The Empirical Record

The analysis in the previous chapter provides a plausible explanation for the two empirical puzzles laid out in the opening pages of the book by looking at the interaction between domestic and international politics. If the theoretical mechanism suggested here is what really drives the negotiation dynamics, then the reason that U.S. pressure is more effective with countries such as Japan than with countries such as China resides in the different structure of these dyadic trade relationships and in the ways in which trade structure divides or unites domestic actors. Before delving into detailed case studies to see how these factors play out in the negotiation processes, I will first provide an overview of the record of trade negotiations between the United States and its major trading partners to establish the empirical validity of the research questions and to show that, rather than deliberately setting up an analytical straw man, the book explains two puzzling patterns that do exist in the real world.

Drawing primarily on the database on Section 301 cases provided by Bayard and Elliott, I show that substantial differences exist in the effectiveness of American pressure across countries and that these differences cannot be readily explained by the degree to which the target countries are dependent on the U.S. markets for exports. Rather, trade competitiveness/complementarity better predicts the variations in threat effectiveness. This chapter also looks at the record of trade conflicts initiated by the United States and shows that trade wars have taken place more frequently between the United States and its competitive trading partners and that regime type is irrelevant to understanding patterns of trade war.[1] Although the theory of democratic peace may offer accurate predictions of the pattern of interstate military wars, it does a less good job describing the pattern of trade wars among nations. Once again, my quantitative analysis reveals the importance of trade competitiveness/complementarity in explaining patterns of trade wars.

A Profile of Recent U.S. Trade Actions

Before proceeding to the empirical test, I first provide an overview of
the policy instruments frequently invoked by the United States at the
unilateral, bilateral, and multilateral levels designed to address
allegedly unfair foreign trade practices and the recent trade actions
undertaken by the United States pursuant to these relevant provisions
in order to lay out the general context of American trade policy.
Although this study will focus primarily on unilateral market-opening
measures under Section 301, it may be argued that the political dynam-
ics characterizing unilateral trade sanctions is equally applicable to
U.S. bilateral and multilateral trade actions since the initiation and res-
olution of these other trade actions similarly depend on the degree to
which domestic actors support such measures designed to address the
alleged unfair trade practices of foreign actors. Due to space limita-
tions, this study will not undertake detailed analyses of the connection
between trade structure and the outcome of each set of U.S. trade
actions and will instead leave this task to future investigation.

Administration of U.S. Trade Laws and Regulations

A wide range of legal statutes in the United States provides trade-rem-
edy measures to deal with allegedly harmful effects of unfair foreign
trade practices. The most frequently utilized trade-remedy measures
include Section 301 of U.S. trade law, antidumping (AD) and counter-
vailing duties (CVD), safeguard actions, and special arrangements for
agricultural products and for textiles and clothing.

Section 301 and Related Actions

The United States has frequently invoked what has been dubbed
"aggressively unilateral" trade strategy in an attempt to open foreign
markets. Section 301 of the U.S. trade law, which came into existence
in 1974 in response to industry concerns about unfair foreign competi-
tion, provides the USTR with enhanced authority either to self-initiate
a case or to launch a Section 301 investigation into an alleged unfair
trade barrier at the request of private parties. Under the Section 301
statute, the USTR is required to undertake consultations with the rele-
vant foreign government in order to reach a settlement. In the event
that a settlement cannot be reached, the USTR would either invoke
dispute settlement procedures of the GATT/WTO if a trade agreement

is involved or decide on the measures to be pursued to compensate for the losses of American business interests.

There are two variations of the Section 301 procedure: the Super 301 provisions incorporated in the Omnibus Trade and Competitiveness Act of 1988 and Special 301 provisions. Reflecting Congress's desire for the USTR to set priorities and to pursue them vigorously, the Super 301 provision of the 1988 trade act authorized the USTR both to identify foreign practices, "the elimination of which are likely to have the most significant potential to increase U.S. exports (either directly or through establishing a beneficial precedent)" and to identify "priority foreign countries" on the basis of the "number and pervasiveness" of the unfair trade practices and "the level of United States exports of goods and services that would be reasonably expected from full implementation of existing trade agreements."[2]

Special 301, in turn, provides for investigation against "priority foreign countries" that may infringe on U.S. IPR. In its annual *National Trade Estimate Report,* the USTR typically singles out countries to be named in the following lists: priority foreign country, priority watch list, and special mention. Table 3.4 provides a breakdown by country of Section 301 (including both Super and Special 301) actions the United States initiated between 1975 and 1995. Between January 1995 and August 1999, the USTR initiated another twenty-five Section 301 cases targeted at a greater number of countries. Notably, the institution of new dispute settlement procedures of the WTO did not lead to a decline in the frequency of Section 301 investigations. Indeed, the USTR has continued to supplement multilateral and bilateral trade negotiations with the aggressive pursuit of unilateral market-opening strategies in order to address unfair trade practices of non-WTO member countries or those in areas not yet covered by the WTO. It is reasonable to expect that aggressive unilateralism will continue to be an important component of U.S. trade policy.

Antidumping and Countervailing Duties

The rise in international competition in recent decades has led many U.S. firms to resort increasingly to U.S. "unfair" trade laws, including the AD and CVD laws to seek relief from foreign imports. The AD law allows U.S. firms or industries to seek protection from "unfair" pricing practices of foreign firms, whereas the CVD law is designed to protect domestic firms and industries from subsidies provided by foreign government. Typically, requests for AD and CVD actions are made by

firms and industries directly to the International Trade Administration (ITA) of the Commerce Department and the U.S. International Trade Commission (USITC), two agencies with congressionally mandated authority to determine whether unfair practice has occurred or whether such practice has injured the U.S. industry. In cases where both the ITA and the USITC make an affirmative decision, an AD or CVD duty is usually imposed to counter the effects of the alleged unfair practice.

Table 3.1 lists the AD investigations the United States initiated, ordered, and revoked between 1980 and 1999. As we can see, industry resort to AD laws has risen steadily since the late 1980s. It reached its peak in 1992 and then declined in the late 1990s, dropping to only fifteen cases in 1997. In terms of the geographical distribution of AD actions, Japan has been singled out most frequently, accounting for 16 percent of all the AD duties in effect in 1999. As to the product distribution of AD actions, iron and steel products take up the lion's share, accounting for 41 percent of all affected products in 1999.[3]

The pattern of CVD actions (see table 3.2) parallels that of AD actions, as CVD actions also peaked in 1992, with twenty-two cases, and then fell to six in 1997 and eleven in 1998. Iron and steel products again take up a disproportionately large share of CVD actions, accounting for 58.8 percent of all CVD duties in effect in 1999.[4]

Safeguard Actions

Under Section 201 of the U.S. Trade Act of 1974, an industry can apply for safeguard relief with the USITC. An affirmative decision by the USITC that an industry has been injured by increased imports will result in the application of safeguard measures for up to four years, or even eight years at the maximum. As of March 2000, safeguard measures were being provided for the following products: wheat gluten, lamb meat, certain wire (wire rod), and circular-welded, carbon-quality line pipe.

U.S. Bilateral Trade Policy Initiatives

In addition to addressing unfair foreign trade practices through existing U.S. trade laws, Washington has conducted extensive bilateral discussions with many of its trading partners to achieve expanded market access for U.S. firms. The following discussion of U.S. bilateral trade initiatives focuses mainly on U.S. trade negotiations with its major trading partners, such as China, Japan, and the EU.

TABLE 3.1. U.S. Antidumping (AD) Investigations, 1980–99

	1980–85	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1980–99
Initiations	218	83	16	42	24	35	66	84	37	51	14	21	15	36	46	788
Preliminary Determinations	156	52	45	35	23	25	43	54	67	46	23	16	16	28	34	663
Final Determinations	117	43	58	17	40	18	28	28	80	31	38	12	15	17	37	579
Duty Orders	59	26	53	12	24	14	19	16	42	16	24	9	7	9	19	349
Revocations	37	8	9	0	5	10	7	1	3	28	12	6	4	25	48	203

Source: International Trade Administration, <http://ia.ita.doc.gov/stats/ad8099.htm>.

TABLE 3.2. U.S. Countervailing Duty Investigations, 1980–99

	1980–85	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1980–99
Initiations	173	28	8	17	7	7	11	22	5	7	2	1	6	11	10	315
Preliminary Determinations	144	28	10	18	6	4	9	26	1	7	3	0	3	7	9	275
Final Determinations	104	22	20	14	12	4	5	7	20	2	6	2	0	2	15	235
Duty Orders	65	13	14	7	6	2	2	4	16	1	2	2	0	1	6	141
Revocations	68	4	2	1	5	4	6	0	1	5	35	1	1	4	19	156

Source: International Trade Administration, <http://ia.ita.doc.gov/stats/cvd-1980-2002.html>.

According to the Trade and Related Agreements Database (TARA) compiled by the Trade Compliance Center (TCC), which covers active, binding agreements between the United States and its trading partners in manufactured products and services, the United States has reached fifteen major bilateral trade agreements with the People's Republic of China since 1992. The agreements cover such issues as IPR, market access, textile products, and commercial launch services.[5]

In terms of U.S. bilateral trade initiatives vis-à-vis Japan, the U.S. government has managed to reach over forty market-opening agreements with that country since 1989. Many of these agreements were accompanied by extensive monitoring and enforcement mechanisms and incorporated "objective" criteria as the basis for the evaluation of progress. Some of the most prominent issues covered by the agreements include auto and auto parts, government procurement (especially in the areas of telecommunications, computers, supercomputers, public works, and medical technology), deregulation of financial services, insurance, and the telecommunication sectors. Finally, fifteen bilateral trade agreements between the United States and the EU are currently in effect, covering such areas as civil aircraft, government procurement, and enlargement.[6]

U.S. Dispute Settlement Actions in the Multilateral Context

In addition to addressing alleged unfair foreign practices either bilaterally or within the framework of U.S. unfair trade laws and regulations, the United States has frequently resorted to the multilateral forum provided by the GATT and its successor, the WTO, to settle disputes with its trading partners. The launching of the WTO in January 1995, with the redesign and strengthening of the Dispute Settlement Mechanism (DSM), has introduced some important changes in dispute resolution procedures. Compared to the dispute settlement procedures in the GATT, several features of the new DSM may have affected the degree to which the United States can effectively utilize the multilateral forum to pursue its trade policy objectives. For example, under the new DSM rules, it is no longer possible for a nation that does not want another country to take the dispute to the WTO to indefinitely delay the establishment of a dispute panel. A nation that is not happy with the WTO panel ruling gains the ability to block the finding on appeal. The new dispute settlement procedures also increase opportunities for arbitration, specify standard terms of reference, and enhance surveillance of the implementation of the panel reports.[7]

Due to the broader coverage of the WTO, the number of consultation requests has risen since 1995. While a total of 278 cases were initiated in the first four decades of the GATT between 1948 and 1987, a total of 317 cases were initiated between 1988 and 1998.[8] As the breakdown of the consultation requests made under the WTO suggests (see table 3.3), the United States has most frequently resorted to the DSM, initiating 65 out of the total of 202 consultation requests filed between January 1995 and June 2000, including 25 against the EU and individual EU member countries, 5 against Japan, 6 against other industrialized countries, and 29 against developing/emerging economies.

As mentioned earlier, this study will not undertake detailed analysis of the relevance of trade structure to each of the sets of trade actions discussed previously. Instead, it will focus primarily on the relationship between trade structure and the United States' aggressively unilateral trade actions under Section 301 in testing its argument. If trade structure exerts a significant impact on the effectiveness of America's unilateral trade actions, then this should provide a basis for extending my analysis to other facets of U.S. trade policy.

Trade Structure and the Effectiveness of America's "Aggressively Unilateral" Trade Policy

Using U.S. trade action under Section 301 as an example, this section tests the relationship between trade structure and threat effectiveness.

TABLE 3.3.   WTO Disputes: Consultation Requests, 1995–2000

Complainants	Respondents				
	United States	Japan	EU (including individual EC members)	Other Industrialized Countries	Developing/ Emerging Economies	Total
United States	—	5	25	6	29	65
Japan	4	—	—	1	2	7
EU	18	6	—	3	24	51
Other Industrialized Countries	5	1	7	3	11	27
Developing/ Emerging Economies	21	—	18	2	27	68
Total	48	12	50	15	93	218

Source: World Trade Organization, "Overview of the State-of-Play of WTO Disputes," see WTO website.

Chapter 1 briefly outlines the cross-national variations in American threat effectiveness under Section 301. Based on a few examples, I argue that U.S. pressure was more effective with countries such as Japan, Taiwan, and South Korea than with countries such as China, Brazil, and India. This contrast is given more empirical weight, however, if I can illustrate, through a more general survey of the record of negotiations between the United States and its major trading partners, that American economic coercion has produced more tangible results with competitive trading partners than with complementary ones. Toward this end, I examine the overall record of Section 301 negotiations conducted by the United States between 1975 and 1995.

An Overview of U.S. Section 301 Actions

To substantiate the claim that there exists substantial cross-national variations in the effectiveness of America's "aggressively unilateral" trade policy, I first calculate the average concession rates of major U.S. trading partners in Section 301 investigations, relying primarily on Bayard and Elliott's evaluation of the success of U.S. economic coercion in Section 301 cases and on Elliott and Richardson's updated and expanded data set. In both Bayard and Elliott's and Elliott and Richardson's classification schemes, the United States is "largely successful" if there is substantial compliance with U.S. demands in all issue areas; "partially successful" if the target capitulates to American demands on some, but not all, of the issues under dispute; "nominally successful" if the issue reoccurs or if the target fails to implement the agreement; and "not at all successful" if the United States fails to reach any agreement with the target.[9] Following these criteria, I rate "not at all successful" cases as "0" up through "largely successful" cases as "3" and average the results of American pressure by country. The results, reported in table 3.4, indicate that the effectiveness of American pressure varies widely with each bilateral relationship. For example, while Japan, Taiwan, South Korea, and Canada are among the U.S. trading partners most responsive to American pressure, China, India, and Argentina end up on the lower end of the responsiveness scale. The Japanese, who are most responsive to American pressure, achieve an average score of 2.07, compared with only 1 for China and 0.5 for India.

A Comparison of Section 301 Cases Involving China and Japan

If we look closely at the effectiveness of American coercive diplomacy in cases involving China and Japan, the contrast in negotiation outcomes

TABLE 3.4. Effectiveness of U.S. Pressure under Section 301

Cases Involving Japan	Degree to Which U.S. Objectives Achieved	Quantitative Score
Thrown silk (1977–78)	Largely successful	3
Leather (1977–85)	Partially successful	2
Cigars (1979–81)	Nominally successful	1
Pipe tobacco (1979–81)	Nominally successful	1
Footwear (1982–85)	Partially successful	2
Semiconductors (1985–91)	Nominally successful	1
Cigarettes (1985–86)	Largely successful	3
Citrus (1988)	Largely successful	3
Construction (1988–91)	Partially successful	2
Satellites (1989–90)	Largely successful	3
Supercomputers (1989–90)	Partially successful	2
Wood products (1989–90)	Partially successful	2
Auto parts (1994–95)	Nominally successful	1
Agricultural products (1997)*	Largely successful	3
Average result	Partially successful	2.07

Cases Involving China		
Market access (1991–92)	Nominally successful	1
IP protection (1991–92)	Nominally successful	1
IP protection (1994–96)*	Nominally successful	1
Average result	Nominally successful	1

Cases Involving EU		
Egg albumin (1975–80)	Partially successful	2
Canned fruit and vegetables (1975–79)	Nominally successful	1
Malt (1975–80)	Not at all successful	0
Wheat flour (1975–83)	Not at all successful	0
Canned fruit (1976–80)	Nominally successful	1
Soybeans and soymeal (1976–79)	Nominally successful	1
Citrus (1976–86)	Partially successful	2
Wheat (1978–80)	Nominally successful	1
Sugar (1981–82)	Not at all successful	0
Poultry (1981–84)	Nominally successful	1
Pasta (1981–87)	Partially successful	2
Canned fruit and raisins (1981–85)	Nominally successful	1
Corn, sorghum, oilseeds (1986–87)	Largely successful	3
Meatpacking (1987–89)	Not at all successful	0
Beef (1987–89)	Not at all successful	0
Soybeans (1987–90)	Nominally successful	1
Fabricated copper (1988–90)	Largely successful	3
Canned fruit (1989)	Partially successful	2
Corn, sorghum, oilseeds (1990)	Partially successful	2
Meatpacking (1990–93)	Nominally successful	1
Bananas (1995–98)*	Partially successful	2
Enlargement (1995–96)*	Nominally successful	1
Modified starch (1997)*	Partially successful	2
Average result	Nominally successful	1.3

TABLE 3.4.—*Continued*

Cases Involving Canada	Degree to Which U.S. Objectives Achieved	Quantitative Score
Eggs (1975–76)	Largely successful	3
Broadcasting (1978–84)	Not at all successful	0
Fish (1986–90)	Partially successful	2
Beer (1990–93)	Nominally successful	1
Service (1994–95)	Partially successful	2
Periodicals (1996–97)*	Partially successful	2
Average result	Nominally successful	1.67

Cases Involving Brazil		
Footwear (1982–85)	Partially successful	2
Soybean oil and meal (1983–85)	Partially successful	2
Informatics (1985–89)	Partially successful	2
Pharmaceuticals (1987–90)	Nominally successful	1
Import licensing (1989–90)	Largely successful	3
Intellectual property (1993–94)	Nominally successful	1
Automobiles (1996–98)*	Partially successful	2
Average result	Nominally successful	1.86

Cases Involving Argentina		
Marine insurance (1979–80)	Nominally successful	1
Leather (1981–82)	Not at all successful	0
Air couriers (1983–89)	Partially successful	2
Soybean oil and meal (1986–88)	Nominally successful	2
Textiles (1988–89)*	Nominally successful	1
Average result	Nominally successful	1.2

Cases Involving Korea		
Insurance (1979–80)	Nominally successful	1
Footwear (1982–85)	Partially successful	2
Insurance (1985–86)	Partially successful	2
Intellectual property (1985–86)	Nominally successful	1
Cigarettes (1988)	Partially successful	2
Beef (1988–90)	Partially successful	2
Wine (1988–89)	Partially successful	2
Agricultural market access restrictions (1994–95)*	Partially successful	2
Automobiles (1997)*	Partially successful	2
Average result	Nominally successful	1.78

Cases Involving Taiwan		
Home appliances (1976–77)	Largely successful	3
Rice (1983–84)	Partially successful	2
Motion picture films (1983–84)	Partially successful	2
Customs evaluation (1986)	Partially successful	2
Beer, wine, tobacco (1986)	Partially successful	2
Intellectual property (1992)	Partially successful	1
Average result	Partially successful	2

TABLE 3.4.—*Continued*

Cases Involving India	Degree to Which U.S. Objectives Achieved	Quantitative Score
Almonds (1987–88)	Partially successful	2
Investment (1989–90)	Not at all successful	0
Insurance (1989–90)	Not at all successful	0
Intellectual property (1991–92)	Not at all successful	0
Pharmaceuticals (1996–98)*	Nominally successful	1
Average result	Not at all successful	0.6

Note: Unless indicated by an asterisk, the degree to which U.S. negotiating objectives were achieved is based on Bayard and Elliott, *Reciprocity and Retaliation,* and Elliott and Richardson, "Determinants and Effectiveness." Since Bayard and Elliott's data only cover cases resolved as of 1992 and Elliott and Richardson only dealt with cases resolved as of 1995, evaluations of cases completed after 1995 are made using similar criteria.

is obvious. The application of pressure tactics against China resulted in only nominal success in both of the Section 301 cases involving that country.[10] Indeed, China is the second least responsive American trading partner behind India. Before the conclusion of the U.S.–China agreement on terms for China's entry into the WTO in November 1999, the United States threatened trade sanctions in an attempt to obtain unilateral concessions from the Chinese. American negotiators repeatedly found themselves defeated in efforts to force the Chinese to reduce tariffs and other trade barriers, to improve the transparency of their trade regime, to police intellectual property protection, and to strictly adhere to quota restrictions on textile trade. As the detailed case studies in chapters 4 and 6 suggest, the United States was able to extract very few meaningful concessions from China in these sets of negotiations and had to several times reinvoke threats of trade retaliation to get the Chinese to move closer to American demands. The reemergence of these issues in bilateral trade negotiations itself suggests the ineffectiveness of American pressure.

In comparison with the China cases, U.S. pressure against Japan seems to be remarkably successful. The utilization of unilateral market-opening measures against Japan turned out to be largely successful five out of fourteen times, resulted in partial success in another five cases, and was only nominally successful in the remaining four cases, thus making Japan the country most responsive to American pressure. The claim that Tokyo has most frequently caved in to American pressure is perhaps hard to believe, given the enduring complaints about Japanese trade barriers emanating from industry officials and their representatives on Capitol Hill. In particular, critics are apt to question

the extent to which Japanese concessions have produced genuine market-opening outcomes.[11] But as Bayard and Elliott's study points out, the United States has derived significant economic gains from the concessions Japan made during Section 301 negotiations. For example, under threats of Section 301 retaliation, the United States was able to increase its exports of cigarettes to Japan from less than $95 million in 1985 to more than $1 billion by 1990. U.S. exports of beef to Japan increased by $750 million, from $350 million in 1987 to $1.1 billion in 1990. Similarly, the semiconductor agreement allowed U.S. producers to increase their exports to Japan by $1 billion a year. The beef, tobacco, and semiconductor cases together accounted for more than three-fourths of the total gains the United States accrued through the use of Section 301.[12] While market barriers remained in Japan, it seems fair to say that the level of Japanese trade barriers would have been a lot higher in the absence of American pressure.

The high-profile semiconductor trade conflict between the United States and Japan provides an example of the effectiveness of American pressure in opening the Japanese market. In this case, described in more detail in chapter 5, sustained American pressure, backed by the threat and actual implementation of trade retaliation, played a crucial role in helping American manufacturers gain enhanced market access in Japan and in preventing Japanese firms from dumping in the U.S. market. As a result of Japanese concessions, American producers were able to increase their shares of the Japanese market, capturing $1 billion in additional sales between 1987 and 1990.[13] While U.S. firms might have hoped to achieve even more through trade negotiations, U.S. coercive diplomacy clearly helped to resuscitate a critical industry on the edge of extinction.

American pressure also turned out to be highly successful in the Super 301 cases over supercomputers, satellites, and forest products that will be examined in more detail in chapter 5. In these cases, U.S. threats of retaliation led to the conclusion of bilateral agreements that helped to address industry complaint about Japanese "targeting" of high-technology industries and other nontariffs barriers that impeded American manufacturers' access to the Japanese market.

To be sure, that the United States was more successful in negotiations with Japan than in negotiations with China does not mean that U.S. pressure has been uniformly successful in extracting concessions from the Japanese. In fact, a fair amount of variations exist in the degree to which Japan has yielded to U.S. demands. While the United States largely achieved its negotiation objectives in a number of Sec-

tion 301 cases involving such products as thrown silk, cigarettes, citrus, and satellites, it has met more Japanese resistance in other areas.

For example, in U.S.–Japan negotiations over satellites in 1989–90, the United States largely achieved its negotiating objectives. Under strong U.S. pressure to open up Japan's public procurement of satellites, the Japanese government eventually acceded to virtually all American demands, committing itself and entities under its control to "procure non-R&D satellites on an open, transparent and nondiscriminatory basis, and in accordance with the GATT Procurement Code."[14] Not only did Japanese observers consider the agreement "a complete acceptance of American demands" in all respects, but U.S. trade officials also regarded it as a significant setback for Japanese commercial satellite development.[15]

But if the United States has largely achieved its negotiating objective of opening Japanese government procurement to foreign bidders in the satellite case, it has had considerably less success in other negotiations with Japan. American efforts to open up Japan's public sector construction market in 1988–91, for example, only partly succeeded in improving access for U.S. firms. U.S. retaliatory threats to bar Japanese firms from bidding for U.S. public contracts led the Japanese government to commit itself to a more open and competitive bidding system and to establish more objective and transparent standards for bidding and contracting procedures. But although the list of projects open to U.S. bidding was increased, it was not implemented as the United States would have wanted. Actual U.S. export gains also appeared to be rather limited. Furthermore, U.S. firms seemed to have difficulty bidding on projects not on the list. Even though the subsequent agreement addressed additional U.S. concerns, there was much more the United States hoped to achieve through the negotiations. The outcome in this case therefore appears to represent only partial fulfillment of U.S. objectives.[16]

Moreover, there were also areas in which the United States failed to induce Japanese commitments to specific American objectives. For instance, in the years between 1993 and 1995, the Clinton administration stepped up the pressure on the Japanese government to increase the use of U.S.–made auto parts in Japanese cars and to enhance access to dealership networks by foreign carmakers. Under U.S. threats to impose prohibitive tariffs on $5.9 billion of imports of Japanese luxury cars, Japan eventually entered into an agreement with the United States in 1995. But the 1995 auto accord contained only very vague language on the expected direction and scope of change. The "results"

specified in the accord were mostly based on "voluntary plans" announced by the Japanese automakers. Without any explicit criteria, the United States had found it very difficult to monitor Japan's enforcement of the deal in any meaningful way.[17] In this case the Clinton administration was unable to achieve its core objectives through coercive diplomacy.

This brief survey of the record of U.S. trade negotiations with Japan is intended to show that, even though U.S. pressure on Japan is highly effective overall, there are also cases in which U.S. pressure only marginally succeeded in affecting Japanese behavior. What is most important for the purposes of the present study, however, is that when compared with America's other trading partners Japan still shows up as the country most responsive to American demands.

Realism and Variations in Threat Effectiveness

In view of the wide variations in U.S. threat effectiveness previously described, one may want to ask to what extent these variations could have been explained by the differences in the contexts of U.S.–Japan and U.S.–China trade negotiations. For example, it may be argued that the United States was able to achieve greater success in negotiations with the Japanese because the U.S. trade relationship with Japan is both more developed and sector specific than are U.S. trade relations with China. It may also be argued that the variations in threat effectiveness previously described may be better understood in terms of states' power balances, a variable emphasized by the realist theory.

However, not entirely in line with realists' predictions, many nations' level of responsiveness to American pressure differs from what one would predict based on their level of asymmetrical export dependence on the United States. Here I measure asymmetrical trade dependence by comparing the percentage of a target country's exports to the United States in the target's GDP to the percentage of U.S. exports to the target country in U.S. GDP.[18] Using this procedure, I calculate the level of asymmetrical trade dependence for major U.S. trading partners in each of the years between 1975 and 1995 and arrive at an average for each country. I then construct a responsiveness index based on the average concession rates reported in table 3.4. The results, plotted in figure 3.1, reveal that countries that are least responsive to American pressure (such as China and India) have a higher level of asymmetrical export dependence on the United States than several of America's other trading partners. Japan, the trading partner most responsive to
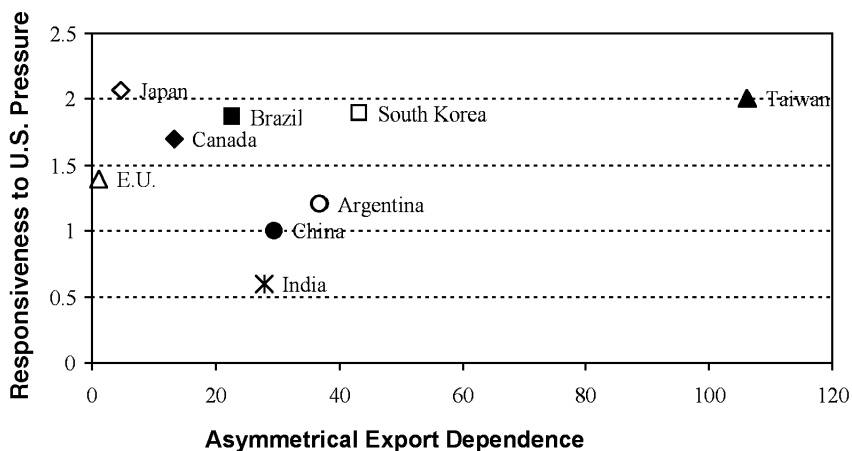
FIGURE 3.1.   Asymmetrical export dependence and responsiveness to U.S. pressure

American pressure, actually has one of the lowest asymmetrical export dependence levels on the American export market. The EU, whose responsiveness index is comparable to those of Canada and Argentina, does not rely on the U.S. export market as much as these two trading partners. Therefore, it seems that states' power balances do not fully explain these patterns. It is necessary for us to look at factors other than raw material power and to unpack the black box of domestic politics to account for these paradoxical outcomes.

Trade Structure and Threat Effectiveness: Statistical Analysis

If countries' underlying power balances do not adequately account for the pattern of U.S. threat effectiveness, how well does the alternative variable emphasized by this study, the structure of trade, explain this pattern? Figure 3.2 presents the relationship between trade structure and the degree of responsiveness of several major U.S. trading partners. As we can see, there is a generally positive relationship between trade structure and threat effectiveness: countries having more competitive trade relations with the United States (such as Japan, Canada, South Korea, and Taiwan) also are the ones that have yielded more frequently to American pressure. In contrast, countries having a primarily complementary trade structure with the United States (such as China and India) are significantly less responsive to America's sanction threats.
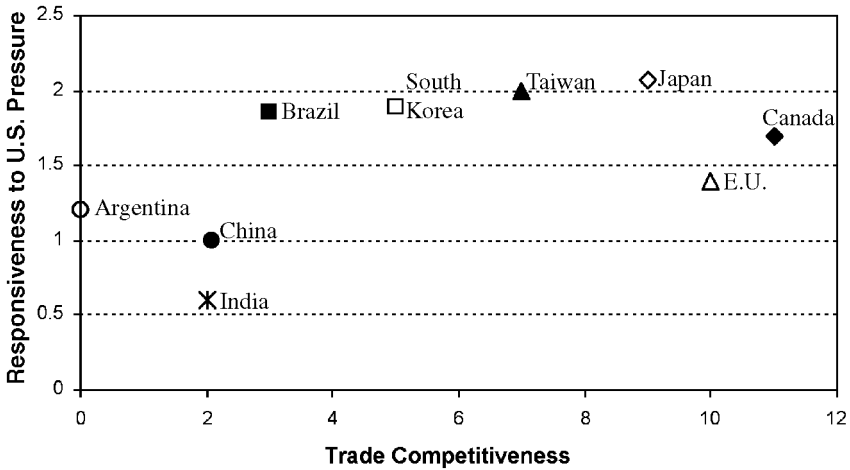
FIGURE 3.2.   Structure of trade and responsiveness to U.S. pressure. (*Note:* See table 3.2 for the responsiveness index. The trade competitiveness index is constructed using data in table 2.1, with larger numbers indicating a higher level of trade competitiveness.)

To better assess the relationship between trade structure and threat effectiveness, I estimate a model of the level of success the United States achieved in using Section 301 to open overseas markets. The estimation sample is based primarily on Bayard and Elliott's comprehensive evaluation of seventy-two Section 301 cases concluded by 1994.[19] But it also takes into account six cases from Elliott and Richardson's updated and expanded sample of Section 301 cases settled by 1995. The addition of these six cases produces a sample of seventy-eight cases involving fifteen countries.[20] To test the influence of trade competitiveness on Section 301 success, I essentially replicate Bayard and Elliott's and Elliott and Richardson's earlier works by including all of the variables in their analyses and adopting the same statistical methods they employed. I then run the same model, adding my trade competitiveness/complementarity variable.

The dependent variable SUCCESS, based on the degree to which the United States was able to achieve its negotiation objectives in each individual case, is a dichotomous variable. It equals 0 if American negotiators were "not at all successful" or "nominally successful" in pursuing their negotiation objectives in a given case and 1 if the United States partially or largely fulfilled its negotiating objectives. Both Bayard and Elliott and Elliott and Richardson used the same coding

scheme, although the latter also assessed the influence of various explanatory variables on an ordinal-scale measure of the target's responsiveness to U.S. pressure, in addition to the dichotomous measure of success. My statistical tests using the ordinal measure success variable yielded similar, indeed even stronger, results than those described later and are not reported here.

To examine the relationship between trade structure and the odds of Section 301 success, I first estimate a model (Model 1) that incorporates all of the variables, measured in exactly the same ways, as those used by Bayard and Elliott in their 1994 study. Explanatory variables for Model 1 include the following:

TBAL. Bilateral trade balance has often been considered as a crude measure of reciprocity in international trade negotiations. It is expected that larger U.S. trade deficits will produce greater protectionist pressure toward the target, increasing the chances of a successful outcome.[21]

TXDEP. To test the realist argument that power resources in a country's favor would enhance its bargaining leverage and chances for successful outcomes, I include the degree of the target's export dependence on the American market (TXDEP) in the analysis. A positive relationship is expected between TXDEP and SUCCESS.[22] TXDEP is measured by the percentage of the target's exports to the United States in the target's GDP during the year(s) of the dispute.

RULING. The variable RULING makes a distinction between those cases in which a GATT panel issued a ruling against the target country (in which case RULING is set to equal 1) and those in which the GATT did not issue such a ruling during the dispute settlement process (in which case RULING equals 0). It is expected that a negative GATT panel ruling can increase the chance for a successful outcome by raising the costs to the target government of defying international rules.[23]

BORDER. Bayard and Elliott and Elliott and Richardson have found that, compared to such trade barriers as subsidies, "domestic" regulatory access barriers, services trade, or intellectual property protection, unfair border barriers to U.S. exports (such as import and export quotas and tariffs) have a better chance of success because of their transparency, ease of definition and measurement, and greater likelihood of being GATT-illegal.[24] Following their lead, a dummy variable BORDER is included to control for the effect of different types of trade barriers on the success of U.S. negotiation strategy. This

variable is coded as 1 if the case involves traditional border barriers that impede merchandise access and 0 if otherwise.

COUNTER. Bayard and Elliott have found some evidence that American negotiators' perceptions of U.S. vulnerability to counterretaliation, shaped in part by whether the target has responded to America's aggressive negotiation tactics in the past with similar moves, play an important role in determining outcomes. The variable COUNTER, intended to capture the effect of U.S. concerns about possible counterretaliation, is set to equal 1 if the target has retaliated against the United States in a past trade dispute (whether under Section 301 or not); otherwise it is 0.[25] A negative relationship is expected between COUNTER and SUCCESS.

TPAP. Following the lead of Bayard and Elliott, I include a time-related dummy variable, TPAP, in Model 1 to see if the adoption of more aggressive negotiation tactics by the USTR since the mid-1980s, especially after the announcement of President Reagan's Trade Policy Action Plan (TPAP) in 1985, played any role in increasing the effectiveness of U.S. negotiation strategy. TPAP equals 1 if a case was settled before September 1985 and 0 otherwise.

SUPER301. The passage of the 1988 Omnibus Trade and Competitiveness Act, including Super 301 provisions, presumably enhances threat credibility by providing trade negotiators with greater discretion and by signaling the United States' strengthened resolve for a positive outcome. Thus, like Bayard and Elliott, I incorporate a dummy variable SUPER301, coded as 1 if the case was initiated after the signing of the congressional trade bill in 1988 and 0 otherwise, to account for the possible strengthening of U.S. credibility under Super 301.

All of these variables are adopted by Bayard and Elliott in their model estimates. To see how trade structure, my key explanatory variable, would affect model estimates, I run a second model (Model 2), adding the degree of trade competitiveness (COMPET) between the United States and its trading partners to Model 1. By adding COMPET to Bayard and Elliott's and Elliott and Richardson's analyses, I am testing the influence of trade structure on threat credibility. The causal logic developed in the previous chapter would lead us to expect a positive relationship between COMPET and SUCCESS. The trade competitiveness index for each case is calculated using the procedure described in the previous section.[26] Because it is possible for a country having a highly competitive trade relationship with the United States in a given year to nevertheless have a relatively small absolute number

of overlaps, the raw data for each dyad year is adjusted in relation to that of the country with the most overlaps in that particular year.[27] In other words, even though the raw numbers reflect the countries' relative degree of trade competitiveness in a given year, they may bias comparisons of trade structure across time, as a given raw score may not reflect the same level of trade competitiveness from year to year. The adjustment described earlier should therefore provide a more objective basis for comparing trade competitiveness indices across dyad years.

Based on these results, I estimate a third model (Model 3), which takes into consideration a couple of other control variables that Elliott and Richardson examined in their study that could potentially affect the probability of Section 301 success, in addition to the variables previously given. These control variables include the following:

INITIATE. The ability of U.S. negotiators to make a threat public may help to open foreign markets by sending a signal to the target country that the issue was high on the U.S. negotiation agenda and that "the administration meant business."[28] To test the hypothesis that USTR initiation of a case will have a positive effect on threat credibility and the successful pursuit of U.S. negotiation objectives, I add a dummy variable INITIATE that takes on a value of 1 if the USTR self-initiates a case and 0 otherwise.

BULLY. This variable measures the number of cases initiated against a particular target country as a percentage of all Section 301 cases started over a three-year period. A negative association is expected between this variable and the likelihood of success due to the phenomenon of diminishing returns.

Tables 3.5 and 3.6 provide a concise description of the dependent and explanatory variables and their frequency distributions.

Test Results

To understand the pattern of Section 301 success, I use the same statistical method adopted by Bayard and Elliott and Elliott and Richardson, the probit approach, to assess the influence of the aforementioned variables on Section 301 negotiation outcome (SUCCESS). The probit method is appropriate for estimating a dichotomous variable such as success/failure.[29] The estimates for the models just described, reported in table 3.7, lend strong support to the hypothesis about the relationship between trade competitiveness and the degree of Section 301 success. In both Model 2 and Model 3, the variable measuring the degree of trade competitiveness, COMPET, holds up quite well. Regardless of

the mix of variables included in the analysis, the relationship between COMPET and SUCCESS is consistently positive and significant, reaching a significance level of 95 percent in Model 2 and 90 percent in Model 3. This result seems to be quite robust considering the relatively large number of control variables included in the analysis.

The type of trade barriers under consideration (BORDER) and the time-related variable (TPAP) also perform quite well in these tests. Consistent with the findings of both Bayard and Elliott and Elliott and Richardson, traditional, transparent border barriers enhance the ability of U.S. negotiators to liberalize foreign markets through Section 301 negotiations. The coefficient for this variable is significant at the 99 percent level. Also corroborating previous study results is the finding

TABLE 3.5.   Variable Descriptions

	Name	Description
Dependent Variable	SUCCESS	Dichotomous measure of the degree to which the United States successfully achieved its negotiation objectives: 1 = "largely successful" or "partially successful"; 0 = "nominally successful" or "not at all successful."
Explanatory Variables	COMPET	Ordinal measure of the degree of trade competitiveness between the United States and the target country in a particular dyad year. Ranges between 0 and 10.
	TBAL	Trade balance between the United States and a given trading partner.
	TXDEP	The percentage of the target's exports to the United States in the target's GDP. Averaged over the years in which the dispute was active.
	COUNTER	1 if the target has retaliated against the United States in past trade disputes; 0 otherwise.
	RULING	1 if a GATT panel issued a ruling against the target; 0 otherwise.
	BORDER	1 if the dispute involved a border barrier to merchandise trade (such as import and export quotas and tariffs); 0 otherwise.
	TPAP	1 if a case is settled before September 1985; 0 otherwise.
	SUPER301	1 if a case is initiated after 1988; 0 otherwise.
	INITIATE	1 if the case is initiated by the USTR; 0 otherwise.
	BULLY	Number of cases initiated against a given target country as a percentage of all investigations started during the current year and two preceding years. The number of cases in 1973 and 1974 is set to equal 0.

that legislative and executive changes in the mid-1980s (TPAP) have contributed to the significantly higher success rates of Section 301 investigations in the late 1980s and early 1990s. The Trade Policy Action Plan, by signaling U.S. negotiators' increasingly tough posture toward trade issues, has increased the odds of obtaining a successful outcome.

The results also provide some support for the variable representing the degree of the target's vulnerability to U.S. retaliation (TXDEP). The United States did wring more concessions from its relatively weak trading partners. Somewhat surprisingly, the variable emphasized by liberal institutionalism, the presence of a negative GATT ruling against the target, while statistically significant in each of the three models, is in the direction opposite from that expected. A GATT panel finding of impairment and nullification actually decreases, rather than increases, the probability of obtaining a successful negotiation outcome. It is possible that, analogous to what the literature on alliances and extended deterrence posits, GATT "commitment" on behalf of the United States could have enhanced the possibilities of conflict. According to the extended deterrence literature, state A's public statement of willingness to intervene on state B's behalf in an international crisis may lead state B to be more intransigent and to refuse to make concessions in a dispute involving state B and a third party, state C, thereby creating the problem of entrapment.[30] Extending this logic to trade disputes, it can be argued that a GATT panel ruling in favor of the United States may produce a similar effect by encouraging a more confrontational and aggressive approach to the dispute, which in turn results in greater conflict.

TABLE 3.6. Descriptive Statistics of the Estimation Sample

Variable	Observations	Mean	Standard Deviation	Min	Max
SUCCESS	78	1.449	.907	0	3
COMPET	78	6.195	2.920	0	10
TBAL	78	8643.84	16188.75	−65942.5	10822
TXDEP	78	.066	.084	.003	.359
COUNTER	78	.256	.439	0	1
RULING	78	.167	.375	0	1
BORDER	78	.308	.465	0	1
TPAP	78	.346	.479	0	1
SUPER301	78	.308	.465	0	1
INITIATE	78	.295	.459	0	1
BULLY	78	.230	.175	.048	.7

TABLE 3.7. Probit Estimates for the Success of Section 301 Investigations (Models 1–3)

Explanatory Variable	Model 1			Model 2			Model 3		
	Coefficient	Standard Error	t-statistic	Coefficient	Standard Error	t-statistic	Coefficient	Standard Error	t-statistic
TBAL	−8.53e−06	.00001	−.771	.00001	.00002	.810	.00002	.00002	.932
TXDEP	7.661	2.938	2.608***	8.831	3.084	.864***	8.595	3.292	2.611***
COUNTER	.229	.427	.054	−.493	.522	−.943	−.483	.522	0.924
RULING	−.494	.518	−.955	−.828	.567	1.459	−.703	.599	1.175
BORDER	1.895	.515	3.682***	2.189	.593	3.691***	2.161	.595	3.631***
TPAP	−1.611	.543	−2.969***	−2.332	.721	−3.233***	−2.195	.755	−2.907***
SUPER301	−.302	.426	−.708	−.215	.449	−.479	−.307	.471	−.625
COMPET				.192	.097	1.975**	.202	.106	.906*
INITIATE							.371	.518	.716
BULLY							−.284	.499	−.190
Log likelihood	−35.54			−33.35			−33.09		

Note: * indicates significance at the 90 percent level; ** indicates significance at the 95 percent level; ***indicates significance at the 99 percent level.

Statistical tests fail to establish the importance of a number of variables that are presumably important to understanding the pattern of Section 301 outcomes. U.S. concerns about possible counterretaliation (COUNTER) prove to have no effect on the effectiveness of U.S. threats in Section 301 cases in any way. The relationship between COUNTER and SUCCESS is not statistically significant in any of the models. In addition, the trade balance between the United States and the target (TBAL), a rough measure of reciprocity in trade relations, does not reach statistical significance in either of the models.[31] Counterintuitively, the bigger stick American negotiators carried under Super 301 provisions did not improve the chances for opening foreign markets. The coefficient for SUPER301, while in the expected direction, is not statistically significant.

The addition of the trade competitiveness variable in Model 2 and the two control variables in Model 3 does not affect the sign and significance of the variables in Model 1. These additional tests lend strong support to the hypothesis about the relationship between trade competitiveness and the degree of Section 301 success. In both models, the variable measuring the degree of trade competitiveness, COMPET, exhibits a positive and statistically significant relationship with SUCCESS. The two control variables, INITIATE and BULLY, do not appear to add any leverage. Public announcement of U.S. negotiation resolve, represented by the USTR initiation of Section 301 investigations, does not have the expected credibility-enhancing effect. Nor did the variable representing the intensity of U.S. investigation activities against a specific target country (BULLY) play any role in explaining Section 301 success. Although, similar to Elliott and Richardson's findings, a period of concentrated activities against a particular country results in decreased, rather than improved, credibility for American negotiators, this variable does not reach statistical significance in Model 3.

In addition to these tests, I experimented with a few alternative specifications, including testing a model that adds to Model 2 three other control variables measuring the regime type of the target (REGIME), the target's level of economic development (GDP-CAPITA), and the nature of the security relationship between the United States and the target (ALIGNMENT), respectively. In this test, the REGIME variable is added to control for the possibility that democratic pairs may be more likely to pursue free trade policies or that they resolve trade disputes more effectively.[32] I also control for the possibility that developed countries may be better able to resist

demands to liberalize trade through a variable measuring the target's average per capita GDP during the years in which the dispute was active (GDPCAPITA). Finally, to account for the possibility that American demands will encounter far less resistance from its strategic partners because of the latter's reluctance to jeopardize their security relationship with the United States or because of the greater concerns about relative gains between adversaries than between allies,[33] I add a trichotomous variable (ALIGNMENT) measuring the target's security relationship with the United States based on the degree to which the target has either an antagonistic, neutral, or cordial relationship with the United States.[34] Test results show that the addition of these control variables does not alter my central finding about the significance of trade structure and that the degree of trade competitiveness is a significant determinant of the success of Section 301 actions.[35]

I further experimented with the ordered probit approach to assess the probability of success using the ordinal-scale measure of success. These tests yield very similar results to those described already. Regardless of the variables added or dropped, the degree of trade competitiveness, the nature of the trade barrier, the degree of the target's trade dependence on the United States, and the adoption of the trade policy action plan have generally retained their sign and significance.

Based on Model 2, I calculate the predicted probabilities of threat effectiveness for countries with low, average, and high levels of export dependence on the United States while holding all other variables at their means. As figure 3.3 suggests, when all other variables are held at their means, the United States would be 8.49 times more likely to obtain a successful outcome from a country with low export dependence on the United States, 4.39 times more likely to be successful with a country with average export dependence on the United States, and 1.05 times more likely to achieve a successful outcome with a country with high levels of export dependence on the United States should the trade competitiveness index increase from 1 to 10. Although the effect of trade structure on threat credibility is not particularly pronounced when the target country is highly dependent on the United States, figure 3.3 nevertheless reveals the influence that varying degrees of trade competitiveness could exert on threat effectiveness.

In conclusion, after taking into account other potentially confounding factors, trade competitiveness still has a statistically significant effect on the degree of threat effectiveness. The evidence from my statistical analysis provides overwhelming support to my argument.
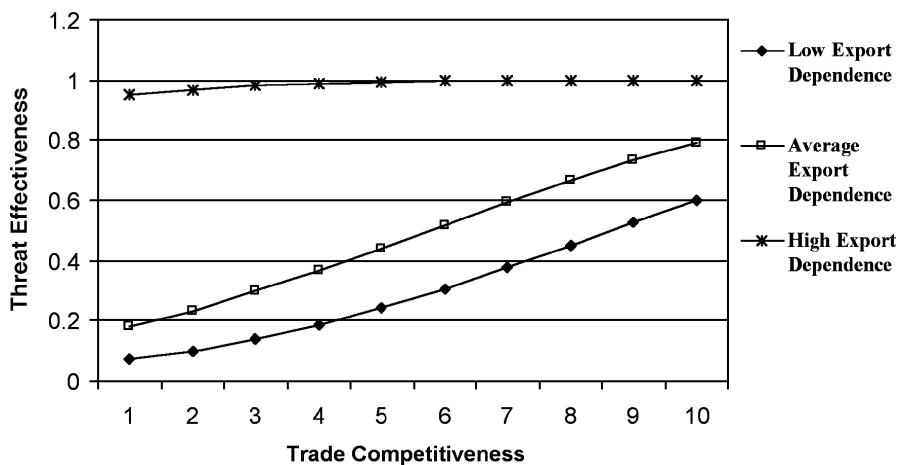
FIGURE 3.3.   Predicted probability of threat effectiveness

Understanding Patterns of Trade War

The second empirical puzzle that is of particular interest to this study is why trade wars seem to have broken out so frequently between democracies. The growing literature on democratic peace provides substantial evidence that democracies are indeed less war prone in their security relations.[36] The connection between regime type and the likelihood of trade wars, however, has been understudied. To see whether democracies are indeed more war prone in their trade relations and the extent to which the key variable emphasized by this study, the structure of trade, can help us predict the outcome of international trade conflicts, I examine the record of bilateral trade disputes between the United States and its top twenty-five trading partners between 1980 and 1995. The subsequent study will first present a brief summary of those trade disputes initiated by the United States (mostly GATT/WTO and Section 301 cases) that have escalated into tit-for-tat trade wars. It will then provide a regression analysis of the effects of trade structure, regime type, and a number of other factors on the probability of trade war by the United States. Both the summary of recent trade conflicts and the regression analysis confirm that there is no "democratic peace" when it comes to trade and that trade wars are indeed more likely among nations with competitive trade relations. The United States has more frequently been engaged in trade wars

against countries with whom it has competitive trade relations, even after controlling for variables that could potentially influence the chances for trade retaliation. This result lends further support to my argument that competitive trade relations can increase the risks of aggressive escalation in trade disputes.

Trade Wars: The Cases

In chapter 1, I define "trade war" as a sustained, high-intensity trade conflict involving at least one round of mutual retaliation. If we apply these criteria to examine the record of trade conflicts involving the United States (mostly those waged under the framework of GATT/WTO and Section 301 of U.S. trade law), we will see that the frequent use of aggressive tactics in international trade disputes did not spark a large number of trade wars. Trade wars that have occurred, however, have been fought almost exclusively between the United States and its democratic trading partners (see table 3.8). Unfortunately, due to the lack of data on the composition of U.S. imports and exports from each trading partner for years prior to 1980, I had to limit the scope of this research to cases that took place after 1980. I also had to restrict my data set to pairs involving the United States because of the difficulty of compiling an exhaustive list of trade wars that covers all available country dyads. Despite these limitations, the evidence presented ought to provide a useful first cut at the relationship between trade structure and the probability of trade war.

The history of trade wars between the United States and the EC can be traced back to the Chicken War in the 1960s and the Turkey War in the 1970s, both of which occurred as a response to the EC's scheme for protecting its agricultural sector, the Common Agricultural Policy (CAP). In the 1980s, the increasingly heavy protection that CAP afforded European farmers again engendered several heated agricultural trade confrontations between the two sides of the Atlantic, including the dispute over EC agricultural export subsidies in third markets, EC tariff preferences in favor of Mediterranean citrus fruits, and EC enlargement that imposed new restrictions against third-country agricultural imports. All of these disputes resulted in the mutual imposition of trade sanctions and are discussed in greater detail in chapter 7.

In addition to agricultural trade wars, trade battles also took place in the steel industry between the United States and the EC. The Amer-

TABLE 3.8. Trade Wars Involving the United States, 1980–95

Target Country	Duration	Issue	Amount of Trade Retaliation
EC (301-6)	1982–85	*Agricultural subsidies in third markets:* In 1983 the Reagan administration announced a $250 million subsidy to farm exports (mostly to Egypt) in response to EC subsidies on agricultural products. The EC replied by announcing a subsidized wheat sale to China in 1983. In 1985 the United States announced another subsidized wheat sale to Algeria and allocated $2 billion through the Export Enhancement Program (EEP) to subsidize agricultural exports.	The subsidy war cost the United States over $2 billion in additional outlays.
China	1983	*Textiles:* In 1983 the United States failed to negotiate a new bilateral textile agreement with more stringent quota restrictions on Chinese textile exports and, as a result, imposed a new unilateral agreement with a substantial increase in the number of product categories subject to quantitative restrictions. China retaliated by suspending agricultural imports from the United States.	Chinese retaliation resulted in $600 million in loss for United States farmers.
EC	1983–84	*Specialty steel:* To prevent European producers from dumping in the United States market, the United States in 1983 imposed quotas and higher tariffs on the import of specialty steel. The EC demanded compensation and, when no agreement could be reached on the appropriate level of compensation, retaliated against United States exports of chemicals, plastics, and selected other products.	EC's total share of the United States steel market decreased from 6.31 percent to 4.64 percent as a result of the United States quota restrictions. EC retaliation against United States quotas was worth $160 million annually.
EC (301-11)	1985–86	*Tariff preferences on citrus, export subsidies for pasta:* In 1985, in retaliation for EC tariff preferences in favor of Mediterranean citrus fruits, the United States imposed penalty duties of 25 to 40 percent on EC pasta, prompting EC counterretaliation against United States lemons and walnuts. Both sides withdrew their penalty tariffs in 1986.	The United States retaliation led to a 28 percent decrease in EC pasta exports, worth about $36 million. United States exports of nuts in shells and lemons to the EC, which averaged about $33 million a year, plunged by 85 percent in the first five months of EC retaliation.

EC (301-54)	1986–91	*Accession of Spain and Portugal*: The EC placed new restrictions against third-country agricultural imports (particularly feed grains) when Spain and Portugal acceded to the EC in 1986. The United States imposed retaliatory QRs on EC agricultural exports in retaliation for the Portuguese quotas on United States soybeans and soybean oil. The United States also imposed a 200 percent ad valorem tariff on EC agricultural products in response to import levies on Spanish imports. The EC promptly retaliated against the United States sanctions with similar tariffs and QRs.	The quotas the United States imposed in May 1986 on EC imports in response to the EC's quantitative restrictions on oilseeds and grains in Portugal amounted to $500 million a year.
Canada	1986	*Timber products*: In 1986 the Reagan administration ruled that Canada was subsidizing its lumber producers and imposed tariffs on imported Canadian softwoods. Canada retaliated by imposing a 70 percent CVD on corn imported from the United States.	The 15 percent export tax Canada eventually agreed to levy on softwood lumber exports to the United States translated into $450 million in lost sales a year.
EC (301-62)	1989	*Beef hormone*: In 1989 the EC announced a ban on imports of meat treated with growth hormones. The United States retaliated against the ban by blocking $100 million EC exports to the United States. The EC counterretaliated against $100 million of United States exports.	United States retaliation and EC counterretaliation each affected $100 million of imports from the other side.
Canada	1991–92	*Softwood lumber exports*: In 1991 Canada suspended the Canada-United States softwood lumber agreement. The United States imposed a bonding requirement on Canadian lumber exports to the United States.	The ITA imposed a 11.54 percent CVD on softwood lumber imports from Canada.
Canada	1992	*Provincial restrictions on beer sales*: In response to Canadian restrictions on beer imports from the United States, the United States imposed a 50 percent duty on beer imported from Ontario in 1992. Canada retaliated by imposing a 50 percent duty on United States beer exported to Ontario.	The United States retaliation affected $80 million in Canadian imports.
Canada	1993	*Steel*: In 1993 the United States imposed duties on a variety of Canadian steel products. Canada fired back by placing provisional duties on some steel exports from the United States.	United States duties on Canadian steel products were as high as 68.7 percent, whereas Canadian duties on United States steel exports ranged between 4.5 and 124.2 percent.

ican steel industry, which had been in serious decline, started to focus on the competitive threats that Japan and the EC posed in the domestic U.S. market in the late 1970s. In December 1981, American steel producers filed dumping charges against specialty steel imports from France, West Germany, Italy, Britain, Brazil, Austria, Sweden, and Spain. In June 1983 the United States announced that it would place quotas and higher tariffs on the import of specialty steel. The EEC initially refused to bargain for the market share quota and later filed a claim with GATT for compensation. When negotiations between the two sides broke down, the EEC retaliated in 1984 and imposed quotas and tariffs against U.S. exports of chemicals, plastics, and sporting goods.

A more recent trade war took place between the United States and Canada over Canadian provincial restrictions on U.S. beer exports. In 1990, U.S. beer manufacturers filed a Section 301 petition alleging that Canadian provincial restrictions on distribution of beer discriminated against imports and violated both the GATT and the Canada–United States Free Trade Agreement (FTA). The two sides managed to reach an agreement in April 1992. At the end of April, however, Ontario decided to double its tax on nonrefillable cans of beer, wine, and spirits. In June, it announced additional new rules for beer imports that directly affected the United States. In July 1992 the United States imposed a 50 percent duty on beer imported from Ontario. Canada retaliated by imposing a 50 percent duty on U.S. beer exported to Ontario.

It is fairly obvious that all of the trade wars described here have been fought between democratic countries. Trade wars did occur between dyads that consist of a democracy and an autocracy, but this happened far more sporadically. For example, as explained earlier, the United States and China did engage in a trade war over textiles in the early 1980s. In 1983, unable to curb the flow of Chinese textile exports to the United States, Washington unilaterally imposed quantitative restrictions on Chinese textile imports. China retaliated by suspending their imports from the United States of chemical fibers, cotton, soybeans, and wheat, products for which China was an important international market.[37]

However, other than this case, trade conflicts between democracies and authoritarian regimes have rarely escalated into full-blown trade wars. Trade relations between the United States and China since the early 1980s, for instance, have been characterized by the complete absence of trade wars. In almost all contentious issue areas, the United

States had threatened to impose economic sanctions on China, only to refrain from doing so in the end. The overall pattern of trade peace was clearly reflected in the two Section 301 cases involving IPR and market access, where the United States always managed to reach an eleventh-hour agreement with the Chinese despite its various sanction threats.

In the area of market access, the United States initiated a Section 301 investigation into China's general practices restricting the entry of U.S. goods into the Chinese markets. The alleged unfair practices, which were not sector specific, included quantitative restrictions (QRs), import licensing requirements, technical barriers to trade, and lack of transparency of laws and regulations pertaining to restrictions on imports. The Chinese argued that some of these measures were necessary as infant industry protection and, therefore, were unwilling to set specific timetables for phasing out their QRs and other trade restrictions. In August 1992 the USTR threatened to impose retaliatory tariffs worth $3.9 billion of Chinese exports, including goods that topped the Chinese export list (such as footwear, silk apparel, leather goods, minerals, industrial hardware, and electronics products). China responded with its own list of U.S. exports worth $4 billion (including aircraft, computers, chemicals, wood products, and cotton) that could suffer retaliation should Washington carry through with its threatened sanctions.

But right before the deadline, the two sides reached an agreement in which China pledged to publish all "laws, regulations, policies and guidance" regarding trade; to eliminate most quantitative restrictions within two years and on products such as telecommunications equipment by the end of 1992; to reduce some tariffs; and to resolve problems involving phytosanitary and other technical standards.[38] A trade war was thus averted at the last minute.

Even textile trade, an area where the two sides failed to conclude a negotiated settlement in the early 1980s, has become more cooperative in outcome. In the 1990s, in response to industry complaints of Chinese textile and apparel quota noncompliance in the forms of counterfeit export visas and country-of-origin evasions, the U.S. government on several occasions threatened to substantially reduce Chinese quotas. But although China protested and threatened to impose retaliatory tariffs on various U.S. products, the two countries eventually signed new bilateral textile agreements and managed to head off potential wars at the threatened deadline.

This survey of the record of bilateral trade wars involving the United States suggests that the democratic peace argument may not

provide accurate predictions of the pattern of trade war: only very rarely have trade disputes between the United States and authoritarian regimes resulted in trade wars. Trade disputes between the United States and its democratic trading partners, in contrast, have shown a greater propensity to escalate into trade wars. Since the signaling strand of the democratic peace literature predicts that democracies' greater capacity to signal their true preferences in a crisis situation should help to prevent disputes between democracies from escalating into war, the lack of democratic peace in trade, as far as cases involving the United States are concerned, thus presents a major challenge to the theory.

The review also points to the structure of trade as a possible alternative explanation for the pattern of trade war. As we can see, most of the countries that have been involved in tit-for-tat trade retaliation against the United States also are the ones that have highly competitive trade relations with the United States. For instance, Canada and the EC, two trading partners that are the frequent targets of U.S. retaliatory action, have trade competitiveness scores of as high as 11 with the United States. In contrast, very few of the trade war cases listed earlier involve a partner country with a complementary trade relationship with the United States. Indeed, only one trade war was directed against such a partner country (i.e., China, with a trade competitiveness score of only 2). My preliminary review of the trade war cases thus suggests that trade structure may potentially play an important role in explaining the pattern of trade war.

Statistical Analysis of the Determinants of Trade War

While the United States seems to have fought a greater number of trade wars with its competitive trading partners, it is plausible that factors other than the structure of trade could have contributed to the higher probability of trade war between these countries. For example, one might expect the probability of trade war to be higher if the two parties trade more with each other or if the target country enjoys a larger trade surplus with the United States. Thus, in this section, I report the results of my statistical analyses of the relationship between trade structure and the probability of trade war. These results suggest that, even after controlling for other potentially confounding variables, the level of trade competitiveness still shows up as a significant factor in explaining patterns of trade retaliation.

To test the relationship between trade structure and the probability

of trade war, I estimate a model that takes into consideration the following explanatory variables: the degree of trade competitiveness, the regime type of the U.S. trading partner, the volume of trade, the size of the bilateral trade balance, the size of the target economy, the target country's dependence on the American export market, and the political relations between the two parties to the disputes.

This model is evaluated on the basis of dyad years. Given the limited availability of data on the composition of bilateral trade for the years prior to 1980, as well as the difficulties of capturing all bilateral trade wars in which the United States is not a party, the analysis focuses on trade disputes between the United States and its top twenty-five trading partners between 1980 and 1995.[39] The resulting data set encompasses sixteen years for a total of four hundred dyad observations.

My dependent variable is simply the probability of trade war, which refers to the odds that a trade war breaks out in a given dyad year. It is coded as 1 if a trade war occurs and 0 otherwise. Trade wars that last several years are coded as 1 in each year they were in place. Explanatory variables for this analysis include the following:

COMPET. The degree of trade competitiveness (COMPET) is the key explanatory variable in this test. It is expected that highly competitive trade relationships are likely to result in higher incidences of trade wars, as discussed in the previous chapter.

REGIME. To see if states' regime type is related to the probability of trade war in any way, I include the trading partner's regime type into this analysis. If the democratic peace theory, particularly the audience cost version of that theory, is valid, then we should expect a statistically negative relationship between democracies and the likelihood of trade war.

The definition of "democracy" I adopt here is consistent with the commonly used definition of democracy seen in the democratic peace literature, which emphasizes the competitiveness and openness of the process through which a country's government is brought to power, the degree to which a country's chief executive's decision-making authority is bounded by institutionalized rules and arrangements, and the degree of political participation within a country. In addition, this definition provides that a state should have established these democratic institutions and processes for a reasonable amount of time so that both its citizens and its adversaries regard it as one governed by democratic principles.[40] According to this criteria, the EU and Canada, two trading partners that have frequently fought trade wars with the United States, are clearly democracies, while

China, which has been involved in only one trade war with the United States, is not.

The widely used Polity III data developed by Jaggers and Gurr are used to measure the regime type of each of the major U.S. trading partners (REGIME).[41] The Polity III data (and earlier versions of them) broadly follow the definition of democracy just described and have been used by various studies of the relationship between regime type and international security conflict.[42] Jaggers and Gurr develop a measure of a state's democratic characteristics (DEMOC) on a 1–11 scale and another measure of its autocratic characteristics (AUTOC) on a 1–11 scale. The measure of a state's regime type is derived by subtracting its autocratic index from its democratic index, that is, REGIME = DEMOC – AUTOC. This summary measure is a continuous variable with values ranging from 10 for a highly autocratic state to +10 for a highly democratic one.[43]

VOLUME. I include the volume of trade between the United States and its trading partner (VOLUME) to account for the possibility that, since countries that trade more with one another tend to have more trade disputes, the chances for such trade disputes to escalate into trade war will be higher. Volume of trade statistics is derived primarily from U.S. Foreign Trade Highlights.[44]

TBAL. In addition, trade balance between the United States and the target country (TBAL) is taken into account because it is expected that the size of the trade deficit could either increase or decrease the likelihood of trade wars. A more negative trade balance could make trade wars more likely because one would assume that there would be stronger domestic pressure for trade sanctions against countries enjoying large trade surpluses with the United States. But it is also plausible that having a larger trade deficit with the target country could reduce the chances of trade wars because the United States would have a greater demand for goods produced in the target country. The costs of having to restrict trade with the target would consequently be higher.

GDPRATIO. To control for the possible influence of country size on the probability of trade war, I take into consideration the partner country's GDP as a percentage of U.S. GDP in each of the dyad years. It is expected that the United States ought to be involved in fewer trade wars with its relatively small trading partners, who are less likely to be able to resist U.S. pressure.

TRDEP. I include a measure of a country's dependence on trade with the United States (TRDEP), measured by the percentage of the total volume of trade between the target and the United States in the

target's GDP, to account for the vulnerability (besides their small size) of certain countries to U.S. retaliation. A negative relationship is expected between each of the previous two variables and TRWAR.

ALIGNMENT. Previous studies have shown that allies tend to trade more with one another.[45] To control for the possibility that countries with cordial political relationships ought to be less likely to fight trade wars when their trade volumes are taken into account, I include a variable (ALIGNMENT) representing the nature of the political relationship between the United States and the target country into the analysis. Alignment is measured using the same procedure described in the previous section. A negative relationship is expected between ALIGNMENT and the probability of trade war.

YEAR. To check to see if there is any secular trend in the probability of having a trade war, I include a time-related variable (YEAR), set consecutively for each dyad, into the analysis.[46]

The parameters in the equation are estimated using the logit model. The logit model has widely been used to estimate the effects of a set of regressors on a binary dependent variable (such as the probability of war or deterrence). Regression analysis using the logit model yields the results shown in table 3.9.

As expected, the relationship between the volume of trade and the probability of trade war is positive and is statistically significant at the $p < 0.1$ level. This suggests that trade wars did break out more frequently between countries that trade more with one another. The variable representing the disparities between the size of the target economy and that of the U.S. market (GDPRATIO) also performed well in this case. Larger economies seem to be more likely to take on a trade war due to their greater ability to withstand the effects of trade restrictions. The variable representing the degree of the target's dependence on the

TABLE 3.9.   Logit Estimates for the Probability of Trade War (full model)

TRWAR	Coefficient	Standard Error	Z	$p > z$
VOLUME	.0000308	.0000166	1.85	.064
REGIME	−.038	.111	−.35	.729
TBAL	−.0000207	.0000306	−.68	.500
COMPET	.633	.295	2.15	.032
GDPRATIO	7.906	4.602	1.72	.086
TRDEP	6.582	8.971	.73	.463
ALIGNMENT	−2.161	1.551	−1.39	.164
YEAR	−.584	.252	−2.32	.020
CONSTANT	−1.525	3.231	−.47	.637

log likelihood = −29.004; chi-square = 69.92

American export market performed less well and did not reach statistical significance. The size of the U.S. trade surplus (BALANCE) and the nature of the political relationship between the two parties (ALIGNMENT), although in the expected direction, did not reach statistical significance in the model.

Consistent with theoretical expectations, after controlling for the confounding influence of other explanatory variables, trade competitiveness has a robust and independent effect on the probability of trade war. The relationship between trade competitiveness and the probability of trade war is positive and is statistically significant at the $p < .05$ level. Although the trade competitiveness variable did not achieve statistical significance at the $p < .01$ level, this may have to do with specific attributes of the statistical analysis (such as the magnitude of the raw data) and in no way indicates that trade competitiveness is less significant than trade volume or the size of the trade deficit in predicting the trade war outcome.

Also of great interest is the finding that the regime measure has failed to achieve statistical significance. When the influence of other relevant variables is taken into consideration, regime type clearly plays no major role in predicting the trade war outcome.

Since the regime measure is clearly insignificant, I re-ran the model without it (see table 3.10). The likelihood ratio test yields a p value that is greater than 0.05, indicating that removal of the regime variable had no significant effect on the model. In addition, the log likelihood of the constrained model (–29.06) was nearly identical to that of the full model (–29.004). These results suggest that the constrained model is superior than the full model in predicting the trade war outcome, as the reduction in the number of independent variables makes the specification somewhat more parsimonious. Note that in the con-

TABLE 3.10. Logit Estimates for the Probability of Trade War (constrained model)

TRWAR	Coefficient	Standard Error	Z	$p > z$
VOLUME	.00003	.000016	1.81	.070
TBAL	–.000018	.000029	–.61	.540
COMPET	.603	.279	2.16	.031
GDPRATIO	7.841	4.611	1.70	.089
TRDEP	6.691	8.979	.75	.456
ALIGNMENT	–2.239	1.622	–1.38	.168
YEAR	–.558	.235	–2.37	.018
CONSTANT	–1.408	3.427	–.41	.681

log likelihood = –29.06; chi-square = 69.81

strained model trade competitiveness remains statistically significant at the $p < .05$ level.

To illustrate the impact of trade competitiveness on the probability of trade war, I report the changes in the probability of trade war with the United States for several of America's leading trading partners for a model consisting of four variables (i.e., VOLUME, GDPRATIO, COMPET, and YEAR), holding all other variables constant and varying only the trade competitiveness variable. In figure 3.4, I show how each of America's five leading trading partners—given their trade volume, GDP ratio, and year (the mean for each over the sample period used)—would be affected were their competitiveness index to change. The chart suggests that varying the trade competitiveness index will result in substantial changes in the probability of trade war. For example, the EC, whose average trade competitiveness index was approximately 9 on a 10-point scale between 1980 and 1995, would be 75 percent less likely to be involved in a trade war with the United States (the probability drops from 0.72 to 0.18) were its competitiveness ratio to fall to 2. Similarly, Canada would be almost 90 percent less likely to fight a trade war with the United States (the probability falls from 0.2 to 0.012) if its trade competitiveness index dropped from an average of 8 over the sample period to 2. Conversely, the probability that China will have a trade war with the United States will be thirty-two times higher (the probability increases from 0.0006 to 0.02) if its competitiveness index rises from 2 to that of the EC's level (9 on a 10-point scale). In reality, most countries' competitiveness index had remained more or less constant over the years; nevertheless, figure 3.4 reveals the effect that increasing competitiveness ratios would have had on the probability of trade war when the other two variables are held at a given level.

Conclusion

The empirical analysis in this chapter confirms the two puzzling patterns that motivate this study. U.S. sanction threats proved to be more effective in opening markets in some countries (e.g., Japan, Canada, and the EC) than in others (e.g., China, Brazil, and India). Interestingly, the bilateral trade structure does play an important role in explaining these variations. It has also been shown that the likelihood of trade war was not necessarily higher between dyads that include at least one party that is nondemocratic than between democracies. If
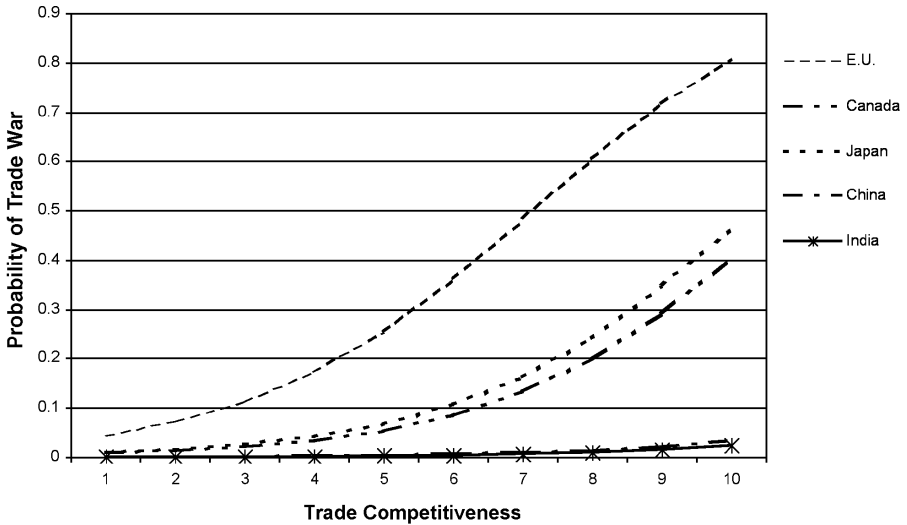
FIGURE 3.4.   Predicted probabilities of trade war

these puzzling patterns do exist in the real world, and if neither realism nor the democratic peace thesis can adequately explain these patterns, then how can we best go about tackling these puzzles? To what extent does the structure of trade affect the pattern of trade war and threat effectiveness? Does domestic politics exert such an important influence on negotiation outcomes? Through detailed case studies of trade negotiations between the United States and some of its major trading partners, the following chapters will piece together the answers to these questions and will show how trade structure, by shaping the domestic political landscape, drives the negotiation dynamics and helps to produce the puzzling patterns observed in this study.