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Does Regionalism Promote Administered Protection?**

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ABSTRACT

The Rise of Antidumping: Does Regionalism Promote Administered Protection?

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Miranda, Torres and Ruiz (1998) and Finger (1993) have documented the increased incidence of antidumping in recent years and its spread beyond developed to developing and transitional economies. Clearly the use of administered protection has in part arisen because of the success of the GATT (and now the WTO) in progressively reducing traditional forms of protection including tariff and non-tariff barriers, particularly in manufacturing. The “globalization” of antidumping has coincided with a proliferation of regional preferential trading arrangements, including initiatives such as NAFTA and association agreements between the EU and surrounding countries. The countries that have been the most prolific in launching antidumping cases have largely been members of such discriminatory trading arrangements while the affected (accused) countries have often been outside regional trading blocks. Moreover, the countries adopting definitive measures against the accused are heavily concentrated among members of powerful regional trading areas. This study documents and analyzes the asymmetry in antidumping actions, focusing on the propensity of members of regional trading blocks to use antidumping actions against developing countries in East Asia.

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The Rise of Antidumping: Does Regionalism Promote Administered Protection?

Introduction

Antidumping investigations and measures have increased sharply in the 1990s compared with the 1980s. Based on semi-annual reports prepared by GATT (now WTO), two recent studies have compiled data on antidumping cases. In the decade of 1980 through 1989, on average 155 antidumping investigations per annum were reported (Finger 1993). However, in the eight-year period of 1990 through 1997, on average, 231 investigations were notified to GATT/WTO (Miranda, Torres and Ruiz 1998).¹ Antidumping measures (discriminatory antidumping tariffs) are also clearly rising in the 1990s compared with the 1980s (Miranda, Torres and Ruiz 1998).

Antidumping regulations allow countries exceptions to two fundamental GATT principles. First, antidumping laws violate the principle of non-discrimination. That is, they allow countries to treat domestic and foreign firms differently in enforcing price discrimination laws (Lipstein 1997). Antidumping law in the United States, for example, allows a “significant deviation from principles of national treatment” (Lipstein, 1997:409). In addition, antidumping duties discriminate among sources of imports and are typically enforced with the aid of rules of origin to prevent circumvention of antidumping duties. Second antidumping duties violate the principle of reciprocity. They allow GATT/WTO contracting members to unilaterally raise tariffs above their GATT bindings without offering any compensation as is required in the case of safeguard actions.

¹ The actual number of antidumping investigations and measures is higher than the number notified to the WTO, as non-members are not obligated to do so. It is known that Taiwan has conducted a number of investigations that are not included in the WTO notifications. Lipstein (1997) reports that fewer than 10

There are currently no reliable estimates of how much trade is affected globally by antidumping actions. Studies of US antidumping actions give some indication of the magnitude of the problem during the 1980s. Hufbauer (1999) roughly estimates that the current 300 plus US antidumping measures in force affect around \$15 billion of US imports. His estimate assumes that, on average, each measure affects about \$50 million in import volume, based on experience of the 1980s. Hufbauer's estimate is much more conservative than that of Kolev and Prusa (1999). They assert that in 1990, almost 10% of US imports were covered by antidumping (triple the coverage of 1980). Moreover, during that decade Voluntary Restraint Agreements (VRAs) on exports doubled and covered significant amounts of trade in items such as autos and semiconductors.

Finger (1991) estimates the cost to the US economy of US antidumping actions in the 1980s is equivalent to about one-half of the OPEC oil shock of 1974. Ironically, in 1999 several domestic US oil producers filed a petition that forced the US Department of Commerce to investigate whether petroleum was being "dumped" on the US market at "less than fair value". The finding was negative. However, the case is illustrative of the fact that large amounts of US imports are subject to antidumping investigations whether or not penalty duties are imposed. In any case, the cost of such administered protection to foreign exporters and US consumers is certainly on the rise.

The Uruguay Round Antidumping Agreement (the AD Agreement) has brought a measure of transparency and regulation over the use of antidumping. However, it does not go far enough in reforming the rules. The aforementioned studies indicate that more countries are engaging in antidumping actions than ever before, including developing and

countries had antidumping laws in 1979, that 24 countries had such laws by 1990 and by 1996 nearly 60 countries had enacted antidumping laws.

transition economies—a trend that is not abating. The incidence of antidumping investigations and measures thus is increasing. It is particularly alarming that antidumping actions are rising against East Asian developing countries, several of which are making nascent recoveries from severe economic crises. Antidumping measures threaten to undermine exports from economies that have recently experienced financial and balance of payments crises including those in East Asia, Brazil, and Russia.

In this context, the Japanese government has tabled a *Proposal on Antidumping* (July 6, 1999) in preparation for the 1999 WTO Ministerial Conference in Seattle. The proposal cites the increasing number of WTO members using antidumping as a trade remedy and the proliferation of antidumping measures. It argues for increasing disciplines over the use of antidumping in order to curb protectionist abuse of antidumping regulations. The proliferation of antidumping investigations imposes large burdens on developing countries and threatens to erode the gains from tariff reductions according to the proposal. Japan's proposal has met with mixed reactions, including vehement opposition from the United States, guarded support from the European Union (EU) and strong support from developing countries.

Japan is among the most parsimonious of the industrial countries in the use of antidumping. The Ministry of International Trade and Industry (MITI) has been very cautious in responding to industry demands for antidumping investigations. Part of the reluctance stems from the Japanese government's support for developing countries, which is an important reason Japan has stayed out of the Multi-Fiber Arrangement (MFA). Cumulatively, Japan has initiated only five antidumping investigations with two

resulting in antidumping measures (Yoshimatsu 1999).² Japan is also not a member of any discriminatory regional trading arrangement.

This paper seeks to evaluate quantitatively the intensity with which countries use or are affected by antidumping relative to trade. It also assesses the extent of asymmetry between various regional groupings in the use of antidumping. The main questions the paper seeks to address are as follows: 1) Are members of regional trade and deep economic integration agreements more likely to engage in antidumping actions than other countries? 2) Are developing economies, particularly those in East Asia, relatively intensely affected by antidumping investigations and measures compared with developed economies? 3) Are members of Customs Unions less likely than members of Free Trade Agreements to intensively use antidumping as a trade remedy?

Data and Methodology

Data published in the study by Miranda, Torres and Ruiz (1998) are utilized in this study. Antidumping investigations are counted by country and by product, meaning that if a country names two countries dumping two products in its notification to WTO, that constitutes four investigations. Twenty-nine contracting members of WTO initiated antidumping investigations between 1987 and 1997 (as reported in Miranda, Torres and Ruiz, 1998). The notified cases include those against non-contracting members as well as members of WTO. The most recent antidumping data are for the first six months of 1998, however, these data are currently incomplete as a number of WTO members have yet to

² By 1999 only one definitive measure remains in force (against cotton yarn from Pakistan). The other measures (a dumping duty and a price undertaking) against ferro-silico manganese from China were terminated in January 1998 (WTO, 1998a).

file their antidumping actions for January 1 to June 30, 1998. Hence, this study relies on the published data cited above.

Finger and Murray (1993) report that the US does not appear to use antidumping to burden developing countries, in general, citing the share of antidumping cases against developing countries compared with the share of US imports they accounted for in 1987. This comparison suggests that an index of the intensity with which a country is accused of dumping relative to its export performance can be calculated as follows:

A = the number of investigations or antidumping measures against country (or region) *i* between years *t* and *t+n*.

B = the share of total investigations or measures in which country *i* is accused of dumping by partners as a % of the total number of investigations or antidumping measures conducted between years *t* and *t+n*.

C = the value of the exports of country *i* between years *t* and *t+n*.

D = the share of total export value of country *i* between years *t* and *t+n*.

E = (B/D) the ratio of the share in total antidumping cases of country *i* relative to the share of country *i* in total exports between years *t* and *t+n*.

If the index value is above unity, then the country or region may be thought to be intensively affected by antidumping actions relative to its share in global export markets. If it is at unity, then antidumping accusations are proportional to the country's export share and if it is below unity, the country is lightly affected by antidumping relative to its export share. The trade-weighted Antidumping Intensity index (ADI) can be applied to investigations as well as definitive measures.

A variant of the ADI can be calculated for import shares as well. Thus, the share of country in a partner's total antidumping investigations or measures is compared with the share of the partner's imports from that country. Again an ADI of greater than unity would suggest the country is relatively intensively affected by the partner's antidumping actions. This latter measure can be computed for partners that are regional preferential trading arrangements. However, some adjustments are needed when doing so. For

example, in a custom's union or common market such as the EU, antidumping actions are limited to non-member countries. Hence, the relevant denominator for import share is not total world imports of the EU but only extra-EU imports. In contrast, in a Free Trade Agreement, anti-dumping actions affect member and non-member countries alike, hence global trade is the relevant denominator.

Miranda, Torres and Ruiz calculated the above indices in the appendix to their study. However, the calculations were done using the trade share of the affected country in 1996 alone. Thus, for countries with rising shares in world trade and with rising penetration of partners' import markets, their calculation will understate the intensity with which such countries are affected by antidumping. The ADI measure, to be sure, has serious weaknesses (as do other commonly used trade indices such as RCAs). If antidumping severely restricts imports so that they fall to zero in a partner's market, the index will also be zero and will be completely misleading. It would be preferable to be able to compute the index based on the market share of the affected country in the apparent consumption of the partner. This is possible for OECD member countries as partners for some years but not all. A problem with doing so is that the antidumping measures are introduced based on the Harmonized System (HS) tariff classifications which are much narrower than the international standard industrial classification (ISIC) categories for industrial production. Hence, establishing a working concordance that accurately weighs the amount of imports relative to production or apparent consumption in particular tariff items is extremely difficult to achieve. This can be seen by looking at the Semi-Annual Report of Anti-Dumping Actions of the United States (1 January – 30 June 1998). Column 12 of the Report records “dumped imports as % of domestic

consumption” and the entry is almost invariably n/a (not available). Thus, it appears that the benefits outweigh the extra costs of attempting to revise the index to take into account market share.

Bearing in mind the weaknesses of the ADI a supplementary measure of antidumping is suggested. The alternative measure is the ratio of total antidumping investigations or measures which country *i* or region *r* initiate to total investigations or measures of partners affecting country *i* or region *r*. This “symmetry ratio” can be calculated using the data in tables 1-4. It matters not whether one uses the absolute number or the percentage share of investigations and measures. This measure provides a useful insight as to why countries or regions may be strongly supportive or opposed to antidumping reform in the WTO.

Results

The trade-weighted ADI comparing country and regional shares in investigations (Table 1) and measures (Table 2) provides some perspective on the relative severity with which antidumping affects major trading nations. It is noteworthy that both Northeast Asia and ASEAN as regions are relatively intensely investigated for dumping as is the EU.³ Within Asia, China followed by Thailand, Korea and Indonesia are investigated most intensively. Japan’s intensity of being investigated is relatively low and is similar to NAFTA. The CER (linking Australia and New Zealand) is comparatively least intensively investigated.

Investigations of antidumping are costly to administer and impose non-negligible burdens on exporters. For example, the questionnaire that the US Department of

³ It is important to note that most dumping actions against the EU involve individual members, rather than the EU as a whole. Hence, individual member countries may have greatly differing ADI’s.

Commerce (DOC) requires firms named in US antidumping petitions to fill in is 135 pages in length. It repeatedly warns the firm that if it is not forthcoming with the requested information, the DOC will base its findings on the facts available to it (presumably from the US firms filing the petition). Antidumping investigations in the past have often led to “voluntary restraint agreements” (VRAs). VRAs are similar to quantitative restrictions in their impact on imports and markets and often allow cartel-like pricing. However, the AD Agreement makes VRAs illegal among contracting members of WTO, though WTO members are still allowed to use VRAs with non-members as the US has done recently in the case of steel imports from Russia. Among WTO members, it is likely that there will be a higher incidence of “definitive measures” which include “price undertakings” and anti-dumping duties. The former measure requires exporters to raise their product’s price to “normal value”. Normal value may be defined as the lower of the domestic price of the product in the exporter’s market or a “non-injurious” export price. Anti-dumping duties are based on the dumping margin calculations, which should result in the same percentage change in the export price as a price undertaking. Duties of course imply a loss of revenue for the exporter compared with price undertakings.

Data on the distribution of antidumping investigations and measures by industrial sector is also published in Miranda, Torres and Ruiz (1998). However, the published data for the distribution are not presented in enough detail to analyze the bilateral partners involved at the industry level. Nevertheless, briefly for East Asia the following industries were most intensely investigated: Machinery and electrical equipment (20.84%), Base metals (15.78%), Plastics (13.73%), Chemicals (13.25%), textiles (8.67%), Glass and ceramics (5.42%), other manufactures (4.34%) and footwear (3.25%). Antidumping

measures against East Asia by industry are as follows: Machinery and electrical equipment (22.71%), Base metals (17.66%), Chemicals (15.60%), Plastics (8.94%), textiles (7.34%), other manufactures (5.05%), footwear (4.13%) and Glass and ceramics (3.90%). There were some differences between Northeast Asia and ASEAN in these rankings and, for ASEAN, Pulp and paper accounted for 8.15% of investigations and 11.25% of measures, while accounting for only about 3% of actions in the case of Northeast Asia. All reporting countries most intensely investigated the following industries: Base metals (25.32%), Chemicals (16.83%), Machinery and electrical equipment (13.53%), Plastics (11.42%), and Textiles (7.21%). For antidumping measures of all reporting countries the following industries were most affected: Base metals (29.58%), Chemicals ((18.23%), Machinery and electrical equipment (14.55%), Plastics (8.73%) and Textiles (6.21%). These sectors accounted for roughly three-fourths of all notified antidumping actions during the sample period.

When one examines the data in tables 2 and 4 regarding the incidence and use of definitive measures, it can clearly be seen that there are large asymmetries between the various regions and countries. Other studies previously published have noted the basic asymmetry between users of antidumping (largely the US, Canada, and EU) and the victims of antidumping (mainly newly industrializing countries).⁴

Members of FTAs are relatively lightly affected by antidumping yet make very intensive use of antidumping. The asymmetry is pronounced in the cases of Canada, Mexico, Australia and New Zealand, although in Mexico's case measures against it are about proportional to its share of export markets. The asymmetry in Asia is just the

opposite as in the case of the FTA members. Asian countries are much more intensively penalized by antidumping measures than they themselves use antidumping measures against others. The EU has a much more symmetrical situation in the area of definitive measures than in the case of investigations. The EU's use of antidumping measures is a bit more than the intensity with which it is penalized by partner's antidumping measures. However, both indices are below unity in value. The relatively greater propensity of members of free trade areas to use antidumping and the great asymmetry between use of measures and being affected by measures compared with the EU provides some evidence that may be relevant to answering question 3 above.

East Asia (Northeast Asia plus ASEAN) in comparison with the other regions, is relatively parsimonious in the use of antidumping measures although it is the region that is most intensively persecuted for (alleged) dumping. As East Asian countries are not members of deep regional integration arrangements, they do not make use of discriminatory trade policies under GATT Article XXIV (Regional Trading Arrangements).⁵ The Asian countries may therefore be reluctant to embark upon the inherently discriminatory path of antidumping (covered by Article VI). Aside from Korea, the number of antidumping investigations and measures taken by East Asian countries is extremely small.

Taiwan and China are still not members of the WTO, hence, they do have no obligation to report antidumping actions to that body in Geneva. Thus, they are excluded

⁴ See Trebilcock and Howse (1995), for example. However, these studies are based on an evaluation of cases in the 1980s and don't take into account the proliferation of users of antidumping that has occurred in recent years.

⁵ Japan provides preferences to developing countries under the Generalized System of Preferences (GSP), but these preferences cover a rather small proportion of imports and are open to all developing countries. Korea has dismantled its "Import Source Diversification Policy" that discriminated against imports from Japan. Despite the policy, Japan has maintained a large share of the Korean import market (Hong 1999).

from Table 3 and Table 4. However, the author has learned that Taiwan has conducted 41 antidumping investigations between 1987 and 1997, with 15 antidumping measures being undertaken, including 7 antidumping duties, 6 price undertakings and 2 quantitative restrictions or voluntary restraint agreements (Taiwan, Ministry of Economic Affairs 1998). If these investigations and measures were to be added to the total WTO notifications, Taiwan would have an ADI of 0.75 for investigations and 0.59 for measures. China has recently implemented its own antidumping regulation, and initiated its first investigation of dumping of newsprint paper by three countries, the USA, Canada and South Korea, in 1997. A preliminary judgement made a positive finding in 1998 and a final positive judgement lead to the imposition of a definitive measure in the form of an anti-dumping duty in 1999 (see appendix Table 1). Taiwan is far more often accused and penalized for dumping than it accuses or penalizes others (Table 7).

The vast bulk of antidumping investigations of and measures against East Asian countries have been undertaken by partners that are members of deep regional integration agreements (Tables 5 and 6). This could be mere coincidence, with other factors determining the propensity of individual countries to engage in antidumping actions. A comparative advantage in litigation (presence of accommodating legal institutions), number of legal professionals specializing in commercial law, number of consultants with experience in antidumping procedures and well-organized lobbying by industry are among these other factors. Politicians and bureaucrats must also be willing to turn trade policy over to industry. These may be proximate causes for the observed asymmetry between East Asia and the other regions.⁶

⁶ In the case of the CER countries, the geographical proximity of ASEAN countries and the potential competition these countries' industries pose may also be factors.

The symmetry ratio analysis (Table 7) highlights the huge differences between the regions in the relative use and affects of antidumping actions. For example, the United States has initiated 17.81% of all antidumping investigations and 26.02% of all definitive measures. It has been named as the offending party in only 8.56% of all antidumping investigations and has been affected by only 8.99% of all definitive measures during the sample period. Thus, the symmetry ratio for investigations is 2.08 and for measures is 2.89. In contrast, Japan has a symmetry ratio of 0.03 for investigations and 0.02 for measures. Thus the United States is 70 times more likely to engage in antidumping investigations than is Japan and is 140 times more likely to impose antidumping penalties.

The asymmetry in antidumping actions between the CER and the East Asian countries is especially pronounced (Table 7). In part the asymmetry between FTA members and developing economies such as China and the ASEAN members such as Indonesia results from the fact that antidumping laws and regulations have only been established very recently (James 1999). However, this does not explain the gap between FTA members and Japan, Hong Kong, Korea, Taiwan or Singapore.

The EU has relatively greater symmetry in antidumping than do the FTAs, however, this does not imply the EU is even-handed with respect to all regions in use of antidumping. This point will be emphasized in examining the import weighted ADI results for the various regional integration agreements.

NAFTA

The Canada-US Free Trade Agreement was implemented in 1989 and, after intensive negotiations with Mexico, the NAFTA was implemented in 1994. It is

interesting to note that antidumping actions by NAFTA members rose in the period of intensive negotiations but settled down again thereafter (data from Miranda, Torres and Ruiz 1998). Part of the explanation for this possibly lies in the business cycle downturn that took place during 1990-1992. NAFTA members have initiated numerous antidumping investigations against each other, however, the trade weighted ADIs of each member for intra-NAFTA imports is well below unity (Table 8) and these ADIs are much lower than the global ADIs.

For Mexico, intra-NAFTA investigations and measures initiated by the US and Canada are relatively large as a share of total investigations and measures against it, resulting in substantial intra-NAFTA ADIs. The ADIs for Canada for investigations (5.42) and measures (3.01) and for the US investigations (4.89) and measures (5.44) are well above unity. The relatively intensive antidumping actions of the developed members of NAFTA against the developing member are noteworthy.

The NAFTA members antidumping investigations (Table 9) and measures (Table 10) with respect to East Asia are below each East Asian partner's share in the North American market for imports, with the exception of China. The ADIs are particularly low for Hong Kong, the Philippines and Singapore but also in the case of Japan. However, the investigations ADI for East Asia excluding Japan is more closely proportionate to the import share. The ADI for definitive measures is above that for investigations and for East Asia excluding Japan is very near unity. Again China is most seriously affected by NAFTA members antidumping measures.

If NAFTA does not intensively pursue antidumping against East Asia or itself relative to import share, then it must do so against other regions. In the case of the CER,

NAFTA members have very few undertakings (well below the import share of partners from the CER). However, for the EU-15 the NAFTA ADI for investigations is above unity (Table 11) for 12 of the 15 and for the EU as a whole. The NAFTA ADI for definitive measures is above unity for 9 of the 15 EU members and for the EU as a whole (Table 12). The value of the overall NAFTA ADI for investigations and measures (Tables 3 and 4), however, is still higher than that for the EU as a whole. NAFTA thus must intensively use antidumping actions against other regions, particularly against developing and transitional economies. In the case of Brazil, NAFTA members account for 42.9% of all antidumping investigations and 49.2% of all measures against Brazil in the sample period.

EU-15

The EU (formerly the EEC) has expanded to 15 members from 12. For much of the study period EEC members could conduct antidumping against members of the European Free Trade Agreement (EFTA), but this is no longer the case. The EU has very few antidumping actions directed against Australia or New Zealand. However, the EU appears to aggressively use antidumping investigations (Table 13) and measures (Table 14) against East Asia. The propensity of the EU to take antidumping actions against East Asia, particularly East Asian developing countries is shown to be more than double the EU global propensity. The ADIs of the EU for investigations (2.24) and measures (2.23) against East Asia excluding Japan are particularly high. Hence, it can be seen that the EU is more aggressive than NAFTA in undertaking antidumping investigations and measures against East Asia. China is singled out for the most intensive EU antidumping action in East Asia.

The EU tends to be more parsimonious in use of antidumping action against the two larger (in trade share terms) members of NAFTA and for NAFTA as a whole than it is globally. Both investigations (Table 15) and measures (Table 16) are quite small against Canada and the US. However, the EU tends to use antidumping against Mexico quite aggressively with investigations ADI (4.22) and measures ADI (6.60) being extremely high and comparable to those involving the EU and China. Hence, there appears to be a strong bias in use of antidumping against developing countries in the sample partners examined in this study in the case of the EU. The EU, unlike NAFTA (and as will be seen below, the CER) has a rather high propensity to adopt antidumping measures against Japan (ADI=1.03).

CER

The members of the CER have over the past decade both implemented far-ranging trade reforms, greatly reducing the average tariff on imports and phasing out most quantitative restrictions. They have also moved to harmonize competition policies and business regulations among themselves, thereby eliminating the basis for intra-CER antidumping actions. That being said, there can be no denying that the CER members have very high overall propensities to undertake antidumping actions in the period under consideration in this study.

East Asia is investigated intensively relative to its share in imports of CER members, particularly when Japan is excluded (Table 17). This also holds true for antidumping measures (Table 18). However, the values of the ADI of the CER globally are much higher than for East Asia. What is particularly striking in the case of the CER is that it undertakes more intensive actions against ASEAN partners than it does against

Northeast Asia. Moreover, the ADI values of measures against Thailand and the Philippines are even higher than against China. CER members also investigate Indonesia more intensively than China. This suggests that the proximity of ASEAN members to the CER is a likely factor in the explanation for these relatively large propensities.

The CER has a very low propensity to investigate or undertake measures against Japan. One reason for this may be that Australia has tended to have a surplus in its bilateral trade balance with Japan.

The CER countries ADI values for investigations (Table 19) and measures (Table 20) vis-à-vis NAFTA are quite interesting. The ADI values for Canada are above unity but for the US are well below unity. As was the case for the EU, CER ADI values for Mexico are quite large, particularly for measures. For NAFTA as a whole, the CER ADI values are comparatively low.

The CER ADI values with respect to the EU-15 are shown in Tables 21 and 22. These values are slightly over unity for investigations for the EU as a whole but slightly below unity for measures. ADI values for individual EU members vary quite substantially.

Summary

The members of regional integration agreements that are not full customs unions (NAFTA and CER) do make more intensive use of antidumping than the EU. Indeed, the EU antidumping activity is about proportional to the share of its trade that is subject to antidumping regulations, that is extra-EU imports and exports. Moreover, the members of the EU are relatively intensively investigated for dumping by other countries and regions, though the negative findings lead to the outcome that measures against members of the EU are less than proportional to their shares in trade. In contrast, members of free trade agreements are not intensively investigated or penalized for dumping, provided they are developed countries. Mexico is penalized by measures of partners slightly more than Mexico's share in export markets.

Non-members of deep integration agreements in East Asia that are developing economies are relatively intensively investigated and are penalized in disproportion to their trade shares. Japan is not. Moreover, non-members are very parsimonious in their use of antidumping actions. Hence, there are large asymmetries between the intensive users of antidumping and the victims of the antidumping measures in East Asia. The latter conclusion holds strongly for Japan as well.

An interesting twist to the outcome is that members of the EU are more intensively investigated than trade shares would dictate by both NAFTA and the CER. Furthermore, NAFTA tends to impose definitive measures on members of the EU in disproportion to trade shares. Hence, there is some asymmetry between the FTA members and the members of the EU in the antidumping game.

The EU is not, however, necessarily more even-handed than the FTA members in respect to antidumping activities across regions. In fact, the EU tends to investigate and take measures against East Asian countries in disproportion to their shares in extra-EU imports. In contrast, NAFTA tends to make less intensive use of antidumping against most East Asian countries. The exception is China.

Recent Antidumping Surge

The most recent available WTO reports on antidumping action cover the first six months of 1998. The available reports (downloaded from the WTO home page, see WTO 1998a,b,c,d,e) include those of Japan, the US, the EU, Australia and New Zealand. The US has initiated some 80 new antidumping cases in the first half of 1998. Of these new investigations, no fewer than 33 involve East Asian countries (China-11, Korea-7, Japan-5, Taiwan-5, Indonesia-3, Thailand-1, and Singapore-1). This is in addition to 44 cases that were initiated in 1997 against these countries and that are carried over in the US report. Brazil and Russia, countries that also have recently experienced economic crises, account for a further 5 cases initiated in 1998. Of the 307 antidumping measures the US currently has in effect, 138 are against East Asian economies (led by Japan-50, China-41, Taiwan-20 and Korea-16, Thailand-5 and Singapore-4). Russia and Brazil account for 20 of the US measures in effect between them.

The EU in the first six months of 1998 initiated 19 new cases and introduced 19 new antidumping measures. Ten of the new cases involve East Asian countries and 18 of the new definitive measures are against East Asian countries. The EU has 138 definitive antidumping duties (as of 30 June 1998) and 86 of these are against East Asia (led by China-33, Korea-10, Thailand-10, Malaysia-8, Japan-7, Indonesia-6 and Singapore-3).

As is the case for the US, there are a fair number of cases initiated in 1997 that have yet to be resolved.

In the case of the CER countries (Australia and New Zealand), Australia has launched 8 new cases in 1998, 4 of which name East Asian partners as the accused. Between them, the two countries currently have 68 antidumping duties and 8 price undertakings in effect, with 7 new measures in the first half of the year. East Asian countries are penalized in 43 of the antidumping duties and 4 of the price undertakings.

Japan has initiated one new case in 1998 (involving Pakistan) and has imposed a penalty duty. However, as was mentioned above (see p.3 n2) the other antidumping measures against China were terminated in January 1998, meaning it has only one measure currently in effect.

The surge in US antidumping actions in the first half of 1998 has, if news reports and amount of coverage are any guide, continued into 1999. It is clear that the intensified use of antidumping is related to the record trade deficits that the US is running as the US economy continues to expand at a fairly impressive rate. The strong domestic political lobby for antidumping is clearly having a field day in the US. However, the surge in antidumping actions is forcing Japan and other East Asian countries to respond—Japan has now challenged US antidumping law in the WTO. Bergsten's "bicycle theory" (Bergsten 1999) of trade reform may well apply to antidumping. Hence, it is worthwhile giving very serious consideration to the Japanese government's proposal for adding antidumping reform (as well as proper implementation of the existing AD Agreement) to the agenda of the WTO.

Conclusion: Prospects for Reform or Down in the Dumps?

During the final stages of the Uruguay Round negotiations on antidumping, a top priority of the Clinton Administration was to preserve the US antidumping law. The US negotiators basically succeeded, although they were forced to adopt the “sunset clause” required by the AD Agreement (Moore 1999). This means that antidumping measures must undergo a sunset review after five years, with the expectation that they duties will normally be rescinded upon review. However, the implementation of the sunset review by DOC emphasizes the “likelihood dumping will reoccur” and is mechanistic with respect to evaluation of the “dumping margin”. Almost all scenarios the DOC is permitted to consider will lead to a positive result of likely dumping (Moore 1999). The dumping margin is likely to be greatly exaggerated by the methodology provided for in the US law. And, given the rapidity of technological change and changes in industrial structure and competition in recent decades a mechanistic approach that precludes careful industry analysis that takes into account changes in foreign markets and firm behavior makes no economic sense. For example, private firms in China are unlikely to emulate the pricing behavior of state enterprises, yet are now a much larger source of imports than they were just a few years ago. To assume dumping margins are the same as when state enterprises were the main exporters is questionable to say the least.

If DOC is likely to apply the old dumping margins in sunset reviews, then it will be up to the US International Trade Commission (ITC) to judge whether injury is also likely to reoccur. The injury test has been key to limiting the imposition of duties based on the margin of dumping provided by DOC (Hufbauer 1999). However, the ITC is hardly a nest of free traders, hence, finding “injury” caused by dumping is the norm in

recent years. The US stance on antidumping does not bode well for reform efforts in the WTO. Noland (1999) warns that the absence of political leadership in support of free trade in the United States is creating an opportunity for trade policy to be captured by protectionists in various guises. The US refusal to entertain antidumping reform is characteristic of this lack of American leadership in the struggle for a more open rules-based trading system.

This does not mean the East Asian countries, led by Japan and supported by much of the developing world, do not have a strong case for antidumping reform. ASEAN, which now is comprised of all ten countries of Southeast Asia, is strongly in favor of antidumping reform. If the EU throws its weight behind the movement for reform of antidumping, then the forces for reform might gain the upper hand.

The alternative is worrisome. One example of how the bending of rules in the US and EU sets a bad precedent can be found in Taiwan's nascent experience in antidumping regulation. Taiwan first implemented antidumping in 1984 and initially set very tough standards for domestic firms while providing positive defenses for exporters accused of dumping (Wu 1995). However, Taiwan soon drew lessons from international antidumping practice and made it increasingly tougher for exporters to obtain information or defend themselves while lowering standards for complainants in domestic industry. Between 1984 and 1990, only 12 dumping cases were investigated by Taiwan without a single positive finding or dumping duty. In 1992-1994, there were at least 18 investigations and 5 positive findings resulting in penalty duties (Wu 1995). In 1998 and 1999 7 new investigations were opened by Taiwan. Moreover, on March 12th, 1999 Taiwan initiated an investigation of US semiconductor firms for dumping of dynamic

random access memory (DRAM) chips possibly in retaliation for US actions against Taiwan-based semiconductor firms in the US market. The potential for reciprocal antidumping investigations and measures could become a serious threat. Thus, failure to push for reform is likely to lead to proliferation of antidumping procedures that are completely unfair to exporters and that make no economic sense.

Antidumping actions are the current weapon of choice of protectionists. Although antidumping is legal under GATT/WTO rules, it threatens to undermine the basic principles of non-discrimination and reciprocity upon which the multilateral trading system has painstakingly been built up over the last 50 years. Antidumping in the past has reflected power relationships more than a set of transparent and even-handed rules. As such, it calls into question the commitment of the bigger players to a rules based system. At present (as well as in the past) antidumping has been fundamentally biased in favor of protecting domestic industries at the expense of import competition and consumer welfare. At this juncture, there is a fork in the road. The low road leads more and more countries down further into the dumps.

The high road of antidumping reform is likely to be an uphill climb for the reformers.⁷ Introducing more balanced procedures for determining dumping and dumping margins, providing for positive defense by exporters, making use of careful industry studies rather than industry supplied “facts”, and strictly enforcing time limits on measures would help curb abuses. Such measures would strengthen the multilateral

⁷ “Radical reformers” favor curtailing antidumping through the harmonization of competition policies (Trebilcock and House, 1999). While harmonization of competition laws and policies may be possible in cases where business cultures are quite similar (i.e., New Zealand and Australia), it is very unrealistic (and probably unwarranted) to seek such a solution on a broader scale.

system and would curb the present dangerous tendency for further proliferation of antidumping as a trade remedy.

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Table 1. Economies Affected by Antidumping Investigations: Comparing Shares in Investigations and Exports (1987-1997)

Affected Party	A Antidumping Investigations Against 1987-97	B Share in Total Investigations (%)	C Export Value 1987-97 (US\$, billions, current prices)	D Export Share (%)	E Intensity of Being Investigated (E=B/D)
Japan	133	6.06%	3,746.55	11.74%	0.52
China	247	11.25%	1,053.88	3.30%	3.40
Hong Kong	34	1.55%	312.90	0.98%	1.58
Korea Rp	139	6.33%	953.02	2.99%	2.12
Taiwan	100	4.55%	930.84	2.92%	1.56
Northeast Asia	653	29.74%	6,997.19	21.93%	1.36
Indonesia	47	2.14%	373.10	1.17%	1.83
Malaysia	37	1.68%	505.56	1.58%	1.06
Philippines	9	0.41%	134.42	0.42%	0.97
Singapore	31	1.41%	506.18	1.59%	0.89
Thailand	62	2.82%	383.27	1.20%	2.35
ASEAN	186	8.47%	1,902.53	5.96%	1.42
Canada	35	1.59%	1,645.14	5.16%	0.31
Mexico	35	1.59%	623.10	1.95%	0.82
USA	188	8.56%	5,079.76	15.92%	0.54
NAFTA	258	11.75%	7,348.00	23.03%	0.51
Australia	9	0.41%	487.74	1.53%	0.27
New Zealand	6	0.27%	118.71	0.37%	0.73
CER	15	0.68%	606.45	1.90%	0.36
EU-15	834	37.98%	6,355.43	19.92%	1.91
World Total	2196	100.00%	31,903.13	100.00%	1.00

Note: For EU-15 and World Total only extra-EU exports are included. For Hong Kong and Singapore only domestic exports are included.

Sources: World Trade Organization, Annual Report 1997 and on-line database downloaded from WWW.WTO.ORG
 J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 2. Comparison of Share in Antidumping Measures and Exports, 1987-1997

Affected Party	A Number of Definitive Measures Against 1987-97	B Share in Total Definitive Measures (%)	C Export Share (%)	D Intensity of Definitive Measures (D=B/C)
Japan	83	8.03%	11.74%	0.68
China	158	15.28%	3.30%	4.63
Hong Kong	12	1.16%	0.98%	1.18
Korea Rp	63	6.09%	2.99%	2.04
Taiwan	41	3.97%	2.92%	1.36
Northeast Asia	357	34.53%	21.93%	1.57
Indonesia	14	1.35%	1.17%	1.16
Malaysia	18	1.74%	1.58%	1.10
Philippines	5	0.48%	0.42%	1.15
Singapore	12	1.16%	1.59%	0.73
Thailand	31	3.00%	1.20%	2.50
ASEAN	80	7.74%	5.96%	1.30
Canada	14	1.35%	5.16%	0.26
Mexico	21	2.03%	1.95%	1.04
USA	93	8.99%	15.92%	0.56
NAFTA	128	12.38%	23.03%	0.54
Australia	3	0.29%	1.53%	0.19
New Zealand	3	0.29%	0.37%	0.78
CER	6	0.58%	1.90%	0.31
EU-15	152	14.70%	19.92%	0.74
World Total	1034	100.00%	100.00%	1.00

Note: For EU-15 and World Total only extra-EU exports are included. For Hong Kong and Singapore only domestic exports are included.

Sources: World Trade Organization, Annual Report 1997 and on-line database downloaded from WWW.WTO.ORG
 J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 3. Intensity of Use of Antidumping Investigations Relative to Import Share, 1987-1997

Reporter	A Number of Investigations 1987-97	B Share of Investigations (%)	C Value of Imports (US \$, billions)	D Share of Imports (%)	E Intensity of Use E=(B/D)
Japan	4	0.18%	2,794.39	8.43%	0.21
Hong Kong	0	0.00%	429.36	1.30%	0.00
Korea Rp	53	2.41%	1,003.66	3.03%	0.80
Northeast Asia	57	2.59%	6,024.27	18.18%	0.14
Indonesia	13	0.59%	303.14	0.91%	0.65
Malaysia	13	0.59%	498.02	1.50%	0.39
Philippines	11	0.50%	210.35	0.63%	0.79
Singapore	2	0.91%	580.81	1.75%	0.52
Thailand	6	0.27%	477.36	1.44%	0.19
ASEAN	45	2.05%	2,069.66	6.25%	0.33
Canada	188	8.56%	1,541.00	4.65%	1.84
Mexico	188	8.56%	658.11	1.99%	4.30
USA	391	17.81%	6,740.73	20.34%	0.88
NAFTA	767	34.93%	8,939.84	26.98%	1.29
Australia	383	17.44%	529.47	1.60%	10.90
New Zealand	59	2.69%	115.24	0.35%	7.69
CER	442	20.13%	644.71	1.95%	10.32
EU-15	388	17.67%	6,524.61	19.69%	0.90
World Total	2196	100.00%	33,133.40	100.00%	1.00

Note: For EU-15 and World Total only extra-EU imports are included. For Hong Kong and Singapore only retained imports are included.
na means not available.

Taiwan and China have antidumping regulations, but as non-WTO members need not notify WTO of antidumping investigations.

Hong Kong is a member of WTO but has no antidumping investigations in this period.

Sources: World Trade Organization, Annual Report 1997 and on-line database downloaded from WWW.WTO.ORG

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 4. Intensity of Use of Definitive Measures Relative to Import Share, 1987-1997

Reporter	A Number of Definitive Measures 1987-97	B Share of Total Measures %	C Import Share %	D Intensity of Use D=(B/C)
Japan	2	0.19%	8.43%	0.02
Hong Kong	0	0.00%	1.30%	0.00
Korea Rp	25	2.42%	3.03%	0.80
Northeast Asia	27	2.61%	18.18%	0.14
Indonesia	4	0.39%	0.91%	0.43
Malaysia	4	0.39%	1.50%	0.26
Philippines	3	0.29%	0.63%	0.46
Singapore	2	0.19%	1.75%	0.11
Thailand	2	0.19%	1.44%	0.13
ASEAN	15	1.45%	6.25%	0.23
Canada	117	11.32%	4.65%	2.43
Mexico	96	9.28%	1.99%	4.67
USA	269	26.02%	20.34%	1.28
NAFTA	482	46.62%	26.98%	1.73
Australia	120	11.61%	1.60%	7.27
New Zealand	31	3.00%	0.35%	8.63
CER	151	14.60%	1.95%	7.50
EU-15	196	18.96%	19.69%	0.96
World Total	1034	100.00%	100.00%	1.00

Note: For EU-15 and World Total only extra-EU imports are included. For Hong Kong and Singapore only retained imports are included. See notes in Table 3. na=not available.

Sources: World Trade Organization, Annual Report 1997 and on-line database downloaded from WWW.WTO.ORG
 J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 5. Antidumping Investigations Against East Asian Economies by Members of Preferential Trading Arrangements, 1987-1997

Investigations by Reporter: Affected Economy:	Total	NAFTA	EU	CER	MERCOSUR	Share of Investigations of PTA Members (%)
Japan	133	61	33	19	2	86.47
China	247	89	44	30	29	77.73
Hong Kong	34	6	10	9	2	79.41
Korea	139	37	31	19	8	68.35
Taiwan	100	42	11	21	6	80.00
Northeast Asia	653	235	129	98	47	77.95
Thailand	62	10	17	25	2	87.10
Indonesia	47	3	11	21	3	80.85
Malaysia	37	6	11	13	3	89.19
Singapore	31	5	5	18	0	90.32
Philippines	9	1	1	5	2	100.00
ASEAN	186	25	45	82	10	87.10
East Asia	839	260	174	211	57	83.67

Source: J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 6. Antidumping Definitive Measures Against East Asian Economies by Members of Preferential Trading Arrangements, 1987-1997

Definitive Measures by Reporter Affected Economy:	Total	NAFTA	EU	CER	MERCOSUR	Share of Definitive Measures by PTA Members (%)
Japan	83	45	21	5	2	87.95
China	158	75	26	13	15	81.65
Hong Kong	12	3	4	1	1	75.00
Korea	63	20	17	16	4	90.48
Taiwan	41	24	3	8	3	92.68
Northeast Asia	357	167	71	43	25	86.09
Thailand	31	9	7	12	0	90.32
Indonesia	14	2	5	6	0	92.86
Malaysia	18	5	6	6	0	94.44
Singapore	12	4	2	6	0	100.00
Philippines	5	1	1	3	0	100.00
ASEAN	80	21	21	33	0	91.30
East Asia	437	188	92	76	25	87.19

Source: J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 7. Symmetry Ratio: Antidumping Investigations and Definitive Measures, 1987-1997

	Investigations	Measures
Japan	0.03	0.02
China	0.01	0.00
Hong Kong	0.00	0.00
Korea Rp	0.38	0.40
Taiwan	0.41	0.37
Northeast Asia	0.15	0.12
Indonesia	0.28	0.29
Malaysia	0.35	0.22
Philippines	1.22	0.60
Singapore	0.06	0.17
Thailand	0.10	0.06
ASEAN	0.24	0.19
Canada	5.37	8.36
Mexico	5.37	4.57
USA	2.08	2.89
NAFTA	2.97	3.77
Australia	42.56	40.00
New Zealand	9.83	10.33
CER	29.47	25.17
EU-15	0.47	1.29
World Total	1.00	1.00

Note: the ratio is the number of investigations or measures undertaken by the country to the number of investigations or measures against the country.

Source: J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," *Journal of World Trade*, October 1998, 32 (5): 5-71.
 International Trade Commission, Ministry of Economic Affairs, Taipei, Taiwan, January 1998, 8 (1): 37-57.
 The People's Daily, June 1999, various issues.

Table 8. Intra-NAFTA Antidumping Investigations and Definitive Measures, 1987-1997

Reporter	A		B		C		D
	Intra-NAFTA Investigations	Share of Total Investigations (%)	Share of Total Investigations (%)	Imports from NAFTA Partners (% of Total Imports)	Imports from NAFTA Partners (% of Total Imports)	Intensity of Intra-NAFTA Investigations	D=(B/C)
Canada	45	23.93%	23.93%	67.10%	67.10%	0.36	0.36
Mexico	57	30.32%	30.32%	74.33%	74.33%	0.41	0.41
United States	31	7.93%	7.93%	25.87%	25.87%	0.31	0.31
NAFTA	133	17.34%	17.34%	36.21%	36.21%	0.48	0.48

Reporter	A		B		C		D
	Intra-NAFTA Measures	Share of Total Measures (%)	Share of Total Measures (%)	Imports from NAFTA Partners (% of Total Imports)	Imports from NAFTA Partners (% of Total Imports)	Intensity of Intra-NAFTA Measures	D=(B/C)
Canada	29	24.79%	24.79%	67.10%	67.10%	0.37	0.37
Mexico	27	28.13%	28.13%	74.33%	74.33%	0.38	0.38
United States	11	4.09%	4.09%	25.87%	25.87%	0.16	0.16
NAFTA	67	13.90%	13.90%	36.21%	36.21%	0.38	0.38

Source: J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71. International Monetary Fund, Direction of Trade Statistics, Yearbook 1992 and 1998.

Table 9. NAFTA Members Antidumping Investigations Against East Asia, 1987-1997

Affected Party	A Antidumping Investigations Against 1987-97	B Share in Total Investigations (%)	C Value of Imports (US\$, millions)	D Share of Imports (%)	E Antidumping Intensity Index E=(B/D)
Japan	61	7.95%	1,260,257.6	26.49%	0.30
China	89	11.60%	177,190.3	3.48%	3.33
Hong Kong	6	0.78%	329,995.8	6.61%	0.12
Korea Rp	37	4.82%	259,824.0	6.03%	0.80
Taiwan	42	5.48%	325,579.4	6.69%	0.82
Northeast Asia	235	30.64%	2,352,847.1	49.30%	0.62
Indonesia	3	0.39%	66,048.9	1.24%	0.32
Malaysia	6	0.78%	105,285.5	1.99%	0.39
Philippines	1	0.13%	53,662.5	0.92%	0.14
Singapore	5	0.65%	174,649.8	3.29%	0.20
Thailand	10	1.30%	87,166.9	1.70%	0.77
ASEAN	25	3.26%	486,813.6	9.14%	0.36
East Asia	260	33.90%	2,839,660.7	58.44%	0.58
East Asia (excl. Japan)	199	25.95%	1,579,403.1	31.95%	0.81

Notes: Mexico does not report imports from Taiwan for the years 1988 to 1993 in the main source, data from IMF, Direction of Trade Statistics, Yearbooks 1992 and 1998 were used for 1991 to 1993. Thus, for the years 1988-1990 no imports are recorded by Mexico from Taiwan. The data used could not be adjusted to remove re-exports from Hong Kong and Singapore.

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 10. NAFTA Members Definitive Measures Against East Asia, 1987-1997

Affected Party	A Number of Definitive Measures Against	B Share of Total Measures %	C Import Share %	D Antidumping Intensity Index D=(B/C)
Japan	45	9.34%	26.49%	0.35
China	75	15.56%	3.48%	4.47
Hong Kong	3	0.62%	6.61%	0.09
Korea Rp	23	4.77%	6.03%	0.79
Taiwan	24	4.98%	6.69%	0.74
Northeast Asia	170	35.27%	49.30%	0.72
Indonesia	2	0.41%	1.24%	0.33
Malaysia	5	1.04%	1.99%	0.52
Philippines	1	0.21%	0.92%	0.23
Singapore	4	0.83%	3.29%	0.25
Thailand	9	1.87%	1.70%	1.10
ASEAN	21	4.36%	9.14%	0.48
East Asia	191	39.63%	58.44%	0.68
East Asia (excl. Japan)	146	30.29%	31.95%	0.95

See notes in Table 9.

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 11. NAFTA Antidumping Investigations Against the EU-15, 1987-1997

Affected Party	A Antidumping Investigations Against 1987-97	B Share in Total Investigations (%)	C Value of Imports (US\$, millions)	D Share of Imports (%)	E Antidumping Intensity Index E=(B/D)
Austria	6	0.78%	71,802.6	0.23%	3.36
Belgium-Lux	12	1.56%	23,273.7	0.81%	1.94
Denmark	3	0.39%	202,293.8	0.28%	1.38
Finland	2	0.26%	415,678.2	0.26%	1.00
France	20	2.61%	5,599.5	2.27%	1.15
Germany	39	5.08%	35,855.1	4.66%	1.09
Greece	2	0.26%	189,120.3	0.06%	4.14
Ireland	1	0.13%	70,474.2	0.40%	0.32
Italy	23	3.00%	10,856.4	2.12%	1.41
Netherlands	10	1.30%	53,517.8	0.79%	1.64
Portugal	1	0.13%	325,326.1	0.12%	1.07
Spain	18	2.35%	20,707.6	0.60%	3.91
Sweden	9	1.17%	25,216.1	0.80%	1.45
UK	25	3.26%	71,696.3	3.65%	0.89
EU-15	171	22.28%	1,521,417.7	17.07%	1.31

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 12. NAFTA Definitive Measures Against EU-15, 1987-1997

Affected Party	A Number of Definitive Measures Against	B Share of Total Measures %	C Import Share %	D Antidumping Intensity Index D=(B/C)
Austria	1	0.21%	0.23%	0.90
Belgium-Lux	4	0.83%	0.81%	1.03
Denmark	4	0.83%	0.28%	2.93
Finland	1	0.21%	0.26%	0.80
France	11	2.28%	2.27%	1.00
Germany	24	4.98%	4.66%	1.07
Greece	1	0.21%	0.06%	3.34
Ireland	0	0.00%	0.40%	0.00
Italy	14	2.90%	2.12%	1.37
Netherlands	7	1.45%	0.79%	1.83
Portugal	0	0.00%	0.12%	0.00
Spain	7	1.45%	0.60%	2.41
Sweden	7	1.45%	0.80%	1.80
UK	14	2.90%	3.65%	0.79
EU-15	95	19.70%	17.07%	1.15

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 13. EU Antidumping Investigations Against East Asia, 1987-1997

Affected Party	A Antidumping Investigations Against 1987-97	B Share in Total Investigations (%)	C Value of Imports (US\$, millions)	D Share of Imports (%)	E Antidumping Intensity Index E=(B/D)
Japan	33	8.51%	628,945.3	10.44%	0.81
China	44	11.34%	133,516.3	2.22%	5.12
Hong Kong	10	2.58%	214,486.4	3.56%	0.72
Korea Rp	31	7.99%	126,394.6	2.10%	3.81
Taiwan	11	2.84%	155,691.9	2.58%	1.10
Northeast Asia	129	33.25%	1,259,034.5	20.89%	1.59
Indonesia	11	2.84%	59,892.5	0.99%	2.85
Malaysia	11	2.84%	74,694.8	1.24%	2.29
Philippines	1	0.26%	25,208.4	0.42%	0.62
Singapore	5	1.29%	117,456.3	1.95%	0.66
Thailand	17	4.38%	72,266.4	1.20%	3.65
ASEAN	45	11.60%	349,518.3	5.80%	2.00
East Asia	174	44.85%	1,608,552.8	26.69%	1.68
East Asia (excl. Japan)	141	36.34%	979,607.6	16.26%	2.24

Note: In 1997, imports of Austria and Spain from Korea and Taiwan are from IMF, Direction of Trade Statistics Yearbook, 1998.

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 14. EU Definitive Measures Against East Asia, 1987-1997

Affected Party	A Number of Definitive Measures Against	B Share of Total Measures %	C Import Share %	D Antidumping Intensity Index $D=(B/C)$
Japan	21	10.71%	10.44%	1.03
China	26	13.27%	2.22%	5.99
Hong Kong	4	2.04%	3.56%	0.57
Korea Rp	17	8.67%	2.10%	4.13
Taiwan	3	1.53%	2.58%	0.59
Northeast Asia	71	36.22%	20.89%	1.73
Indonesia	5	2.55%	0.99%	2.57
Malaysia	6	3.06%	1.24%	2.47
Philippines	1	0.51%	0.42%	1.22
Singapore	2	1.02%	1.95%	0.52
Thailand	7	3.57%	1.20%	2.98
ASEAN	21	10.71%	5.80%	1.85
East Asia	92	46.94%	26.69%	1.76
East Asia (excl. Japan)	71	36.22%	16.26%	2.23

Note: In 1997, imports of Austria and Spain from Korea and Taiwan are from IMF, Direction of Trade Statistics Yearbook, 1998.

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 15. EU Antidumping Investigations Against NAFTA, 1987-1997

Affected Party	A Antidumping Investigations Against 1987-97	B Share in Total Investigations (%)	C Value of Imports (US\$, millions)	D Share of Imports (%)	E Antidumping Intensity Index E=(B/D)
Canada	2	0.54%	119,600.4	1.98%	0.27
Mexico	6	1.63%	23,283.7	0.39%	4.22
US	10	2.71%	1,248,572.5	20.72%	0.13
NAFTA	18	4.88%	1,391,456.6	23.09%	0.21

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 16. EU Definitive Measures Against NAFTA, 1987-1997

Affected Party	A Number of Definitive Measures Against	B Share of Total Measures %	C Import Share %	D Antidumping Intensity Index D=(B/C)
Canada	0	0.00%	1.98%	0.00
Mexico	5	2.55%	0.39%	6.60
US	6	3.06%	20.72%	0.15
NAFTA	11	5.61%	23.09%	0.24

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 17. CER Antidumping Investigations Against East Asia, 1987-1997

Affected Party	A Antidumping Investigations Against 1987-97	B Share in Total Investigations (%)	C Value of Imports (US\$, millions)	D Share of Imports (%)	E Antidumping Intensity Index E=(B/D)
Japan	19	4.30%	96,598.2	16.31%	0.26
China	30	6.79%	13,354.4	2.25%	3.01
Hong Kong	9	2.04%	21,005.2	3.55%	0.58
Korea Rp	38	8.60%	15,817.5	2.67%	3.22
Taiwan	33	7.47%	20,708.3	3.50%	2.14
Northeast Asia	129	29.20%	167,483.6	28.28%	1.03
Indonesia	21	4.75%	9,285.1	1.57%	3.03
Malaysia	13	2.94%	10,100.0	1.71%	1.72
Philippines	5	1.13%	1,664.8	0.28%	4.02
Singapore	18	4.07%	21,330.9	3.60%	1.13
Thailand	25	5.66%	6,695.8	1.13%	5.01
ASEAN	82	18.55%	49,076.6	8.29%	2.24
East Asia	211	47.75%	216,560.2	36.56%	1.31
East Asia (excl. Japan)	192	43.44%	119,962.0	20.25%	2.14

Note: Australia's imports from Taiwan in 1988 and New Zealand's imports from Korea and Taiwan in 1997 were derived from IMF, Direction of Trade Statistics, Yearbook, 1992 and 1998.

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table18. CER Definitive Measures Against East Asia, 1987-1997

Affected Party	A Number of Definitive Measures Against	B Share of Total Measures %	C Import Share %	D Antidumping Intensity Index D=(B/C)
Japan	5	3.31%	16.31%	0.20
China	13	8.61%	2.25%	3.82
Hong Kong	1	0.66%	3.55%	0.19
Korea Rp	16	10.60%	2.67%	3.97
Taiwan	8	5.30%	3.50%	1.52
Northeast Asia	43	28.48%	28.28%	1.01
Indonesia	6	3.97%	1.57%	2.53
Malaysia	6	3.97%	1.71%	2.33
Philippines	3	1.99%	0.28%	7.08
Singapore	6	3.97%	3.60%	1.10
Thailand	12	7.95%	1.13%	7.03
ASEAN	33	21.85%	8.29%	2.64
East Asia	76	50.33%	36.56%	1.38
East Asia (excl. Japan)	71	47.02%	20.25%	2.32

See note to Table 17.

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 19. CER Antidumping Investigations Against NAFTA, 1987-1997

Affected Party	A Antidumping Investigations Against 1987-97	B Share in Total Investigations (%)	C Value of Imports (US\$, millions)	D Share of Imports (%)	E Antidumping Intensity Index E=(B/D)
Canada	6	1.36%	7,991.2	1.35%	1.01
Mexico	3	0.68%	605.7	0.10%	6.65
US	25	5.66%	105,225.6	17.76%	0.32
NAFTA	34	7.70%	113,822.4	19.22%	0.40

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 20. CER Definitive Measures Against NAFTA, 1987-1997

Affected Party	A Number of Definitive Measures Against	B Share of Total Measures %	C Import Share %	D Antidumping Intensity Index $D=(B/C)$
Canada	3	1.99%	1.35%	1.48
Mexico	3	1.99%	0.10%	19.46
US	12	7.95%	17.76%	0.45
NAFTA	18	11.92%	19.22%	0.62

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 21. CER Antidumping Investigations Against EU-15, 1987-1997

Affected Party	A Antidumping Investigations Against 1987-97	B Share in Total Investigations (%)	C Value of Imports (US\$, millions)	D Share of Imports (%)	E Antidumping Intensity Index E=(B/D)
Austria	5	1.13%	2,347.8	0.40%	2.85
Belgium-Lux	12	2.71%	5,060.0	0.85%	3.17
Denmark	2	0.45%	2,591.6	0.44%	1.03
Finland	4	0.90%	4,204.4	0.71%	1.27
France	14	3.17%	13,496.0	2.28%	1.39
Germany	20	4.52%	34,259.7	5.78%	0.78
Greece	2	0.45%	521.5	0.09%	5.11
Ireland	2	0.45%	2,542.2	0.43%	1.05
Italy	16	3.62%	16,095.8	2.72%	1.33
Netherlands	11	2.49%	6,350.9	1.07%	2.32
Portugal	0	0.00%	667.1	0.11%	0.00
Spain	5	1.13%	2,765.1	0.47%	2.42
Sweden	7	1.58%	10,100.5	1.71%	0.93
UK	13	2.94%	40,891.4	6.90%	0.43
EU-15	113	25.57%	141,894.0	23.96%	1.07

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Table 22. CER Definitive Measures Against EU-15, 1987-1997

Affected Party	A Number of Definitive Measures Against	B Share of Total Measures %	C Import Share %	D Antidumping Intensity Index D=(B/C)
Austria	0	0.00%	0.40%	0.00
Belgium-Lux	5	3.31%	0.85%	3.87
Denmark	1	0.66%	0.44%	1.51
Finland	1	0.66%	0.71%	0.93
France	4	2.65%	2.28%	1.16
Germany	8	5.30%	5.78%	0.92
Greece	1	0.66%	0.09%	7.50
Ireland	1	0.66%	0.43%	1.54
Italy	4	2.65%	2.72%	0.98
Netherlands	3	1.99%	1.07%	1.86
Portugal	0	0.00%	0.11%	0.00
Spain	0	0.00%	0.47%	0.00
Sweden	0	0.00%	1.71%	0.00
UK	5	3.31%	6.90%	0.48
EU-15	33	21.85%	23.96%	0.91

Source: Statistics Canada, World Trade Analyzer Data Base, 1999.

J. Miranda, R.A. Torres and M. Ruiz, "The International Use of Antidumping: 1987-1997," Journal of World Trade, October 1998, 32 (5): 5-71.

Appendix Table 1. Intensity of Use of Antidumping Investigations and Measures Relative to Import Shares, China and Taiwan (1987-1997)

Reporter	A Number of Investigations 1987-97	B Share of Investigations (%)	C Value of Imports (US \$, billions)	D Share of Imports (%)	E Intensity of Use E=(B/D)
China	3	1.34%	988.19	2.98%	0.45
Taiwan	41	1.83%	808.68	2.44%	0.75

Reporter	A Number of Definitive Measures 1987-97	B Share of Total Measures %	C Import Share %	D Intensity of Use D=(B/C)
China	0	0	2.98%	0.00
Taiwan	15	1.43%	2.44%	0.59

Note: China's first dumping investigation was initiated against three countries in 1997. The investigation led to adoption of a definitive measure in 1999.

Source: Tables 3 and 4 text, author's compilations and International Trade Commission, Ministry of Economic Affairs, Taipei, Taiwan, Vol.8, No.1, January 1998.
The People's Daily, various issues, June 1999.