt the production process altogether. Both options are costly. As a result, firms involved in production sharing, especially those that own their suppliers, lack adaptability because their demand for intermediate goods is insensitive to market- or policy-induced changes in price.

Measures to reduce the costs and risks of cross-border trade therefore offer large benefits to firms engaged in production sharing. Helleiner (1977), Milner (1988), and Goodman, Spar, and Yoffie (1996) find that multinationals closely

22. Consider metal smelting and rolling versus semiconductor manufacturing. Metal ingots and sheets must be reheated if they cool prior to shaping. This makes it costly to separate production processes. In addition, metals are heavy and therefore expensive to transport, relative to their value. Semiconductor manufacturing, in contrast, involves several distinct steps, with capital-intensive stages (fabrication, testing) and labor-intensive stages (assembly, packaging) that can be easily performed at different places and times while weight-to-value ratios are low (see Caves 1996, 13–19).

integrated with their foreign affiliates tend to be forceful advocates for trade liberalization. When products move across borders between a corporate parent and its affiliates, multinationals “gain *at both ends* from tariff cuts, both as importer and exporter of the same product” (Lavergne 1983, 105). Indeed, multinational firms dependent on production sharing are not only importers or exporters—they are consumers.

Geographic proximity is a key factor in production sharing. Often there are diseconomies of scale in global production networks, so multinationals tend to focus on region-specific sourcing, manufacturing, and marketing (Wells 1992). Locations near the corporate parent offer several benefits: lower transport costs in the movement of goods between home and host countries, easier coordination with suppliers for firms that maintain low inventories and rely on just-in-time delivery systems, and shorter lead times when firms must adapt quickly to changes in demand or consumer tastes. As a result, production sharing primarily crosses borders between neighboring (or nearby) countries. Most large U.S. businesses have established regional production networks in North America during the past thirty years. Recently, Japanese and European firms have extended this practice to East Asia and the European periphery, respectively. In fact, foreign multinationals in North America conduct labor-intensive operations mostly in Mexico and Canada; U.S. multinationals outsource their European production to Italy, Ireland, and Spain.

The regional proximity of the different components of these networks helps to explain why production sharing promotes interest in trading blocs. The most important concern for firms engaged in production sharing is not to liberalize trade worldwide but to liberalize trade across the borders that link their separate investments. Moreover, free trade in goods is necessary but not sufficient to sustain regional production networks. Firms also need “deep integration” to harmonize national standards, establish dispute settlement procedures, eliminate trade-related investment measures (TRIMs), relax restrictions on equity ownership, and protect intellectual property rights (Lawrence 1996).

Multilateral negotiations on these sorts of behind-the-border trade barriers have yielded mixed results to date. In particular, the failure to integrate effective codes on foreign direct investment (FDI) into the WTO agreements has stimulated the pursuit of regional initiatives. If production sharing is internal to a region, regional arrangements will be an attractive institutional framework to liberalize this sort of trade. The potential benefits of liberalization are maximized and the negotiating costs minimized when it occurs regionally rather than through multilateral organizations.

In sum, firms involved in regional production sharing are more likely than

those with wholly national operations to support trading blocs.²³ Just as multinationals benefit from internalizing the supply of specialized inputs to forestall disruptions in price or availability, so too do they benefit from policy commitments to forestall government actions that could elevate the costs of procuring these inputs. In this case the motive to lobby for trading blocs is to facilitate deeper integration, not to gain access to a larger protected market.²⁴ This reasoning leads to the third hypothesis:

HYPOTHESIS 3: Support for trading blocs increases the more that firms are involved in regional production sharing.

Domestic Actors and External Trade

In the analytical framework outlined in the last two sections, producers support or oppose trading blocs based on the anticipated distributional effects and the likely opportunities to reorganize production after regional trade liberalization. This framework provides an underpinning for hypotheses about domestic actors' preferences regarding external trade. As producers expand or contract economic operations and reallocate assets to adjust to the new trading environment, incentives for liberalization or protection toward countries outside the region may change. This in turn affects the trade policies domestic actors will seek—and so national decisions at one point in time shape policy into the future.

The task at hand is to specify how domestic actors evaluate their interests in the new trading environment. Most studies focus on the “immediate impact effect” (that is, the static outcome in terms of trade creation and trade diversion), but scholars are less certain about the “dynamic time path” that determines whether regional arrangements promote or retard multilateral integration (Bhagwati 1993, 31–35). Even if it is possible to distinguish which domestic actors support regional arrangements to satisfy protectionist motives and which desire further liberalization, there is the possibility of imperfect foresight. Because economic conditions are different once a trading bloc is formed,

23. To clarify, producers base their trade preferences on expectations about future economic opportunities as well as past investment decisions. If firms anticipate that a regional arrangement will promote the development of regional supply chains by opening up opportunities for intrafirm trade, then they are likely to support regional trade liberalization.

24. Cox (1996) suggests that external protectionism was a central motive in NAFTA lobbying by “regionalists” such as the U.S. automobile and electronics industries. This assessment, however, rests on their previous support for trade protection, not their involvement in production sharing per se.

domestic actors will have some uncertainty *ex ante* about how such an arrangement affects their interests.

Imperfect foresight is important because the previous section suggests that the main supporters of regional trade liberalization are producers that anticipate opportunities to reorganize operations to gain scale economies or increase production sharing (or both). This does not guarantee that they will be able to do so, however. Any number of factors can intervene in the restructuring process to produce results that were unexpected at an earlier point in time. Thus, the effect of regional arrangements on policy toward external trade is an empirical question—but one that first requires basic theoretical principles to illuminate potential answers.

This section presents a series of hypotheses about protectionist pressures in trading blocs. First, domestic actors with a weak competitive position will seek protectionist measures against outside trade the more that regional trade liberalization increases import competition. Second, domestic actors that can reorganize to gain scale economies or establish production-sharing networks are likely to become more favorable to multilateral liberalization. If these producers are not able to expand production runs or increase outsourcing, however, then preexisting support for external protection will persist. Third, to the extent that regional integration attracts FDI from outside the region, domestic actors are less likely to push for external tariffs and nontariff barriers. Instead, they will tend to seek regulatory rules and TRIMs to limit foreign entry.

Import Competition and Trade Protection

In the perfectly competitive industries characterized in the standard trade model, regional integration will not enhance productivity because cost curves are flat and firms cannot engage in production sharing between labor-rich and labor-scarce areas. In this case, domestic actors cannot capture any of the dynamic gains previously emphasized as an important motive for regional trade liberalization. As a result, producers respond to one-time shifts in the source of supply of goods (trade creation and trade diversion), and external trade preferences simply reflect factor cost considerations embodied in an industry's export orientation or its exposure to import penetration.

But even when forming a trading bloc does not trigger cost reduction, it can intensify the pressure on domestic actors already disadvantaged in global competition. For this reason, import-competing producers that would enjoy reduced protection after regional trade liberalization are likely to resist it, or to at least seek special exemptions to prevent or delay free trade in their products

(Grossman and Helpman 2002). If that fails, these firms have incentives to transform trade creation into trade diversion by lobbying to restrict third-country trade to compensate for intensified competition and lower prices after regional trade protection is lost (Bhagwati 1993, 36–37).²⁵

HYPOTHESIS 4: Industries that fail to secure exemptions for their products will lobby for more external trade protection the larger the increase in import competition after regional integration.

If dynamic gains can be achieved through restructuring, however, domestic actors update their trade preferences as they adjust to the new trading environment after regional integration. When firms reorganize to exploit scale economies or increase production sharing, unit costs decline. Lowered unit costs alleviate the need for external trade protection because producers can compete more effectively in world markets. Under these conditions, domestic actors will become more favorable to external liberalization after the formation of a trading bloc.

Scale Economies and Trade Protection

Conventional wisdom holds that intraindustry trade produces no adjustment costs: as trade expands, producers differentiate their goods to compete on quality and variety rather than price. On this basis, work in political economy often suggests that the growth of intraindustry trade reduces domestic interests in trade protection.²⁶

However, this is not a plausible description of the competitive effects of trading blocs. Regional trade liberalization places small-scale producers under stress from firms that can expand scale to the enlarged market; as competition increases and prices decline, these inefficient producers face pressure to accept a takeover or exit production (Müller and Owen 1989, 175–77). As this process unfolds, expanding firms absorb the manufacturing facilities of producers that are selling off their assets (unless these are converted to other activities or de-

25. Though it is possible that increased regional competition would weaken import-competing industries too much to successfully undertake a protectionist campaign (cf. Richardson 1993; Hathaway 1998), this is likely to be an unusual result that only occurs over the long run.

26. A justification for this is Krugman's (1981) theory of monopolistic competition, in which the gains from larger markets (greater product variety and larger-scale production) outweigh the income distribution effects. In this model, firms specialize in different products mixes; no producer loses market share or faces the prospect of elimination through import competition, so there is no pressure to reallocate assets into other activities.

molished and sold for scrap) and streamline these plants with their existing operations. Thus, trade liberalization with imperfect competition is not painless: some producers expand to gain scale economies in an integrated regional market; others become targets of mergers and acquisitions, or simply lose business and go bankrupt.

In the period when production is being rescaled for a regional market, firms are likely to favor the preservation of external trade barriers to block foreign competition while they restructure—indeed, this is a key incentive for regional arrangements over multilateral liberalization. Transitional protection is especially attractive when production in a region has been fragmented through FDI. In an integrated regional market, firms would centralize manufacturing for the entire region in a few locations to maximize scale economies. But pre-existing trade barriers and TRIMs impede efforts to concentrate production because they encourage firms to operate plants in the market of final sale. Phasing out these measures leaves multinational firms with geographically dispersed factories that are functionally separated from one another and scaled for national rather than regional markets. Because manufacturing must be integrated regionally, functions specialized by location, and output concentrated, incumbent firms face heavy short-term restructuring expenses.²⁷ To compensate for this liability, producers that must reorganize across borders after regional trade liberalization are likely to favor protection against outside imports, at least while they adjust their operations.

When will protection provide a “helping hand along the learning curve” (Lipson 1982, 433) and when might it become a permanent dispensation for uncompetitive firms? In terms of comparative static analysis, producers need import barriers when unit costs exceed world prices so they can price above marginal cost; when unit costs are lower than world prices, producers tend to favor trade liberalization (at least on a reciprocal basis).²⁸ Unit costs in turn reflect the position on the cost curve relative to foreign competitors. If firms manufacture in short production runs, they will have high unit costs; foreigners will be able to sell in the region more cheaply, so domestic firms will have incentives to seek external trade protection. If over time firms are able to

27. In a standard model of FDI and trade as substitutes, liberalization allows multinationals to close inefficient plants and divest from host markets to centralize manufacturing in the home country. However, the fixed costs of establishing foreign affiliates are difficult to recover. As a result, multinational firms are more likely to specialize and integrate their operations than to end foreign production.

28. Trade protection provides rents, but it also interferes with foreign market access if it incites retaliation (Milner and Yoffie 1989).

achieve large-scale production compared to producers in other countries, then they will enjoy relatively low unit costs. At this point the need for trade protection diminishes.

Viewed dynamically, regional integration can be export promoting, as the opportunity to expand production lowers marginal costs until firms can profitably export beyond the region.²⁹ If this sort of restructuring takes place, protectionist pressure is likely to dissipate. Regional integration also can be export deterring, as it may promote oligopoly and inefficient entry rather than improved productivity (Horstmann and Markusen 1986; Dick 1994). If producers fail to gain significant scale economies, they will need continued trade protection to maintain domestic and regional market shares.

Thus, producers become more favorable to multilateral liberalization when conditions to exploit scale economies are present in regional arrangements. At the margin, producers will seek less external trade protection the more they experience cost reduction—that is, the greater the increase in the scale of output and the larger the returns to scale. The scale of output increases in greater increments the larger the regional market and the more integrated this market after regional trade liberalization. In short, regional market size and the level of internal liberalization generally determine the extent to which conditions to exploit scale economies are satisfied.

To summarize, the combined market after regional trade liberalization must be large enough and sufficiently integrated for firms to be able to expand production or specialize activities between parent plants and foreign affiliates. As this restructuring proceeds and firms gain scale economies, the need for trade protection declines. In this case, external barriers in trading blocs merely provide “breathing room” to prepare firms to compete more vigorously on a global scale. However, if the regional market is too small or internal liberalization is incomplete, then producers will not be able to achieve cost reduction. Under these conditions, firms will develop a vested interest in regional trade protection to reap monopoly rents that global trade liberalization would bid away.

HYPOTHESIS 5: Producers with unexploited scale economies will seek to preserve external trade barriers. Over time, producers that gain scale economies inside a trading bloc will become more favorable to external liberalization.

29. Krugman (1992, 80) explains, “the circular causation from output to marginal cost to output makes import protection an export promotion device.”

Production Sharing and Trade Protection

Some analysts suggest that firms with regional supply networks have no interest in policies toward cross-regional trade. Since multinationals trade little across continents, Wells (1992) argues, they regard the prospect of increased protection between trading blocs with a “big yawn.” However, if foreign competitors service regional markets through exports rather than local production, firms already based in the region can earn rents from trade protection. Thus, it is important to consider how regional production sharing affects preferences toward external trade.

To the extent that increased offshore procurement reduces factor costs, the effect on trade preferences should be the same as when producers gain scale economies. If firms successfully integrate intermediate goods production between parent plants and foreign affiliates, they are likely to lose interest in trade protection and become more favorable to multilateral liberalization. If economic and regulatory barriers to production sharing persist, however, firms will continue to face competitive pressure from foreign producers with lower comparative costs.³⁰ To the extent that regional arrangements fail to provide deeper integration and policy harmonization, multinational firms will have difficulty specializing operations between labor-rich and labor-scarce areas. Under these conditions, their interest in external trade protection is not likely to diminish.

HYPOTHESIS 6: Firms that deepen production sharing after regional integration will become more favorable to external liberalization.

Inward FDI and Trade Protection

The benefits of trading blocs for local producers—an enlarged, integrated market with barriers to outside imports—also serve as inducements to firms headquartered in other regions. Regional integration tends to stimulate inward FDI when the unique advantages of foreign firms (proprietary technologies, managerial skills and practices, brand name recognition, advertising advantages,

30. A number of factors can undermine corporate restructuring after regional trade liberalization: an unstable investment climate, barriers to capital movements or profit repatriation, poor transportation networks and customs delays (which interfere with just-in-time delivery systems and continuous flow technologies), competing production structures among the countries in a region (which reduce factor cost differences), labor laws that prevent firms from adjusting skill ratios across plants through layoffs, and so on.

networks of suppliers and customers, and so on) can be easily deployed abroad. Global capital mobility therefore creates opportunities for multinationals outside an integrating region to relocate inside the trading bloc to benefit from regional trade liberalization.

This poses a problem for producers already established in the region. For one, inward FDI makes it difficult for incumbent firms to capture the gains from regional integration. When foreign firms substitute production in the region for imports from the outside, local producers reap less benefit from external trade protection: new entrants raise their prices to share in protectionist rents, while fewer imports arrive from outside the region to pay the tax.³¹ Moreover, firms in industries with large returns to scale will have difficulty concentrating production if foreign competitors can gain market shares through FDI because entry pushes producers already established in the region up their cost curves. Finally, incumbents will be at a disadvantage if competitors can build state-of-the-art factories while they are trying to rationalize and streamline outmoded operations.

When production is internationally mobile, rules of origin and other TRIMs make it possible for incumbents to capture a larger share of the gains from regional integration. These measures protect local production because they deter FDI by foreign competitors that are not able to meet the requirements at acceptable cost. Rules of origin, for example, target companies that produce a certain share of value content or perform specific technical processes outside the region—usually (though not necessarily) foreign multinationals—by denying them free trade privileges. While rules of origin are generally designed to block transshipment when there are tariff differentials among the members of a trading bloc, their use as an entry restriction has received less attention.³² Absent guarantees that new entrants will not be able to share in the benefits of regional integration, established firms are not likely to undertake costly investments to reorganize their operations. Forcing outsiders to pay an entry fee (that is, to source higher-cost local inputs) channels rents to incumbent firms that already have met these criteria. Excludability in turn limits free

31. As a result, studies suggest that protectionist lobbies are less effective when capital is mobile internationally. Grossman and Helpman (1996) suggest that FDI intensifies free riding in the domestic industry because entrants can share in the benefits of a lobbying campaign after the costs have been paid. Froot and Yoffie (1993) emphasize foreign entry, which they contend bids away the rents to local owners of capital.

32. Cadot, de Melo, and Olarreaga (2001) argue that restraining transshipment to preserve protectionist rents helps to neutralize opposition to a free trade agreement from import-competing industries. Krueger (1999) emphasizes incentives to export protection to regional partners through rules of origin.

riding, so the potential for entry barriers against outsiders makes it easier to mobilize lobbying efforts to liberalize trade and FDI regionally.

In sum, inward FDI—or the threat of it—is likely to defuse pressure for traditional forms of protection such as tariffs and nontariff barriers. But producers in industries with large returns to scale and internationally mobile capital will tend to seek origin rules to restrict foreign entry while they streamline operations, eliminate outmoded factories, and integrate production networks inside a trading bloc.

*HYPOTHESIS 7: If the formation of a trading bloc is likely to stimulate FDI from outside the region, industries will tend to seek TRIMs to limit foreign entry.*³³

Moving from Trade Preferences to Policy Outcomes

The explanatory framework detailed in the preceding pages focuses on producers' trade preferences. To complete the argument, it is necessary to analyze how domestic actors organize into groups and work within policy-making processes to influence national policy choices. This requires attention to the collective action problems and political institutions that domestic actors face.

In the mobilization of domestic actors into groups, two relevant considerations are excludability and the cost of organizing a group (Alt and Gilligan 1994). Trade policy resembles a public good because its effects are not excludable—nobody can be prevented from sharing in the benefits after lobbying expenses have been paid. This creates collective action problems, notably free riding. In addition, it is costly to organize a group when many actors are involved and when production is dispersed geographically or economically (Olson 1965).

Excludability varies, at least in part, with factor specificity. As stated previously, domestic actors tend to organize as factors of production (capital, labor) when factors are mobile, and as sectors (textiles, automobiles) when factors are industry specific.³⁴ All else equal, it is more difficult for factors than for sectors to mobilize a lobbying campaign due to free riding (Alt and Gilligan 1994, 183–85).

33. This hypothesis is general to both free trade areas and customs unions. While rules of origin have attracted more attention in free trade areas like NAFTA, the EU case in chapter 5 shows that they are important to the workings of customs unions as well. Because there are incentives to limit foreign entry even when external trade practices have been fully harmonized, TRIMs will not necessarily be more prevalent in free trade areas than in customs unions.

34. The discussion in this chapter focuses on private firms (that is, owners of capital and land), but not labor. Chase (2003, 147–49) develops the analytical framework's implications for labor union preferences and whether groups will lobby as factors or sectors.

The framework presented here is consistent with the specific factors approach, though it is not derived from standard trade models. Work on industrial organization finds that scale economies and entry barriers tend to coexist (Stigler 1968; Caves and Porter 1976). Theories of FDI (e.g., Caves 1996) also emphasize specific assets, entry barriers, and imperfect competition. While to date these theories have not been formally integrated, they point in the same direction: high levels of factor specificity.

Factor specificity with imperfect competition has important implications for the organization of domestic actors into groups. On the one hand, it eases collective action because policy benefits are more excludable. Trade policy in imperfectly competitive industries “is virtually a private good” because the effects “are highly concentrated on single firms” (Gilligan 1997, 456, 464). Individual firms (or small groups of like firms) can more easily absorb the costs and internalize the benefits of their political activity. This alleviates free riding and increases the incentives to lobby.

On the other hand, factor specificity may lead to firm-based rather than sector-based lobbying. Sectors can be composed of firms with a range of unit costs if producers operate plants that vary in scale or the level of offshore procurement. Since these are characteristics of firms—and individual firms rather than sectors as a whole internalize the effects of policies that facilitate scale economies and outsourcing—industry solidarity could break down. It therefore is not clear that the sector is the relevant unit of analysis with imperfect competition.³⁵ The book’s theory anticipates both industry-based and firm-based lobbying, but does not distinguish when one or the other will occur. In the end this is an empirical question, and disagreements between particular firms, and between firms and their trade association, are noted in the case studies when they arise.

Whether domestic actors lobby as sectors or firms matters only insofar as it affects their ability to influence policy. In practice, divisions between firms in the same sector may not be exposed in trade lobbying because producers have incentives to lobby as sectors even when policy effects are not felt at the associational level.³⁶ For example, trade associations tend to present a united front to maximize their weight in the policy process. To the extent that they do not, opposing interests will cancel out, undermining the political strength of the lobby group.

35. Even with interindustry trade, conflicts of interest between firms in the same industry are more common than standard trade models allow because markets can be segmented and products differentiated.

36. Milner (1988) studies characteristics of individual firms (export dependence and multinationality) and finds a high degree of coherence in business groups and industry associations.

Imperfect competition also affects the cost of organizing a group. If collective action costs are low, large, encompassing groups such as grassroots lobbies and political parties tend to be powerful. Small, concentrated pressure groups will have more political strength when collective action costs are high (Alt and Gilligan 1994). In these circumstances, industrial and geographic concentration will make it easier to influence policy.

In addition, however, collective action costs interact with political institutions. In democratic systems, politicians benefit (in terms of campaign contributions, for example) from the provision of sector-specific policies to organized groups, but they also face electoral constraints from voters and taxpayers who can penalize them for directing rents to special interests. Institutional analysis suggests that winner-take-all systems in particular reward concentrated interests, so long as these are dispersed across electoral districts (Rogowski 1987).³⁷ In undemocratic systems, well-connected interests benefit from the absence of established channels for exerting political pressure (due to voting restrictions, restraints on assembly, and the weakness of parties and intermediate associations) because these make collective action difficult for groups that face high organization costs.

This discussion suggests that imperfectly competitive industries are likely to enjoy organizational advantages, particularly in institutional environments that reward special interests over the median voter and concentrated rather than dispersed groups. In imperfect markets, a few large firms dominate. These types of industries ordinarily have small numbers of actors, concentrated interests, and firms with substantial resources at their disposal—all of which facilitate effective organization and political clout. In short, firms that are powerful in the market also are likely to be powerful in politics.

To summarize, the analysis proceeds from two sets of expectations about the organization of domestic actors into groups and their ability to influence policy. First, domestic actors in imperfectly competitive industries may have incentives to lobby as firms rather than as sectors. But even when firms in the same industry do not organize collectively, they will be able to mobilize political pressure to the extent that they are individually large and concentrated. Second, large employment size and concentration in production and physical space are likely to be associated with influence over government policy, particularly when collective action costs are high. Thus, “[t]he policy and political

37. Geographic dispersion is most influential in majoritarian systems with low party discipline (such as the United States) because geographically dispersed groups wield the greatest strength in the legislature (McGillivray 1997).

concerns of specific and concentrated economic sectors are expected to dominate in most instances” (Frieden 1991, 9).

Ultimately, however, moving from trade preferences to national policy outcomes is difficult. Coalition-building processes are notoriously difficult to predict, policy-making institutions tend to be unique to each country, and so many other causal forces intervene. Because of these challenges, few scholars systematically examine both the demand and supply side of domestic politics.³⁸ The approach in this book is not to attempt new theoretical claims but rather to use the generalizations about collective action outlined in the preceding to provide descriptive insights into the politics underlying policy outcomes in the countries under examination. In some instances, such as the interwar German case in chapter 3 and U.S. policy before 1934 in chapter 4, gaps between group preferences and policy outcomes are visible. Yet even where the analysis cannot fully explain national policy choices, it is clear that the factors on which the theory focuses played a key role.

Methods of Research

The book’s analytical framework illuminates domestic actors’ incentives to support or oppose regional trade liberalization and to seek an increase or a reduction in regional trade barriers. The case studies subject these hypotheses to systematic scrutiny. This involves two research tasks. First, the framework’s observable implications for the trade preferences of domestic actors in a given country must be specified. Second, these expectations must be evaluated against the actual behavior of organized groups.

The primary independent variables are technological features of production that are distributed unevenly across industries: the size and extent of scale economies and the capacity for production sharing. These variables can be measured (though not always with precision) with data available in industrial censuses and national trade statistics.

Measuring Economies of Scale

When there is the potential for scale economies, unit costs differ across plants (or firms) manufacturing the same product in different volumes. Analysts cannot observe long-run average cost curves, however, so they have developed in-

38. Previous studies (e.g., Milner 1988; Rogowski 1989; Frieden 1991) evaluate domestic actors’ raw preferences or assume that preferences alone determine policy.

direct methods of evaluation. This study draws primarily from engineering estimates, which estimate returns to scale and MES plant sizes from the unit cost data of engineers who design and construct factories. The MES is expressed in terms of annual output of an article by weight or number. The returns to scale are the elasticity of costs with respect to scale—usually the percentage increase in unit costs at one-half or one-third MES.

Because this method involves immense data burdens, information is available for a limited range of products.³⁹ Most of the available estimates were made between 1956 and 1975.⁴⁰ Because of changes in technology, these data probably reflect MES levels larger than those that prevailed before World War II. Developments in the last two decades also may call into question the validity of these measures. Recently, “flexible manufacturing systems” have emerged, particularly in capital goods industries using complex machinery to perform repetitive tasks (such as cutting, forming, welding, or assembling metal). Some analysts argue that flexible manufacturing has reduced the need for mass production. In this view, replacing large, specialized machinery with more adaptable equipment (numerically controlled machine tools, computer-aided design and manufacturing systems, industrial robotics, and the like) has enabled firms to shorten production runs or reduce batch sizes to differentiate products, minimize inventory and overhead, and limit the risk of excess capacity.

In many industries, however, technological changes have increased rather than reduced MES production levels. In synthetic fibers, the lowest-cost output per plant is at least 150 million pounds today, compared to 40 million pounds in the 1950s. In chemical intermediates such as ethylene and ammonia, MES levels increased from one hundred thousand tons to five hundred thousand tons. MES output for an integrated steelworks grew to six to nine million tons with the advent of basic oxygen furnaces and continuous casting. Radial technology for steel-belted tires also increased optimal plant sizes significantly. New consumer goods such as personal computers, videocassette recorders, and cellular telephones also have exhibited rising MES levels with standardization for mass markets.

Thus, there is little reason to believe that scale economies have diminished in importance. Unfortunately, MES statistics for a large number of industries

39. Observations must cover plants using the same technology and paying the same factor prices to control for external influences on production costs. As Bain (1959, 346) notes, “random differences in rates of utilization, techniques employed, wages or material prices paid” can introduce measurement error into these estimates.

40. Pratten (1988) compiles the results of numerous studies, including Bain 1959; Scherer 1970; Pratten 1971; and Scherer et al. 1975.

at several points in time simply do not exist. This makes empirical work challenging, but even estimates from a single point in time provide valuable insights.⁴¹

The appendix describes the method implemented in chapters 3 and 4 to measure an industry's scale position. In addition, chapter 6 employs a more direct method for estimating the returns to scale (a technique that requires large amounts of data, which are available only for the United States). Wherever possible, the cases also supplement engineering data with qualitative evidence from industry studies.

The framework's predictions are that producers will support regional trade liberalization when returns to scale are large and the MES is a significant proportion of the domestic market. Stated as comparative dynamics, producers are likely to become interested in trading blocs when returns to scale increase or MES levels grow. Pressure for external trade protection depends on the scale firms already have attained compared to foreign rivals. The greater the increase in scale after regional trade liberalization or the larger the regional market relative to the MES, the more it is likely that protectionism will diminish over time. But if the regional market is small and scale does not increase, then pressure for external trade barriers will persist or intensify.

Measuring Production Sharing

The technological features conducive to production sharing also are difficult to measure directly. For the most part, governments other than the United States do not collect data on outsourcing trade. Production sharing was generally uncommon before the 1960s, and so while chapter 3 presents qualitative details about FDI in specific industries where available, there is little evidence to suggest that this was a strong motive for interwar-era trading blocs.

For more recent periods, chapters 5 through 7 infer offshore manufacturing from trade flows and FDI stocks. A useful proxy is intrafirm trade as a percentage of domestic sales. Otherwise, foreign production in combination with trade patterns provides inferences about the level of production sharing. In industries with substantial foreign production and large trade shares in total output, offshore manufacturing is likely to be high. If there is significant foreign production with small amounts of two-way trade, or little foreign production

41. Another method is "survivor tests," which observe changes over time in the distribution of plants across size classes. But these produce crude and often indeterminate results, as usually there are multiple-size classes compatible with the definition of optimal plant size (see Stigler 1968, 71–73; Pratten 1971, 27–28).

at all, then offshore manufacturing is low. These measures at least should be correlated with unobservable production-sharing patterns.

The framework's observable implication is that firms in industries involved in outsourcing activity are likely to be the most favorable to regional trade liberalization to further develop regional production networks. Thus, support for trading blocs will tend to increase the greater the level of intrafirm trade in total output and the larger the share of foreign production in total sales. Over time, firms are likely to exert less pressure for external trade barriers the more that involvement in production sharing reduces labor costs. If outsourcing trade does not increase, firms will not curtail past protectionism.

Other Independent Variables

In perfectly competitive industries, proxies for comparative costs such as import penetration and export orientation provide the basis for expectations about domestic actors' trade preferences. Producers with a high export to output ratio are likely to be favorable to trading blocs the more these exports are regionally concentrated; if exports are destined for markets outside the region, producers will tend to oppose regional integration out of concern for foreign retaliation. In industries with a high import to consumption ratio, producers are more likely to oppose the formation of a trading bloc the larger the proportion of total imports from countries in the region. Over time, protectionist pressures are likely to intensify the more that regional trade liberalization enhances competition—that is, the greater the increase in imports to consumption.

Dependent Variables

The case chapters evaluate the strength of the association between the independent variables and the policy demands of domestic actors. The policy demands of domestic actors are then employed to explain national trade policy choices. The analysis has two objectives. First, it seeks to demonstrate a correlation between the hypothesized causal variables and organized group behavior. Second, the case studies illuminate how policy demands by domestic actors subsequently influence national policy choices

The book employs several techniques to evaluate the primary dependent variable, the policy demands of domestic groups. The case studies present material from public hearings, policy reviews, and other reports of political activity by organized groups, firms, and labor unions. Petitions to government agencies provide information about groups seeking special measures to gain

access to markets abroad or restrict foreign imports into the domestic market (for example, through antidumping relief or a tariff increase). Where useful, the cases also employ archival records and secondary sources such as corporate histories and participant accounts of trade policy-making.

National policy choices can be more readily observed and measured. Treaties disclose the extent and pace of trade liberalization in regional arrangements, the origin rules and content requirements for each product, and relevant understandings regarding external trade protection. Changes in tariff rates and nontariff barriers (at the national level in free trade areas and regionally in customs unions) also are widely available.

Table 4 summarizes the variables in the study and the methods of measurement.

Omitted Variables

The explanatory variables in the analytical framework are not exhaustive, but they do help to explain the phenomena under examination—the formation and evolution of trading blocs. Clearly there are important geopolitical factors involved in this process as well. Regional trade agreements are international treaties. Interstate bargaining no doubt influences the pace and scope of internal liberalization and the level of external tariffs. In the course of negotiations, concentrated domestic groups might not dominate if there is a need to trade

TABLE 4. Variables and Methods of Measurement

	Methods of Measurement
<i>Dependent Variable</i>	
Group lobbying	Qualitative determination based on government documents, company petitions, industry studies, and secondary sources
External trade barriers	Nominal tariff rates in national tariff code Duties collected divided by imports Counts of industry nontariff barrier petitions Nontariff barrier coverage ratios
<i>Independent Variable</i>	
Returns to scale	Engineering production function estimates Elasticity of value added per worker with respect to plant size
MES	Engineering production function estimates
Market size	Domestic sales plus imports minus exports
Production sharing	Intrafirm trade or outsourcing trade divided by total shipments
Import competition	Imports divided by consumption
Export dependence	Exports divided by total shipments
Inward FDI	Foreign firms' share of total shipments

off opposing interests to reach an agreement that satisfies each country's win-set. Evaluating the extent to which variations in policy reflect bargaining at the interstate level would require attention to factors in the strategic environment. However, strategic interaction between members of a trading bloc is left for others to address so that the main puzzle can be defined and analyzed in a manageable way.

Along with interstate bargaining, a range of factors such as cultural affinity, emulation, common development programs (import substitution in the 1960s, market-based reform in the 1990s), concerns about access to strategic materials, and political-military relations have influenced national decisions in trade policy. Unique features of regional arrangements are noted where relevant, but they are not integrated into the explanatory framework. This is problematic only if alternative explanations are less idiosyncratic than believed and if one or more outperforms mine. Even if interest group support is not always sufficient to explain national choices for regional integration, the book seeks to establish that it is necessary.

The Case Studies

The case chapters focus on large countries in the world's major trading regions. In the end, the emergence of trading blocs has reflected the efforts of key large states: without Britain, there would have been no commonwealth; without Japan, no East Asian Co-Prosperty Sphere; without the United States, no NAFTA.

The cases have been selected to illuminate differences across countries in the choice to form or not to form a trading bloc. Examples of countries with weak domestic pressure for regionalism permit counterfactual inferences about the conditions that cause states to deviate from a multilateral orientation. Since all domestic actors manufacturing tradable goods should have preferences over trade policy, country cases are free of bias as long as they include industries with the different economic characteristics outlined in the argument. Within countries, variation also exists across industries in the scope of regional trade liberalization and the level of external trade barriers.

The Interwar Period

After World War I, new manufacturing techniques required mass production to be profitably employed. During the 1920s, automakers and machinery pro-

ducers introduced assembly lines; steelmakers built continuous strip mills; high-pressure chemical synthesis and larger tanks for refining liquids appeared in dyes, fibers, and fertilizers; and scale, R&D, and learning became critical in electrical and electronic equipment. Advances in rail transport and shipping made it easier for firms to concentrate production and market their goods on a wider scale. In response, factories increased dramatically in size.

The twenty years after World War I also witnessed an upsurge of protectionism, territorial expansion, and commercial discrimination. Japan imposed the world's highest tariffs in the 1920s and then sought to expand the boundaries of its empire through conquest. Britain abandoned free trade with the General Tariff and Imperial Preference. Germany used bilateral agreements to gain markets in central Europe and adopted strict exchange controls, culminating in the New Plan of 1934. These "1930s-model" blocs were "territorial in scope" and "tightly organized and politically circumscribed" (Frankel and Kahler 1993, 6). Imperial blocs typically raised tariffs against outsiders more than they reduced them internally, so trade destruction dominated trade creation (Eichengreen and Irwin 1995).

The United States instead pursued MFN-based trade liberalization in the years after the Smoot-Hawley tariff. Most U.S. producers had reached a high rate of output in an enormous national market, so they had no need for trade protection. Elsewhere, small-scale producers faced intense foreign competition, usually from the United States, and they struggled to gain market shares to sustain mass production. In Japan and Britain, firms with small plants sought to gain scale economies in trading blocs sheltered by high tariff walls; German heavy industry supported trade treaties in central Europe. The case studies trace how trade policy in these three countries responded to political pressure from industry groups that were disadvantaged in global competition due to small-scale production and geographically limited national markets.

The Postwar Period

In the last half century, reduced transport and communication costs with the advent of transoceanic air travel, the microchip, satellites, and the Internet have made it possible to specialize and coordinate production across borders and over long distances. These developments have extended the range of the available market and increased plant sizes in activities with large returns to scale. FDI also has grown as capital and technology have become more mobile internationally. Many multinationals have rationalized their operations to concentrate

production and relocate labor-intensive tasks to labor-rich areas. These trends have unleashed intrafirm trade flows as intermediate inputs cross borders for assembly and final sale.

With the establishment of production-sharing networks, regional arrangements have provided a framework to ensure access to a regional market from one central location, free movement of intermediate goods within a company, and guarantees for FDI. Contemporary trading blocs have been oriented primarily toward eliminating “behind-the-border” distortions that inhibit multinational corporate expansion. The main purpose of the EC’s single-market program was to harmonize product standards and eliminate the externalities of national control over nontariff barriers so that firms could rescale production for the regional market. In North America, multinationals sought free trade between the United States, Canada, and Mexico to liberalize FDI, strengthen intellectual property rights, and introduce dispute settlement procedures. Only in East Asia, where Japanese companies established regional supply networks only recently, has broad-based domestic pressure for regional integration failed to materialize.

These regional arrangements need not preclude further trade liberalization at the global level. Definitely there are exclusive elements in all regional arrangements. But domestic interests in trade liberalization regionally rather than globally are not necessarily protectionist in their motives. In fact, the book suggests that trading blocs can help to prepare companies—and countries—to compete more vigorously internationally. As producers gain scale economies and deepen production sharing, the need for protection against outsiders diminishes. When these adjustments occur, regional arrangements advance progress toward multilateral trade liberalization more than they undermine it.

The book’s broader implication is that understanding the political consequences of globalization, both today and in the 1930s, requires that scholars evaluate the effects of market integration and technological change on micro-economic interests, as well as the impact of shifting preferences and domestic coalitions on policy responses at the national level. Studies that focus on the interests and actions of nation states fail to illuminate these internal political struggles. A few studies have noted the significance of scale economies and FDI in the political economy of trade, but none of this work integrates the dynamic benefits central to the formation of trading blocs into a single analytical framework. This book incorporates these factors into a domestic theory of trade preferences. The chapters that follow demonstrate that the analytical framework helps to explain political demands and national policies across a broad array of countries and time.