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# 12 Bilateral Negotiations and Multilateral Trade: The Case of Taiwan-U.S. Trade Talks

Tain-Jy Chen and Meng-chun Liu

#### 12.1 Introduction

It is widely recognized that the multilateral trading system embodied in the GATT has played an instrumental role in expanding world trade and supporting the phenomenal economic growth the world has experienced since World War II. Even a nonmember like Taiwan has benefited from access to increasingly open markets in industrial countries, particularly the United States. Immediately after the war, as a hegemonic power, the United States championed multilateralism in world trade and led the way in successive multilateral negotiations for trade liberalization. This effort created international public goods on which even a nonmember like Taiwan can ride free.

Since the 1970s, however, the United States has resorted with increasing frequency to unilateral measures to solve trade problems. The 1974 U.S. Trade Law provided the U.S. Trade Representative (USTR) with a set of weaponry for practicing unilateralism, such as the Section 301 provision, and strengthened safeguard measures.

Armed with these weapons, the USTR undertook bilateral negotiations to achieve "orderly marketing arrangements," such as voluntary export restraints and the Multi-Fiber Arrangement, to shield domestic U.S. industries from import competition. Antidumping and countervailing duty cases also became more commonplace, effectively deterring aggressive pricing strategies by importing countries.

Unilateralism was heightened even further in the 1980s as the U.S. trade deficit rose to an unprecedented level. Reciprocity and the "level playing field" became catchphrases of U.S. policymakers. In addition to measures restraining

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imports, the USTR negotiated vigorously for access to foreign markets, with the targets being the former developing countries that had succeeded in industrializing. Bilateral talks on tariff concessions and other market access issues became regular tasks of the USTR. The enactment of the Super 301 and Special 301 provisions in the 1988 U.S. Omnibus Trade and Competitiveness Act brought unilateralism to a climax.

It is generally believed that a bilateral approach to world trade problems is inferior to a multilateral approach. A bilateral approach may not even produce a second-best solution (Krueger 1993, 184). The economic costs of VERs and the MFA have been well documented (see, e.g., Hufbauer, Berliner, and Elliot 1986; de Melo and Tarr 1990; Cline 1990). The problems associated with safeguard measures have also been widely discussed (see, e.g., Boltuck and Litan 1991). In comparison, the bilateral approach to market opening has not been analyzed in great detail. Krueger's (1993) exploration of the bilateral trade negotiations between South Korea and the United States and Ito's (1993) analysis of those between Japan and the United States are exceptions. The basic conclusion of Krueger's investigation is that forcing Korea to open its market under the threat of the Super 301 provision not only represents a departure from GATT principles but also conflicts with the general U.S. policy goals toward developing countries.

The purpose of this paper is to examine bilateral trade arrangements between the United States and Taiwan, one of its major trading partners targeted for market access in the 1980s. Taiwan is similar to Korea in terms of its asymmetrical bargaining power vis-à-vis the United States. However, Taiwan may hold even fewer bargaining chips than Korea, making it more vulnerable to U.S. threats of trade sanctions. The United States generally prevailed throughout the bilateral negotiations. A study of the Taiwan-U.S. case may reveal whether the results of bilateral negotiations dominated by the United States conform to the multilateral principles espoused by the United States.

The rest of the paper is arranged as follows. In section 12.2, we examine the history of bilateral trade arrangements between Taiwan and the United States, focusing on export restrictions and market access issues other than tariff concessions. The cases in which Taiwan practices trade preference are identified and their background discussed. In section 12.3, we present a political economy model to explain the results of Taiwan-U.S. bilateral negotiations on tariff concessions. It is found that, although the USTR may not consciously produce a list of demands for tariff concessions based on the political influence of domestic interest groups, the negotiation outcomes often reflect the lobbying power of these groups. U.S. commitment to the multilateral system, meanwhile, serves as an effective moral persuasion for Taiwan to follow a similar course of trade liberalization.

### 12.2 Bilateral Trade Arrangements between Taiwan and the United States

The United States first engaged Taiwan in a bilateral trade agreement in 1962, when Taiwan agreed to voluntarily restrict its exports of cotton textiles and apparel products to the United States. The agreement was negotiated under the auspices of the Long-Term Arrangement for Cotton Textiles, which is primarily an unilateral regulation instituted by the United States to curtail textile imports from Japan, Hong Kong, and Korea, as well as Taiwan. Despite this voluntary export restraint (VER) so agreed, Taiwan's exports of textile products to the United States continued to increase rapidly, with man-made fiber products accounting for most of the growth. The United States, in turn, pressured Taiwan, along with Japan, Hong Kong, and Korea, in 1971, to enter into new bilateral agreements aimed at limiting their exportation of woolen and manmade textile and apparel products. These bilateral actions initiated by the United States turned into the Multi-Fiber Arrangement (MFA) in 1974 under the purview of the GATT, allowing other members of the GATT to follow suit in setting geographical quotas to restrict trade in textile and apparel products. The agreement, which is an obvious violation of multilateralism, prevails to this day.

The frequency with which the United States used VERs to contain trade flow increased substantially in the 1970s. The backdrop of this increased unilateralism was the promulgation of the 1974 Trade Law, which empowered the USTR (under Section 301) to retaliate against U.S. trade partners who engage in unfair trade practices. Fearful of trade sanctions, trade partners, particularly those depending asymmetrically on the U.S. market for export, usually succumbed to U.S. pressure by "voluntarily" restraining those of their exports deemed (by the United States) injurious to an orderly domestic U.S. market. Taiwan agreed to a VER on nonrubber footwear in 1977 and a VER on color television sets in 1979.

It has been shown theoretically and empirically that a VER may not hurt constrained exporters because it raises the price of the exported goods under the imperfect market assumption (Feenstra 1984; Harris 1985; Ries 1993). There is also the possibility that the quality of the export products will shift upward in response to such a quantity restriction, resulting in an upgrading of the industry (Falvey 1979). A study by Aw (1993) estimated the price increase of Taiwanese footwear during the VER-effective period of 1977–81 to be as high as 18 percent. A study by Aw and Roberts (1986) also confirmed significant quality improvement in Taiwanese footwear exports during the VER-effective period.

It must be noted, however, that an abrupt restriction on the expansion of a booming industry just as it begins to show some prominence may undermine the incentive for further investment by existing firms in the industry and deter new entry. This may smother the industry before it has a chance to become

truly internationally competitive. Taiwan's TV industry, which was subjected to a VER in 1979–82 and shrank quickly after the mid-1980s, might have been a victim of such a "bud-picking" policy.

In analyzing the impact of U.S. VERs on Korean exports, Nam (1993) also expressed concern over the adverse effect of VERs on the long-term competitiveness of the constrained industries. In addition to deferment of domestic investment, he also pointed out that allocation of export quotas may constitute an entry barrier that protects existing inefficient firms.

U.S. unilateralism became even more aggressive in the 1980s as the United States suffered from increasing trade deficits and extensive unemployment at home. Under pressure from the National Machine Tool Builders Association, which pleaded for trade protection under Section 232 (safeguarding national security) of the Trade Expansion Act of 1962, the U.S. government engaged Taiwan, along with Japan, in bilateral negotiations aimed at restricting Taiwan's export of machine tools to the U.S. market. The negotiations resulted in another VER agreement, which took effect in January 1987. The VER on machine tools was even more damaging to Taiwan's industry than the VERs on textiles, footwear, and TV sets because the machine tool VER limited Taiwan's market share instead of quantity or growth rate. Market share restrictions placed on individual product categories based on previous market performance severely restrict an industry's potential for upgrading from low-end to highend products. Specifically, the VER accord on machine tools gave fairly sizable market shares to Taiwanese companies for conventional items, such as nonnumerically controlled lathes (24.70 percent) and milling machines (19.29 percent), but very small market shares for advanced items with good growth potential, such as numerically controlled lathes (3.23 percent) and machine centers (4.66 percent). The VER, which was originally due to expire in January 1992, was extended for another two years after a lengthy and friction-filled negotiation in 1992. Whether the VER has succeeded in protecting the U.S. machine tool industry is not clear. It is clear, however, that the VER has suppressed Taiwan's market share along with Japan's, allowing unrestricted competitors, notably Switzerland and Korea, to gain substantial market share during the restriction period.

In addition to VERs, the United States has also resorted to safeguard measures to restrict Taiwan's exports into the U.S. market. Between 1980 and 1990, there were seven countervailing duty and 29 antidumping cases filed against Taiwan by U.S. industries, making Taiwan one of the top countries among all U.S. trading partners blamed for the plight of U.S. industry. For Taiwanese exporters, which are typically small in size, the lengthy and costly legal process involved in these cases presents an effective deterrent to price competition.<sup>1</sup>

<sup>1.</sup> Compliance with an investigation by the U.S. authorities in terms of providing detailed operation-related data in computerized form is a real challenge to small exporters (Krueger 1993). Costs of legal proceedings also often exceed the capacity of small exporters. These firms usually

The most aggressive series of unilateral assaults launched by the United States in the 1980s, however, were intended to pry open the doors of its trading partners for U.S. access to domestic markets. Many developing countries had thrived on exports to the open U.S. market theretofore and had developed sizable domestic markets of their own that could be reciprocally open to U.S. imports. Therefore, U.S. trade representatives pressured these countries to liberalize their domestic markets. Both Taiwan and Korea were selected as primary targets. The United States used preferential tariffs afforded to Taiwanese and Korean exports under the Generalized System of Preferences (GSP) as the lever for bargaining. In fact, the negotiations undertaken were often called "GSP consultations," although the agenda were largely focused on market opening. Ironically, despite continuous concessions by Taiwan and Korea, GSP preferences for these two countries were appealed in January 1989. Later, the U.S. trade representatives switched to the Super 301 and Special 301 provisions of the 1988 Trade Act as the main levers for bilateral bargaining.

U.S. pressure for access to Taiwan's market was heightened in the second half of the 1980s when the bilateral trade imbalance swelled to a historic level. Because the impulse of import liberalization often intruded into the domain of politically powerful domestic interest groups, trade friction became inevitable. As documented in table 12.1, between 1986 and 1988 there were at least four occasions on which Taiwan was on the brink of being subject to unilateral trade sanctions by the U.S.

In May 1986, Taiwan was investigated by the USTR under the provisions of Section 307 of the 1974 Trade Law for its imposition of an export performance requirement on an investment project in Taiwan proposed by the Japanese automaker Toyota. According to this performance requirement, Toyota was to export no less than 30 percent of the cars assembled in Taiwan in the initial period, and the export ratio was to exceed 50 percent when production reached full capacity. Fearing that Toyota would "dump" these cars on the U.S. market, the USTR demanded that Taiwan remove the export performance requirement and invoked the Section 307 investigation to stage a credible threat. Taiwan succumbed to the pressure by removing the export performance requirement; but the action also killed the investment project because existing carmakers in Taiwan lobbied against the Toyota project for fear of being outcompeted if Toyota were allowed to sell freely in the domestic market.<sup>2</sup>

The United States also invoked Section 301 investigations twice in 1986, the year that Taiwan's bilateral trade surplus with the United States reached a historic high of \$13.6 billion. In August 1986, the first Section 301 investigation was undertaken after Taiwan refused to revamp its practice of assessing

exit the U.S. market altogether when an affirmative decision is reached at the preliminary determination stage. They cannot afford the risk of an uncertain dumping margin that may eventually be imposed on them in final determination.

<sup>2.</sup> Toyota later made a smaller-scale investment in 1989 with no export performance commitment. The cars assembled under the project were all sold domestically.

May 1993

	1986–93	1986–93		
Time	U.S. Action	Issue	Taiwan's Concession	
May 1986	Section 307 investigation	Export performance restriction on proposed Toyota investment in Taiwan	Restriction removed	
August 1986	Section 301 investigation	Customs valuation	Abolishing customs price tables and assessing duties based on transaction values	
October 1986	Section 301 investigation	Marketing restrictions on U.S. tobacco, beer, and wine in Taiwan	Restrictions removed	
December 1988	Section 301 investigation	Quota on imports of U.S. turkey meat to Taiwan	Quota removed	
May 1989	Special 301 Priority Watch list	Licensing requirement for U.S. films shown in Taiwan's private movie parlors (MTV)	Copyright law changed to require licensing	
May 1992	Special 301 Priority	Copyright	Export inspection	

Table 12.1 Major Unilateral Actions Taken by the United States against Taiwan,

Source: Compiled from Baldwin, Chen, and Nelson (1995).

Special 301 Priority

Watch list

Watch list

customs duties on imported goods based on an official price table. Facing imminent Section 301 retaliation, Taiwan abolished the official price table and began assessing customs duties based on the transaction value.

protection of

software

Intellectual

U.S. computer

property right

protection

scheme installed on

computer hardware

Copyright law revised

works

to prohibit parallel import of original

The first serious trade dispute concerning market access also arose in 1986, when Taiwan and the United States could not agree on the tariff levels to be imposed in Taiwan on U.S. cigarettes and the regulations concerning cigarette advertisement in Taiwan. Just one year earlier, Taiwan had reluctantly agreed to allow U.S. cigarettes, beer, and wine to be imported freely. The dispute on tariffs and advertising led the USTR to invoke Section 301 investigation for the second time in 1986. The action forced Taiwan to lower the tariff level, although Taiwan's regulations on cigarette advertisement were enacted largely unchanged.

Another serious dispute concerning market access arose in 1988, when Taiwan refused to remove an import quota on U.S. turkey meat. Strong protests against imported turkey meat were voiced by Taiwan's chicken farmers, who demonstrated in front of the American Institute in Taiwan, the de facto U.S. embassy in Taipei, and who later staged a street rally that turned into a riot. Despite the strong resistance from local farmers, the Taiwanese government agreed to dismantle the import quota after being investigated under the Section 301 provision.

After the enactment of the 1988 U.S. Trade Law, which empowered the USTR with the Special 301 provision, bilateral negotiations between Taiwan and the United States focused on the issue of intellectual property rights. The USTR has placed Taiwan on the Priority Watch list under the Special 301 provision three times since the law took effect (see table 12.1). Once placed on the Priority Watch list, Taiwan had to negotiate with the USTR for a settlement that would significantly improve the protection of U.S.-owned intellectual property within six months or face sanctions. Under this pressure, Taiwan revised its copyright law twice to meet U.S. demands, with some provisions now exceeding international standards in copyright protection. For example, the current version of the copyright law in Taiwan prohibits Taiwanese citizens from importing original works through unauthorized dealers or from third-party markets (i.e., parallel imports).

Nevertheless, confrontation was the exception rather than the norm in Taiwan-U.S. negotiations.<sup>3</sup> Often, Taiwan succumbed to U.S. pressure without much resistance, particularly when the domestic interest groups at stake lacked political clout. In cases where the domestic interest groups to be affected were politically sensitive, such as agriculture, or politically powerful, such as the insurance and security industries, Taiwan often resorted to trade preference to reduce the impact on domestic industries. As in the case of Japan, U.S. pressure is sometimes useful in helping dismantle vested interest groups at minimum political cost (Ito 1993), but the practice of trade preference incurs extra costs on resource allocation.<sup>4</sup> Trade preference often takes the form of offering exclusive market access to American firms. Since Taiwan was not a member of the GATT, it was free to exercise discrimination, although this practice sometimes brought protests from other trading partners, such as the European coun-

<sup>3.</sup> Li (1994) argued that confrontation is likely to arise when preference distribution on both sides is homogeneous and when societal pressure is great. A homogeneous preference distribution (lack of opposition) and societal pressure (strong lobbying) eliminate room for compromise. He categorized the issues of agriculture and intellectual property rights in Taiwan-U.S. talks as being in this class.

<sup>4.</sup> Ito (1993) argued that in the case of Japan, businesses that lost vested interests under U.S. pressure were those that sided with Japan's ruling party (LDP) and the United States in ideology. The situation is similar in Taiwan, where the losers are big private firms politically tied to the ruling party (KMT) and enterprises that are owned outright by the state and the ruling party.

Import Items	Preference
Fresh peaches and persimmons	Exclusive market access
Tobacco, beer, and wine	Exclusive right to distribute in Taiwan
Turkey meat	Exclusive market access
Beef	U.S. beef classified as "prime" or "choice" by U.S. standards is subject to lower tariffs
Wheat, maize, and soybeans	Favored by Taiwan's import cartels under government direction
Insurance	U.S. insurance firms are given exclusive rights to establish branches in Taiwan
Securities	U.S. brokerage firms are favored in license granting
Automobiles	Imports are allowed for vehicles made in North America and Western Europe only

Table 12.2 Preferential Treatment of U.S. Imports to Taiwan

Source: Compiled by the authors.

tries. On such occasions, Taiwan would engage the complainant in a bilateral negotiation for a settlement. Since no other trading partner possessed the asymmetrical bargaining power that the United States did, bilateral negotiations with non-U.S. trading partners were not as lopsided.

For the U.S. trade negotiators, who still proclaimed themselves the champions of multilateralism, Taiwan's offer of unilateral trade preference put them in a dilemma. They could accept the offer for the benefit of American industries but at the expense of multilateralism, or they could reject the offer in favor of continued negotiations that were costly and whose results were uncertain. A simple rule seemed to guide the decisions of U.S. negotiators; that is, accept the offer when the beneficiary industries in the United States were concentrated or politically sensitive, and reject the offer when the domestic interests were diversified or the benefits from access to Taiwan's market were hard to appropriate.

Table 12.2 lists some major trade preferences that Taiwan has granted to the United States, most of which still prevail today. Among them, four are related to agricultural products, including fruit, turkey meat, beef, and grain. The others are related to tobacco, beer, and wine, automobiles, and the insurance and securities industries. Exclusive market access is granted to U.S. fresh peaches and persimmons, turkey meat, and insurance operators. U.S. tobacco, beer, and wine are allowed to be imported and distributed through agents designated by the manufacturers, whereas other brands can only be imported by the state-owned monopoly producer in Taiwan. U.S. beef classified as "prime" or "choice" by U.S. standards is subject to a lower tariff rate, whereas its main competitor, Australian beef, has been subject to a higher tariff rate that applies to low-grade beef. Importation of beef from other origins, such as Argentina, is prohibited for physiological and sanitary reasons. U.S. wheat, maize, and soybeans, meanwhile, benefit from a subtle preference scheme in which the

Taiwanese government has created import cartels for the respective grains and directed these monopsonies to buy from the United States. At times, the "Buy American" missions organized by these import cartels have even been manipulated to favor particular states of the United States. In the case of the securities industry, the Taiwanese government has exercised favoritism in granting brokerage licenses to U.S. brokerage firms.

These trade preferences have been effective in tilting economic benefits in favor of U.S. firms. For years, U.S. grain has accounted for more than 90 percent of Taiwan's grain imports. Taiwan is the largest export market for American automobiles in Asia, and there are more U.S.-based insurance operators in Taiwan than indigenous ones.

Trade preferences, however, have also incurred apparent economic costs via trade diversion effects. For example, suppression of cigarette imports from Japan has resulted in widespread smuggling of Japanese brands such as Mild Seven. Exclusive market access for automobiles made in North America and Europe has resulted in large numbers of Toyota, Honda, and other Japanese makes being imported from the United States rather than from Japan. The locking-out of European insurance firms has resulted in insurance policies written by Hong Kong branches of European firms being sold in Taiwan's underground market, causing legal problems.

In contrast with the issues in which relevant domestic U.S. interests are concentrated, the United States has usually insisted on multilateralism on the issues in which U.S. economic interests are dispersed. For example, U.S. negotiators repeatedly turned down Taiwan's offer to enhance protection of U.S. trademarks, patents, and copyrights on an exclusive basis.

In fact, in areas where Taiwan's domestic market is dominated by large conglomerates and state-owned enterprises, whose political influence is formidable, the Taiwanese government seems to prefer bilateral agreements with the United States to allow exclusive access to American firms (hence partial liberalization) rather than full-scale liberalization under the multilateral principle.<sup>5</sup> At one point, Taiwan even proposed the formation of a free trade area with the United States to put all bilateral disputes to rest. The proposal was rejected, however.

#### 12.3 The Political Economy of Tariff Concessions

In addition to bilateral arrangements for constraining Taiwanese exports to the United States and for opening Taiwan's market to U.S. exports, the United States also engaged Taiwan in negotiations for lowering Taiwanese tariffs on imports. Tariff negotiations are completely consonant with the multilateral

5. Granting exclusive market access to American firms may also forge partnerships between those American producers and Taiwan's state- and party-owned enterprises, carrying political implications.

Round	Requested	Granted	
1978	339	339	
1981	49	28	
1984	109	59	
1985	174	112	
1986	71	58	
1987 (April)	66	62	
1987 (August)	267	239	
1988	174	51	
1989	558	366	
Total	1,807	1,314	

Table 12.3 Number of Tariff Concessions Requested by the United States and Granted by Taiwan, 1978–89

*Note:* Classification is based on Customs Import Tariff of the Republic of China (CTRN) code except for 1989, which is based on the Harmonized Commodity Description and Coding System (HS Code). Numbers are counted at the eight-digit level.

principle as all concessions made by Taiwan are extended to all trading partners on a most-favored-nation (MFN) basis. The United States first engaged Taiwan in bilateral trade talks in 1978, aiming at obtaining concessions from Taiwan in exchange for U.S. extension to Taiwan of concessions it committed itself to in the Tokyo Round. In other words, the United States used bilateral negotiation to incorporate Taiwan, a nonsignatory of the GATT, into the multilateral system. The talks covered both tariff and nontariff trade issues. From 1978 until 1989, Taiwan and the United States engaged in tariff negotiations nine times. The negotiations then were recessed when Taiwan declared its intention to apply for GATT membership and filed an official application in 1990. Since bilateral negotiations following Taiwan's GATT application would have had important implications for the GATT admitting procedure, the United States wisely halted the annual trade talks at that point.<sup>6</sup>

The purpose of this section of the paper is to examine the pattern of Taiwan's tariff concessions. From this examination we hope to uncover the political economic explanations for U.S. demands for tariff reductions and Taiwan's responses.

Table 12.3 lists the tariff concessions requested by the United States and eventually granted by Taiwan in these nine rounds of negotiations. It can be seen that a total of 1,807 tariff reductions were requested by the United States,

6. As admission to the World Trade Organization (WTO) needs to be unanimously approved by WTO members, the United States took the opportunity to produce a lengthy list of demands for liberalization and policy changes. The package was aimed at removing all remaining trade impediments in Taiwan. In previous negotiations, which were termed "informal consultations," U.S. negotiators had addressed the issues in a piecemeal and incremental manner, whereby a partial concession by Taiwan might be accepted with the expectation that further progress could be made in future negotiations. The negotiation pertinent to WTO admission was a one-shot deal, and the incrementalism principle was abandoned.

	Number of Concessions <sup>b</sup>	Number of Tariff Items Affected	Total Number of Tariff Items	ns B/C	
Sector	(A)	(B)	(C)	(%)	
Agriculture	127	76	314	24.2	
Mining	3	3	99	3.0	
Food processing	291	163	419	38.9	
Textiles and apparel	44	35	588	5.9	
Wood and paper	120	69	218	31.7	
Chemicals	224	159	986	16.1	
Rubber and plastics	43	38	153	24.8	
Basic metal	119	89	520	17.1	
Fabricated metal <sup>c</sup>	333	253	902	28.0	
Nonmetal minerals	82	55	349	15.8	
Others	2	2	29	7.4	
Total	1,388	942	4,577	20.6	

Table 12.4 Sectoral Distribution of Tariff Concessions by Taiwan, 1978–88

some repetitively on the same items, and a total of 1,314 concessions were actually granted. The success rate was 72.7 percent, although the amount by which the duty was actually reduced on each item might be smaller than the original demand. In addition to tariff concessions so granted, Taiwan also cut tariffs on its own initiative in order to bring the tariff structure in line with its own objectives, for example, to provide adequate effective rates of protection to strategic industries. As a result, the Taiwanese government rewrote the tariff law almost every year to bring the tariff schedule up to date. Successive concessions brought the average tariff burden down from 11.3 percent in 1978 to 6.3 percent in 1989.

The requesting and granting of concessions were not made randomly, they were based on political economic calculations. Table 12.4 lists the distribution of concessions across industries. It can be seen that in terms of the sheer number of concessions, the fabricated metal industry (encompassing machinery, electronics, and transport equipment) had the largest number, at 333, followed by 291 in the food-processing industry, and 224 in the chemical industry. It can also be seen from column (B) of the table that the number of tariff items affected was smaller than the number of concessions, indicating that some tariffs were cut repetitively. The last column of the table indicates the proportion of tariff items subject to tariff cut. It can be seen that during the 11-year negotia-

<sup>&</sup>lt;sup>a</sup>Classification is based on Customs Import Tariff of the Republic of China (CTRN) code, at the eight-digit level. Some CTRN codes appear in more than one sector, making the total number of concessions in this table greater than the total number of granted concessions shown in table 12.3. 
<sup>b</sup>Number of concessions is greater than tariff items affected because some concessions were made repetitively.

<sup>&</sup>lt;sup>e</sup>Fabricated metal includes machinery, electronics, and transport equipment.

<sup>7.</sup> Average tariff burden is derived by dividing tariff revenue by value of total imports.

tions, 20.6 percent of all tariff items were negotiated to come down at least once. The efforts of U.S. trade representatives toward reducing Taiwan's trade barriers have to be admired. Among the broadly defined industry categories, the food-processing industry witnessed the highest proportion of tariff items targeted for tariff reduction (38.9 percent). This was followed by the wood and paper industry (31.7 percent) and the fabricated metal industry (28.0 percent). A large proportion of agricultural products (24.2 percent) were also earmarked for tariff cut, in addition to being frequent targets of negotiations for removal of nontariff trade barriers.

We conducted a statistical test to see whether these tariff concessions were deliberately selected or randomly chosen. Comparing the frequency distribution of actual tariff concessions made across industries with the frequency distribution of the tariff population across industries, we obtained a chi-squared statistic of 266.6 under the null hypothesis that the two distributions are indistinguishable. Given that there are nine degrees of freedom, the statistic soundly rejects the null hypothesis, implying that the concessions were not made randomly.

Presumably, U.S. trade negotiators chose items in which U.S. producers possessed a comparative edge in Taiwan's market. And, in fact, for the import items targeted by the United States for concessions and actually acted upon by Taiwan in the nine rounds of negotiations, the United States occupied a market share of 31.6 percent in 1977, one year before the negotiations commenced, compared to its 23.1 percent market share in Taiwan's overall import market that same year. In 1990, one year after the last round of negotiations, the U.S. market share among these conceded import items rose to 45.0 percent, whereas the U.S. share in Taiwan's total imports was 23.0 percent, virtually unchanged from the 1977 level. It is apparent that the import items targeted for negotiation and ultimately subjected to concession were those for which comparative advantage was moving in favor of U.S. producers or whose market potential in Taiwan was better for American products than the average. Therefore, although the United States created public goods by negotiating with Taiwan for tariff reduction, there was an intrinsic bias in the scope of reduction driven by U.S. self-interest. In the following, we will explore the interplay of this self-interest and Taiwan's defense strategy.

We envisage a political economy model in which interest groups in the United States motivate U.S. negotiators' demands for specific tariff concessions. Taiwanese negotiators, on the other hand, react to these demands by deciding whether to concede based on political and economic costs at home. Until the later part of the 1980s, Taiwan had a basically autocratic government with limited influence from business interests. While maintaining a harmonious relationship with the United States was a predominant policy concern, the Taiwanese government's decision rule at this time would probably have been to act so as to minimize adverse effects on economic development with little regard to private business interests at home. Multilateralism was probably of

little relevance in bilateral negotiations, although it might have been used to legitimize the negotiators' positions. For example, before the conclusion of the Uruguay Round of the GATT negotiations, there were no unified rules on agricultural trade. Taiwanese negotiators cited the widespread practices of GATT members in protecting their domestic agricultural products to justify Taiwan's high tariffs on agricultural products.

Based on the political economy model of trade policy formation expounded by Baldwin (1989) and Olson (1965), and considerations of bargaining strategy, we attempted to determine which factors were important in influencing the selection of tariff items that were targeted for negotiation by the United States and that were conceded by Taiwan. This was done with a regression model. We include the following variables in analyzing the determination of tariff concessions in bilateral talks. The explanatory variables are divided into two groups, one related to Taiwan and the other related to the United States.

#### Taiwan-Related Variables

Public Enterprise (PUB). Public enterprises are a crucial factor in the determination of Taiwan's structure of trade protection. A sector in which public enterprises have a larger output share is also more heedfully protected by tariff and nontariff measures (Chen and Hou 1993). Taiwanese government officials are likely to be more determined in defending the interests of public enterprises than private enterprises because the demise of public enterprises means decreasing governmental control over economic resources for political expediency. Their U.S. counterparts, who understand the importance of Taiwan's public enterprises, may also refrain from attacking sectors pertinent to the interests of public enterprises to avoid acrimony. The variable PUB is measured by the share of public enterprises in the output of each sector.

Employment (EMP). In a democratic society, employment means voting power. Most studies suggest that the larger the employment size of the industry, the higher the expected level of protection (Baldwin 1989, 122). Taiwan, however, in the period that we studied here, was not yet a mature democratic society. To what extent employment mattered to policymakers and influenced negotiators is an empirical question. EMP is measured by the number of workers in each sector.

Wages (WAGE). Wage rate may be an important factor in trade negotiations for two reasons. First, public officials may seek to protect workers whose wages are already relatively low from market pressures resulting from liberal trade policies out of egalitarian concerns (Baldwin 1989, 122). Second, wages are generally positively correlated with skills embodied in workers. As has been demonstrated in the trade literature, worker skills are important determinants of the comparative advantage of industrialized countries (Keesing 1966; Baldwin 1971). A high-skill-endowed, and hence high-wage, industry is likely to

be an industry in which Taiwan was gaining comparative advantage, as the country was making the transition from a labor-abundant to a labor-shortage economy during the period studied. If Taiwan's officials are concerned about protecting newly emerging industries more than declining industries, they may be more determined to resist trade liberalization in high-wage sectors. WAGE is measured by monthly wage per worker, in terms of NT (Taiwanese currency).

Tariff Level (TB). U.S. negotiators are likely to target Taiwan's high-tariff items for tariff cut. This makes economic sense because the potential benefit from trade creation is high. For example, U.S. negotiators successfully forced Taiwan to reduce the tariff on imported automobiles from 50 percent to 30 percent, creating a buoyant market for imported cars. It also makes sense in terms of bargaining strategy because the rule of proportionate tariff concessions agreed upon by industrial countries in the Tokyo Round of GATT negotiations provides a "moral" ground for demanding that high tariffs be cut first.

Nontariff Barriers (NTB). Nontariff barriers may be used as substitutes or complements for tariffs as measures of trade protection. In Taiwan's case, the two are shown to be substitutes (Chen and Liu 1993). The major nontariff barriers in Taiwan are licensing requirements, which tend to be more stringent for sectors in which tariff levels are lower. During the bilateral negotiations that we studied, licensing control was also a major issue on the negotiation agenda. Through the years of negotiation, licensing control was significantly lessened along with the reduction of tariffs. U.S. negotiators tended to treat tariff and nontariff barriers as strategic complements and attacked them at the same time. NTB is measured by a weighted index of various non-tariff trade protection measures as described in the appendix.

In addition, the four-firm concentration ratio of Taiwanese industry was tried as an explanatory variable in the regression but was dropped for lack of significance.

#### U.S.-Related Variables

Changes in U.S. Tariff Level resulting from the Tokyo Round Agreements (UTB). U.S. engagement with Taiwan in bilateral negotiations was initially aimed at integrating Taiwan into the Tokyo Round agreements. Therefore, the concessions that the United States made in the Tokyo Round might be used as the yardstick for negotiations or the basis for reciprocity. The United States might ask Taiwan to make a similar pattern of concessions to make the bilateral talks conform with multilateral agreements. UTB is measured by the percentage change in the nominal U.S. tariff rate as described in the appendix.

Changes in U.S. Effective Rate of Protection resulting from the Tokyo Round Agreements (UERP). The effective rate of protection may move in the opposite

direction from the nominal tariff rate. Concessions in nominal tariffs are usually used to gauge the degree of trade liberalization, but the real indicator of government trade policy may be the effective rate of protection. The change in effective rate of protection may truly reflect the U.S. government's concerns for domestic industry. It will be interesting to see whether the U.S. government sought to expand export markets through bilateral efforts to aid industries that were losing or gaining in effective rate of protection at home. UERP is also measured in percentage.

Industry Concentration (UCR4). It is well documented in the political economy literature that industrial concentration is conducive to lobbying power and hence trade protection. Through bilateral negotiations on nontariff issues, we have witnessed the formidable political forces of the U.S. industries dominated by oligopolies, such as tobacco, automobiles, insurance, banking, and finance. We expect this influence to carry over to tariff negotiations. UCR4 is measured by four-firm concentration ratio of U.S. industry in 1987.

Revealed Comparative Advantage (URCA). Aggregated data presented above suggest that the United States gained substantial market share in the sectors in which tariffs were reduced as a result of bilateral negotiations. We hypothesize that U.S. negotiators chose the sectors targeted for tariff cuts in line with the comparative advantage of various U.S. industries. The index of revealed comparative advantage proposed by Balassa (1977) is used to measure the competitiveness of U.S. products in Taiwanese markets. This index is included in the regression analysis to see whether it exerts a systematic impact on the pattern of tariff concessions.

We employ the above two sets of variables in a regression analysis to see to what extent each variable can help to explain the likelihood of each Taiwanese industrial sector's being targeted by the United States for tariff cuts and the likelihood of its being actually subject to a cut. Industrial sectors are defined at the three-digit level in Taiwan's official industrial classification (CIC). For our purposes here, all import and export commodities listed in the official tariff schedules (at the eight-digit level) are first classified into their proper industry sector and then the proportion of those commodity items subjected to tariff cuts or to demands for tariff cuts in each round of negotiation is taken as the dependent variable. Since the dependent variable lies between zero and one, we adopt a limited dependent variable model to conduct the regression analysis. The results are reported in table 12.5.

We conducted regressions on two equations separately. The first is the U.S. demand equation, in which the dependent variable measures the proportion of tariff concessions requested by U.S. negotiators at the beginning of the round. Data on initial U.S. requests are available for the last five rounds of negotiations only (1986–89). The second equation is the final concessions equation,

	Coefficient Estimates	
Explanatory Variable	U.S. Demand for Concessions, 1986–89	Final Concessions 1978–89
Constant	-103.89	35.38
	(2.2)**	(2.6)**
PUB	-0.101	-0.081
	(2.2)**	(2.9)**
EMP	0.389	-1.012
	(0.4)	(1.5)
WAGE	9.252	-2.631
	(2.3)**	(2.3)**
TB	0.399	0.087
	(4.3)**	(1.3)
NTB	0.233	0.097
	(3.5)**	(1.9)*
UTB	-1.396	-1.835
	(1.3)	(2.5)**
UERP	3.281	3.620
	(1.6)	(2.5)**
UCR4	0.059	0.068
	(1.2)	(1.9)*
URCA	0.051	0.020
	(3.4)**	(1.8)*
Log-likelihood	85.05	141.9

Table 12.5 Limited Dependent Variable Model for Tariff Concessions

Notes: Numbers in parentheses are asymptotic t-statistics.

in which the dependent variable measures the proportion of tariff concessions finally made by the Taiwanese government at the end of negotiations. Data on final concessions are complete for all nine rounds.

It can be seen from table 12.5 that the set of independent variables exhibits different explanatory power in the two equations. For the U.S. demand equation, five independent variables, namely, Taiwan's public enterprises (PUB), Taiwan's wage rate (WAGE), Taiwan's tariff level (TB), Taiwan's nontariff barriers (NTB), and the revealed comparative advantage of U.S. industry (URCA), are shown to be asymptotically significant. The United States tends to refrain from demanding tariff concessions in sectors dominated by public enterprises in Taiwan and in sectors in which wages are relatively low in Taiwan. "Respecting" Taiwan's public enterprises and the roles pursued by them was the gesture shown by U.S. trade representatives in the negotiations on nontariff barriers. For example, in the negotiation on market access for U.S. tobacco, U.S. trade representatives never disputed Taiwan's system of monopolizing tobacco production by the state. U.S. negotiators also never challenged Taiwan's state-

<sup>\*</sup>Asymptotically significant at the 10 percent level.

<sup>\*\*</sup>Asymptotically significant at the 5 percent level.

owned oil monopoly. Part of the reason may lie with the favoritism these public enterprises often exercised in the procurement of American products. This attitude may be extended to tariff negotiations.

The fact that the United States also refrains from pressuring Taiwan's low-wage sectors for trade liberalization can hardly be conceived of as due to a "social concern" for Taiwan's poor workers. It is more conceivable that low-wage sectors are also declining sectors in which the United States sees little prospect for importing American products. High-wage sectors are targeted because their potential for sales of U.S. products is good.

The U.S. assault on high-tariff sectors came as no surprise. The United States also campaigned more vigorously for tariff concessions in sectors where nontariff barriers are high. Since many nontariff barriers also provide Taiwanese trade administrators with discretionary power to practice trade preference to the advantage of U.S. exporters, the benefits of tariff cuts in this area are likely to be captured by U.S. producers. This may explain why the United States treats tariff and nontariff barriers as strategic complements in bargaining.

It is reassuring that the index of revealed comparative advantage is significantly and positively correlated with U.S. demands for tariff reduction. This suggests that U.S. negotiators target U.S. products that have been selling well in Taiwan and a tariff reduction may bring disproportionately large benefits to U.S. producers.

It is interesting to note that the two variables related to the Tokyo Round agreements, changes in U.S. nominal tariff (UTB) and effective rate of protection (UERP), are not significant factors in shaping U.S. demands for concessions. The degree of industry concentration (UCR4) also turns out to be insignificant. In other words, U.S. negotiators compile the list of commodities for tariff negotiations mainly based on U.S. comparative advantage, with little regard to the lobbying power of the industry or to U.S. commitments in the Tokyo Round negotiations.

The determinants of the final concessions, supposedly a result of the tug-of-war between U.S. pressure and Taiwanese counterpressure, present a different picture. A U.S. request for a tariff concession will be granted only if U.S. pressure is high and counterpressure from Taiwan against such liberalization is low. In other words, nonpriority items on the U.S. demand list may be dropped if they are in strong conflict with Taiwan's interests. On the other hand, nonpriority items from Taiwan's perspective may be "sacrificed" to salvage the priority items.

Table 12.5 shows that in the final concessions equation, public enterprises (PUB) remain significant and negatively related to the probability of tariff concession. This suggests that both sides share an interest in sparing state-dominated sectors from tariff concessions. Taiwan's wages (WAGE), however, exert a negative impact on the proportion of tariff reduction, contrary to its correlation with U.S. demands. The Taiwanese government seems to be deter-

mined to withstand U.S. pressure to open up markets in high-wage sectors and appears to be successful in doing so. The complete reversal of the pattern of trade liberalization for these sectors is something remarkable, reflecting the strategic importance of Taiwan's high-wage, and probably also high-skilled, sectors. Although export promotion is the major Taiwanese government policy toward developing strategic industries in Taiwan, protecting these industries from premature exposure to import competition is also considered important. In this regard, we can sense the importance of industrial development concerns on the part of Taiwan in trade negotiations. In fact, Taiwan's Bureau of Industrial Development, which is in charge of industrial policy, played a pivotal role in each round of negotiations.

Existing tariff and nontariff barriers in Taiwan, which are important determinants of U.S. demands for tariff cuts, are not as important in determining the final outcome of negotiations. The commodities that end up on the final list for tariff reduction are not necessarily high-tariff items. In fact, our analysis reveals that a higher level of tariff on a given item does not even increase the likelihood of that item's being actually selected for tariff slicing, as the variable TB is not asymptotically significant. The variable for nontariff barriers (NTB), however, remains significant at the 10 percent level, although its statistical contribution to the likelihood of being finally selected for tariff cut is much smaller than its effect on the likelihood of being targeted by U.S. negotiators, judging by the much smaller coefficient estimate for NTB in the final concessions equation.

Interestingly, tariff concessions agreed to by the United States in the Tokyo Round and the resulting changes in the effective rate of protection turn out to be important determinants of the final pattern of tariff concessions agreed to by Taiwan, although they do not significantly influence U.S. negotiators' list of requests. The variable of changes in U.S. nominal tariffs (UTB) is shown to be negatively related to likelihood of tariff concession, meaning that for industries in which the United States made more drastic cuts in tariffs, Taiwan also agreed to more cuts. In other words, U.S. commitments in the multilateral system seem to carry some power to persuade Taiwan to pledge a similar pattern of concessions. Perhaps Taiwan does not want to be seen as a free rider on the multilateral system. On the other hand, the final concessions made by Taiwan are positively related to changes in the effective rate of protection in U.S. industry (UERP). This implies that sectors that gain in effective rate of protection in the United States are also more likely to gain from easier access to the Taiwanese market. This is an apparent "strategic" trade policy aimed at boosting priority industries.

It is also noticeable that the four-firm concentration ratio (UCR4), which is an unimportant factor in U.S. demands for tariff concessions, turns out to be important in deciding the final outcome of negotiations. This implies that concentrated industries flex their muscle through their lobbying power in the bargaining process, making their demands hard for Taiwanese negotiators to resist and hard for U.S. negotiators to compromise on.

The revealed comparative advantage (URCA) of U.S. industry remains a significant factor in determining the final outcome of bilateral bargaining, although its importance is reduced, judging from a smaller coefficient estimate in the final concessions equation. Resistance by Taiwan's negotiators seems to have attenuated its strength.

The only variable that turns out to be insignificant in both equations is employment (EMP). It has a correct, negative sign in the final concessions equation, suggesting that Taiwan's negotiators are somewhat concerned about the "voice" of industries with large numbers of employees. This concern has not been transformed into a significant factor for trade negotiators in a new-born democracy, however.

#### 12.4 Conclusions

This paper reviewed the history of bilateral trade negotiations between Taiwan and the United States. The question we posed at the outset was: Does bilateralism enhance or jeopardize multilateralism? The Taiwan-U.S. case suggests that a bilateral approach to obtaining export restriction or market opening by removing nontariff barriers tends to be in conflict with the multilateral principle. VERs divert economic benefits to nonrestricted exporters at the expense of the importing country and possibly also at the expense of exporters subject to such restriction. Bilateral negotiations for market opening under the threat of unilateral trade sanctions (Section 301 action) tend to encourage the practice of trade preference. This practice, while rendering maximum benefits to U.S. industries, is detrimental to multilateralism. It signals to the world that the United States is no longer interested in creating public goods for other members of the GATT and that those who are interested in entering Taiwan's market ought to negotiate their own opportunities. The United States is more inclined to accept trade preference in areas where its domestic interests are concentrated. In this connection, state power is employed by oligopolistic firms to circumvent the competition process in gaining access to foreign markets.

Even in the area of tariff negotiations, where any tariff reduction made by Taiwan is applied to other trading partners under the MFN principle, bilateralism does not necessarily enhance multilateralism. Since tariff concessions are made selectively, with domestic business interests underlying the selection process, trade liberalization resulting from these negotiations is also biased. On the other hand, we find that multilateral agreements are used as "moral standards" by asymmetrically weak negotiators like Taiwan to defend their positions. If the dominant negotiator adheres to multilateral principles, bilateral negotiations may complement multilateralism. But the temptation to act in one's own self-interest seems to be too great to guarantee such a happy outcome.

In any event the prospect of Taiwan's joining WTO in the near future may significantly change Taiwan's bilateral relationship with the United States. First of all, trade preferences, notably exclusive market access granted to U.S. pro-

ducers, will have to be abolished once Taiwan is admitted to the WTO. To offset the loss from an elimination of trade preferences, U.S. negotiators have been particularly intransigent in demanding drastic tariff cuts in the related product categories during the bilateral consultations pertinent to Taiwan's WTO admission. Second, losing the option of preferential trade arrangements reduces the opportunity set for compromise and may make future bilateral negotiations more difficult and more confrontational, although the resultant agreements will be less distortive. Meanwhile, private interests lobbying the U.S. government to negotiate bilaterally for access to Taiwan's market will have to give up their attempts to monopolize Taiwan's market and leave the market access issue to multilateral organizations. Third, Taiwan will improve its bargaining power, and the legitimacy of its refusal to accept terms of agreement beyond the WTO rules will be strengthened. In cases involving split U.S. interests, Taiwan may even challenge U.S. demands presented through bilateral channels by taking them to the WTO dispute settlement mechanism, making the bilateral approach less effective for the United States in the future. In addition, Taiwan may also make use of regional forums, such as APEC, to fortify its position against the United States in solving trade-related problems.

## Appendix Sources of Data

- PUB: The share of public enterprises in agricultural production is calculated from the *Report on Agriculture and Fishery Census, Taiwan-Fukien District, the Republic of China* (Taipei: ROC Directorate-General of Budget, Accounting, and Statistics [DGBAS], 1980, 1985, 1990); that in manufactured output is from *Kung ch'ang chiao cheng chi ying yun tiao ch'a pao kao* (Survey of Factory Registrations and Operations; Taipei: ROC Ministry of Economic Affairs, various issues).
- WAGE: Wages of manufacturing workers are from Yearbook of Earning and Productivity Statistics, Taiwan Area, ROC (Taipei: DGBAS, 1993); those of agricultural workers are from Report on the Survey of Family Income and Expenditure, Taiwan Province, ROC (Taipei: DGBAS, (1993).
- EMP: Employment size of manufacturing sector is from Yearbook of Earning and Productivity Statistics, Taiwan Area, ROC (Taipei: DGBAS, 1993); employment size of agricultural sector is from Agricultural Production Statistics Abstract, Taiwan District, ROC (Taipei: ROC Council of Agriculture, 1993).
- TB: Average nominal tariffs are based on 1986 levels and calculated from Customs Import Tariffs and Classification of Import and Export Commodities of the Republic of China (Taipei: ROC Ministry of Finance, 1986).

- NTB: Nontariff barrier index is also based on 1986 levels. NTB is a weighted index of five forms of trade barriers: prohibition and control, producer-only import restriction, public-enterprise-only import restriction, sources-of-import restriction, and administrative licensing control. For details of the calculation, see Chen and Hou (1993).
- CR4: Four-firm concentration ratio is calculated from 1986 Industrial and Commercial Census (databank; Taipei: DGBAS, 1986).
- UTB: U.S. concessions in nominal tariffs in the Tokyo Round are from Alan Deardorff and Robert Stern, "The Effect of Tokyo Round on the Structure of Protection," in *The Structure and Evolution of Recent U.S. Trade Policy*, ed. Robert Baldwin and Anne Krueger (Chicago: University of Chicago Press, 1984).

UERP: Same as UTB.

UCR4: Four-firm concentration ratios are from 1987 Census of Manufactures (Washington, D.C.: U.S. Department of Commerce, 1987).

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#### Comment Sang-Woo Nam

Korea is no different from Taiwan in its vulnerability to bilateral trade pressure from the United States. As the proverb says, "Misery loves company." We have full sympathy with Taiwan. During 1978–88, eight countervailing duty cases were filed against Korea by U.S. industries, 31 antidumping cases, and 15 cases of import relief on the part of the United States against Korean products.

My comments focus on the analytical part of Chen and Liu's paper: the political economic analysis of tariff concessions. Presented in table 12.5 is an equation of U.S. demand for concessions, in which the only significant U.S.-related variable revealed is comparative advantage. In Taiwan, U.S. market share for import items targeted for concession is said to have increased from 31.6 percent in 1977 to 45 percent in 1990. Here, what I want to point out is that causality runs both ways between comparative advantage and demand for concessions: that is, the more concessions the United States obtains, the faster its market share rises.

The authors tried the industrial concentration ratio of the United States to

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see whether highly concentrated industries are better organized for pressuring the government. It would also be interesting to see whether Taiwanese industries with high concentration ratios would be effective at resisting U.S. requests for concessions. The motivation of concentrated industries to pursue lobbying efforts may be stronger for the country giving concessions than for the country requesting them. This is so because the Taiwanese market is likely to be small for U.S. firms, and not all of them may actually benefit from concessions because of competition among them, while all Taiwanese firms are affected.

The success rate for the United States is reported to be 73 percent, obtaining 1,314 concessions out of 1,807 requests. The success rate by industry would be valuable information for the purpose of analyzing how important political economic considerations were on the part of Taiwan.

Finally, the sample periods for the two equations presented in table 12.5 are not the same. If an important missing variable specific to a particular period is closely associated with an explanatory variable, estimated coefficients may not be reliable. In Taiwan, where the structure of comparative advantage and the industrial structure have changed rapidly, this seems very possible. Even in the case where a lack of data is the problem, the second equation (final concessions) could be estimated for the same sample period as the first equation. This would make us more comfortable with comparing the estimated coefficients between the two equations.

#### Comment Hank Lim

This paper provides a very interesting and useful empirical study of the relationship of bilateral negotiations between the United States and Taiwan to the multilateral trade regime. The purpose of this study is to reveal whether the empirical results of bilateral negotiations dominated by the United States conform to the established principle of multilateralism.

It is generally believed that a bilateral approach to world trade issues and problems is inferior to a multilateral approach. Theoretically, a bilateral approach may not even produce a second-best solution. The economic cost of voluntary export restraints and the problems associated with safeguard measures have been widely discussed in the economic literature. In comparison, the bilateral approach to market opening has not been analyzed in great detail. This empirical study specifically attempts to examine the bilateral trade arrangements between the United States and Taiwan on market access and tariff and nontariff reductions under the framework of asymmetrical bargaining power between the two trade partners.

Another interesting aspect of this study involves the incorporation of a polit-

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ical economy model to explain the results of bilateral negotiations between the two economies on tariff concessions. This was done through a regression model to determine which factors were important in influencing the outcome of negotiations. The statistical results were significant and functionally correlated as expected, except for the employment variable for the Taiwan-side equation. This variable does, however, have a correct negative sign in the final concessions equation, suggesting that Taiwan's negotiators were somewhat concerned about industries with large numbers of employees. In the U.S.-side equation the results were equally significant and correlated.

The statistical results of this study are consistent with Krueger's earlier study on bilateral trade negotiations between the United States and South Korea (Krueger 1993). The basic conclusion of both studies confirms the hypothesis that bilateral trade negotiations between unequal partners tend to depart from the multilateral principle. In the case of Taiwan, there was a certain element of peculiarity in the sense that the Taiwanese government seemed to prefer bilateral arrangements with the United States for market opening rather than full-scale trade liberalization under the multilateral principle. This is due to the fact that Taiwan's domestic market is dominated by large conglomerates and state-owned enterprises, and Taiwan is not a member of the GATT.

The Taiwan-U.S. bilateral case as revealed in this study suggests that a bilateral approach to obtaining export restrictions or market opening tends to be in conflict with the multilateral principle. Furthermore, bilateral negotiations for market opening under the threat of unilateral trade sanctions tend to encourage the practice of trade preference. This practice, while rendering maximum benefits to U.S. industries, is detrimental to global multilateralism.

The empirical evidence in this study also confirms the theoretical hypothesis that the United States is particularly inclined to accept trade preference in areas where its domestic interests are concentrated.

There are, however, four points that require further clarification. They are as follows:

- 1. On wages, the paper needs to explain more fully how to reconcile the conflicting objectives of enhancing employment and protecting high-wage newly emerging industries. The regression model on the Taiwan side seems to show that Taiwanese officials were more concerned with protecting high-wage newly emerging industries.
- On employment, the empirical results show that this explanatory variable is not important to Taiwanese policymakers. The paper should indicate the underlying structural and expedient factors behind this departure from the conventional theory.
- 3. On the assertion that existing tariff and nontariff barriers are not as important to the final outcome of negotiation, could it be that tariff and nontariff barriers in Taiwan are basically used to protect Taiwan's industries from countries other than the United States?
  - 4. On the assumption that different international trade policies adopted by

different U.S. administrations seem to have had no impact on the demand equation of the U.S. regression model, is this realistic?

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