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Antidumping Policy and Competition

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The World Bank
Private Sector Development Department

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Introduction

1.1 In recent years antidumping policy has become a major trade policy instrument in industrial countries, and increasingly in developing countries as well. Other instruments, such as tariffs, quotas, and voluntary export restraints (VERs), used to dominate antidumping barriers, but antidumping measures are being employed to a growing extent for protectionist purposes under the rhetoric of fair trade (Boltuck and Litan 1991; Finger 1992a). Although the Uruguay Round made substantial progress in streamlining other trade restrictions, including VERs, it did little to reverse the strong protectionist bias of antidumping regulations. Antidumping regulation thus remains one of the most restrictive trade barriers in industrial countries.

1.2 In the 1980s, as many developing countries took unilateral steps to liberalize their trade regimes, they also enacted antidumping laws to protect their domestic industries from "unfair" foreign competition in the new, more liberal trade environment. In recent years some of these countries have become such active users of antidumping legislation that both competition and their national economic welfare may be significantly harmed.

1.3 Developing countries must design and manage their trade policy instruments intelligently. They must avoid the mistakes made by industrial countries and safeguard their past liberalization achievements. At the same time, both multilateral and unilateral efforts to reform antidumping policy should be intensified. The reform of antidumping regulations may well be a high-priority issue in the next round of trade negotiations.

1.4 This paper raises issues that should be considered in any effort to reform antidumping policy. Its objectives are to:

- Review some basic definition issues concerning the General Agreement on Tariffs and Trade (GATT) and specific antidumping regulations and their implementation.
- Examine antidumping measures from both a global and a national welfare perspective.
- Discuss the issues that have emerged during debates on antidumping policy and its effect on competition.
- Derive policy recommendations and identify priority research issues.

1.5 Chapter 2 of this paper starts by noting the sharp increase in antidumping investigations, as well as the more recent use of antidumping measures by some industrializing

countries, such as Mexico. A discussion of the determination of dumping and material injury is followed by a review of antidumping measures taken by the four major users—Australia, Canada, the United States, and the European Union. The chapter highlights the strong bias of antidumping policy in favor of domestic industry, the absence of clear rules and criteria by the GATT (and the World Trade Organization) concerning issues such as material injury, and the major differences of antidumping regulations across jurisdictions.

1.6 Chapter 3 presents an economic analysis of antidumping measures in an attempt to answer the following questions: Why does dumping occur? Do antidumping measures affect the export price more than the home-market price of the exporters? Can the imposition of antidumping duties improve the terms of trade of the importing country? Is there a stable relationship between the extent of injury to the domestic industry and the welfare of the importing country? What are the global and national welfare effects of antidumping measures?

1.7 Chapter 4 focuses on the issues that have emerged in recent antidumping policy debates: the use of antidumping regulations for anticompetitive purposes such as collusion and predation; the most efficient approach to prevent international predation; the challenges to antidumping policy posed by the globalization of industry; and whether antidumping policy can contribute to the removal of distortions of global competition.

1.8 The concluding chapter presents policy recommendations and suggests some priority research issues.

2

Implementation of Antidumping Policy

2.1 Antidumping investigations are undertaken by the governments of importing countries in response to petitions by domestic industries. The number of antidumping investigations has increased significantly over the last 25 years (Table 2.1). Whereas in the late 1960s and early 1970s about 40 cases were brought each year, by the late 1980s that average had reached 140 cases a year, more than a threefold increase. In the early 1990s, the number of antidumping investigations increased further still, to around 200 cases a year.[1]

Table 2.1: Antidumping Investigations Initiated by Signatories to the GATT Antidumping Code, 1969-93

Initiator	*1969-74*	*1975-79*	*1980-84*	*1985-89*	*1990-93*[a]	*Total*
Australia	0	120	242	180	204	746
Canada	42	74	176	115	66	473
European Union	19	55	138	101	90	403
United States	125	140	146	219	183	813
Other	39	64	10	74	148[b]	335
Total	225	453	712	689	691	2,770
Average cases per year	38	91	142	138	197	

[a]: Through May 1993.
[b]: Two-thirds is accounted for by Brazil, Mexico, and the Republic of Korea.
Source: GATT documents as reported by the Industrial Structure Council of Japan (1994).

2.2 Antidumping investigations have been undertaken most frequently by Australia, Canada, the United States, and the European Union. In 1904 Canada enacted the first antidumping laws, followed by Australia in 1906 and the United States in 1916 and 1921. Between 1969 and 1993, these three countries and the European Union were responsible for

[1] The number of domestic as well as bilateral disputes concerning the consistency of antidumping measures with national antidumping laws as well as with GATT regulations also has been rising. This reflects the fact that national antidumping regulations often include provisions allowing for a high degree of administrative discretion, which can be abused for protectionist purposes, as well as provisions that are inconsistent with GATT regulations. The general wording of GATT Article VI and the GATT Antidumping Code also have been a source of international disputes.

almost 90 percent of the 2,770 antidumping investigations (the United States accounted for 29 percent; Australia, 27 percent; Canada, 17 percent; and the European Union, 15 percent).

2.3 The number of countries that have enacted antidumping laws has also increased markedly, according to the GATT secretariat: from 24 countries in 1990 to more than 40 by 1993. At the same time, several industrializing countries, notably Brazil, Mexico, and the Republic of South Korea, have become very active in using antidumping measures (Table 2.2). These three countries accounted for approximately 15 percent of the total antidumping investigations between 1990 and 1993. Mexico was the third most frequent user between July 1991 and June 1992.[2]

Table 2.2: Antidumping Investigations Initiated by Industrializing Countries, 1988-93

Country	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*[a]
Brazil	1	1	3	2	13	..
India	0	0	0	0	8	0
Korea, Republic of	0	1	6	0	5	2
Mexico	12	7	12	10	25	21

.. Not available.
[a]: Through May 1993.
Source: GATT documents as reported by the Industrial Structure Council of Japan (1994).

Determination of Dumping

2.4 Dumping has two definitions: export sales below home-market price and export sales below cost. GATT Article VI defines dumping as sales below "normal value," which in turn is defined as the comparable price, in the ordinary course of trade, for the like product destined for domestic consumption. Thus normal value is home-market price when home-market sales are in the ordinary course of trade. As explained later, home-market sales below cost are not considered to be in the ordinary course of trade.

2.5 Export sales below home-market price are generally understood to indicate that exporters are engaged in international price discrimination. However, discrimination exists only if export and home-market prices are compared in a symmetric manner. It is now well established that the current antidumping practices of the four major user jurisdictions are biased toward a finding of artificially high dumping margins—and consequently international price discrimination—even when no discrimination exists.

2.6 The "dumping margin" is the maximum level of the duty that the importing country can impose on dumped imports. The GATT Antidumping Code recommends that the duty be less than the dumping margin (the "lesser duty" rule), if this amount is adequate to remove the

[2] From June 1991 to June 1992, 202 antidumping investigations were begun by the five countries that were the most frequent users of antidumping measures: 76 cases by Australia, 62 by the United States, 25 by Mexico, 23 by the European Union, and 16 by Canada.

injury to the domestic industry. Australia and the European Union have adopted this rule.[3] To calculate the adequate duty level to remove injury, the export price is compared either with the price of the domestic product of the importing country or, if such a price is depressed, with the full cost of production plus a "reasonable profit" for domestic producers.

2.7 Table 2.3 summarizes the three major sources of bias in the methods used by the United States and the European Union to establish price discrimination. First, in calculating the dumping margin, each individual export price is compared with the average home-market price. In such a calculation, the negative dumping margins (that is, the excess of export price over the average home-market price) are treated as zero margins; thus they are not balanced against the positive dumping margins. Consequently, dumping is bound to be identified—even if export price is equal to home-market price on average—whenever there exists some variation of export prices across transactions during the investigation period.

2.8 A second source of bias is the asymmetric adjustment of sales cost in deriving home-market and export prices on the ex-factory basis. Although all of the sales cost is deducted from the export price, there are restrictions in the deduction of sales cost from the home-market price. The third source of bias is the practice of calculating the average home-market price based only on the remaining above-cost sales, disregarding home-market sales below cost. This practice is based on the view, discussed below, that below-cost sales are not in the ordinary course of trade.

2.9 Sales below cost have not been regarded by the four major user jurisdictions of antidumping laws to be part of the normal course of trade since an informal agreement in 1979 during the GATT Tokyo Round. The revision of the Antidumping Code in the Uruguay Round authorizes this view.[4] The standard used to judge whether sales are below cost is the full cost of production and sales, including fixed and variable costs of production as well as selling, general, and administrative costs. When there are extensive below-cost sales, "constructed value" is used as a normal value. Constructed value is the full cost of production and sales plus profit. The frequent use of inflated constructed values has led to the finding of artificial dumping as well as to artificially high dumping margins.

2.10 Although dumping is still widely perceived as a form of international price discrimination, in practice below-cost sales have become an increasingly important determinant of dumping. More than 60 percent of all U.S. antidumping cases since 1980 have been based at least in part on allegations of sales below cost (Horlick 1990)—a clear reflection of the increased restrictiveness of cost standards (see Finger 1992b and Horlick 1990 for historical accounts). If sales are below cost during the investigation period, the current practice is to use constructed

[3] In the European Union the average duty was 17.8 percent, compared with an average dumping margin of 28.8 percent during the period 1980—89 (Bourgeois and Messerlin in OECD 1993).

[4] GATT Article VI does not explicitly define "ordinary course of trade." However, an explicit provision in the new Antidumping Code allows importing countries to treat below-cost sales as not being in the ordinary course of trade under certain conditions (see Table 2.3).

value almost automatically.[5] Moreover, adjustments are rarely made for either business cycles or product cycles, and artificially high profit rates are often used for the calculation of constructed value.

2.11 The frequent use of cost standard may also reflect the globalization of competition of capital and R&D-intensive industries. Indeed, industries with higher capital and R&D intensity seem to be involved in more dumping disputes. Table 2.4 shows the industries that most frequently bring charges based on antidumping laws in Canada, the European Union, and the United States. These industries, which account for 60 to 80 percent of all antidumping investigations, are all relatively capital- or R&D-intensive with the exception of the wood products and food and beverages industries. The primary metals and chemical products industries are jointly responsible for more than 60 percent of the antidumping cases in the United States and the European Union, and together with electrical machinery, they appear among the top five user industries in all three jurisdictions.

Definition of Domestic Industry and Standing

2.12 Determining the scope of the domestic industry competing with imports is necessary to evaluate injury. The Antidumping Code defines "domestic industry" as a group of domestic producers (that is, firms engaged in local production) that produce the whole or a major proportion of like products (that is, similar to those allegedly being dumped).[6] The scope of the domestic industry is in turn determined by the scope of the like product. "Like product" as used in the code implies physical rather than functional likeness.[7] This interpretation, if adopted, would lead to a narrower definition of the market than that adopted in antitrust analysis, which focuses on substitute products based on their price elasticity of demand or consumers' response to a sustained price increase. In practice, however, the scope of like products has often been interpreted broadly.[8] When an affirmative determination of injury from import is relatively easy to obtain, there are strong incentives for domestic producers to argue for a broader definition of

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[5] Note that the current administrative standard on below-cost sales is often more restrictive than national regulations. The U.S. Tariff Act (Section 773) of 1930 as amended in 1974, for example, stipulates that sales below cost are considered outside the ordinary course of trade if they are made over an extended period of time (conditions that also were adopted in the new Antidumping Code). In 1987 the U.S. Court of International Trade (CIT) found grounds to criticize the practice of the U.S. Commerce Department, which automatically considered the existence of below-cost sales during the six-month investigation period to imply that cost recovery was not feasible within a reasonable period of time. The CIT also ruled in that same year that the practice of disregarding all below-cost home-market sales in calculating the dumping margin, once such sales reached 10 percent of the total, was not justifiable.

[6] It is clear from this definition that ownership does not matter, so that foreign-owned firms should be able to seek redress through antidumping measures just as nationally owned firms do. Note in this regard that the U.S. Court of International Trade. ruled in 1992 that the fact that a foreign-owned firm performs design and engineering abroad and imports major parts does not disqualify it as part of the domestic industry. See the discussion in the section on the globalization of industry and antidumping policy.

[7] "Like product" is defined in the 1994 Antidumping Code as "a product alike in all respects to the product under consideration."

[8] Messerlin and Noguchi (1991) reported that the antidumping office of the European Union had identified only two markets in photocopier products, whereas the competition office had identified three.

Table 2.3: Systematic Biases in Calculating Dumping Margins

Current Practice	*Biases for High Dumping Margins in US and EU Practices*	*Provision of 1994 Antidumping Code*
Asymmetric price comparison		
Average and zeroing	Each individual export price is compared with the average home-market price, with negative dumping margins in such comparisons being treated as zero margins in calculating the overall dumping margin.	The comparison generally is to be made either on a transaction-to-transaction basis or on an average-to-average basis.
Asymmetric adjustment of sales cost	All of the sales cost, including the profit of the related distributor in the case of the European Union, is subtracted from the export price. There are restrictions on the subtraction of sales cost from the home-market price (only direct sales cost can be deducted in the case of the European Union) in order to derive prices on the ex-factory basis.	No substantive changes. Calls for a fair comparison and for due allowances to be made for the differences affecting price comparability, as does the old code.
Disregarding below-cost home-market sales in the calculation of the dumping margin	If more than 10 percent of home-market sales are below cost during the investigation period, all below-cost home-market sales are typically disregarded for the calculation of the average home-market price in the United States. (This threshold is 20 percent in the European Union.)	Conditions that permit the treatment of below-cost sales as not in the ordinary course of trade are specified.
Frequent use of inflated constructed value		
Automatic presumption that home-market sales below cost are not in the ordinary course of trade	Home-market sales below average total cost during the investigation period (six months to one year) are automatically presumed to justify the use of constructed value, typically when 90 percent or more sales are below cost in the case of the United States.	No substantive change.
Short investigation period for calculating constructed value	A normal value is calculated from the production and cost data of the short investigation period (six months to one year). Typically, no adjustments are made for either business cycles or developments during product life span, such as learning curve effects.	Introduces a special provision for the start-up period.
Artificially high overhead cost and profit margin used for calculating constructed value	In the United States there are artificial minimum floors for overhead cost (a minimum 10 percent of production cost) as well as for profit (a minimum 8 percent of the total cost).	Introduces a provision requiring the use of cost and profit standards based on actual data, when feasible.
Asymmetric adjustment of sales cost	The same biases shown for asymmetric price comparison, above, are created.	No substantive change.

Source: Jackson and Vermulst (1990), Boltuck and Litan (1991), and the Final Act of the Uruguay Round.

Table 2.4: Major User Industries of Antidumping Laws in Canada, the European Union, and the United States

Industry	*Antidumping Cases Initiated*	
Canada, 1980-91		
Primary metals	35	(23)
Electrical machinery	18	12)
Chemical and petroleum	15	(10)
Metal products	12	(8)
Food and beverages	11	(7)
Subtotal	91	(59)
Total	155	(100)
European Union, 1980-89		
Chemical products	161	(42)
Primary metals	57	(15)
Nonelectric machinery	34	(9)
Electrical machinery	33	(9)
Wood products	19	(5)
Subtotal	304	(79)
Total	385	(100)
United States, 1979-89		
Primary metals	185	(41)
Chemical products	69	(15)
Metal products	39	(9)
Nonelectric machinery	27	(6)
Electrical machinery	24	(5)
Subtotal	344	(76)
Total	451	(100)

Note: Industrial classifications roughly follow the two-digit Standard Industrial Classification (SIC). Numbers in parentheses are percentages of total cases.
Source: OECD (1993).

the like product. Such an interpretation of like product has occasionally resulted in the imposition of antidumping duties on products that domestic producers could not supply competitively.

2.13 An antidumping investigation is initiated when a firm that has standing brings a claim on behalf of the domestic industry. To have "standing," the firm requesting the investigation first must produce like products. This has become an important issue, especially as firms globalize their operations. According to the current GATT rule, the final assembler of product components has no standing to request an antidumping investigation of imported components unless the

assembler also produces components domestically.[9] In the United States, however, standing has been assumed to exist for any petition filed unless a majority of the industry expresses opposition (Horlick 1990).[10]

2.14 Second, the petitioning firms must secure support from domestic industries. The GATT only recently provided guidelines on the level of domestic industry support necessary for a petitioning firm to obtain standing. The Antidumping Code, as revised in the Uruguay Round, provides relatively clear albeit arguably weak conditions on standing: Domestic producers supporting the petitioning firm's case must dominate those opposing and must account for at least 25 percent of domestic production.

Determination of Material Injury

2.15 GATT Article VI states that "dumping is to be condemned if it causes or threatens material injury to an established industry or materially retards the establishment of a domestic industry." As clarified in the Antidumping Code, antidumping duties may be levied only against injurious dumping. But the code provides no clear definition of "material injury."[11] The code specifies two major factors that must be taken into account in the determination of injury: (a) the volume of the dumped imports and their effect on prices in the domestic market for like products, and (b) the consequent impact of the imports on domestic producers. With respect to the volume of the dumped imports, the code stipulates that whether there has been a significant increase in dumped imports, either absolute or relative, must be considered. However, the code does not stipulate that such an increase is a necessary condition for a finding of material injury caused by dumped imports. The Antidumping Code, as well as the national legislation based on it, therefore allows a very broad interpretation of material injury.[12]

2.16 The room for interpretation of the meaning of material injury is illustrated by the fact that commissioners of the U.S. International Trade Commission, an official body responsible for injury determination, have diverged widely on their findings on the degree of injury in the same antidumping cases. Among the 14 commissioners studied, three found material injury in less than 30 percent of the cases, whereas four found injury in more than 80 percent (Baldwin and Steagall 1993). Although the commissioners' voting behavior clearly reflects their individual

[9] In the United States, the 1988 Trade Act gave standing to such domestic assemblers in the context of anticircumvention. See the discussion in the section on the globalization of industry and antidumping policy.

[10] However, in a 1990 dispute between Sweden and the United States about U.S. imposition of antidumping duties on Swedish steel products, the GATT panel ruled that the absence of opposition by other domestic producers was insufficient to conclude that the petition had been made on behalf of the domestic industry.

[11] The 1967 GATT Antidumping Code required the dumped imports to be a principal cause of the injury to the domestic industry. For the affirmative determination of material injury, however, this requirement was eliminated in the Tokyo Round.

[12] U.S. law, for example, defines material injury simply as "harm which is not inconsequential, immaterial, or unimportant."

trade policy orientation, it is the vagueness of the definition of material injury that allows for such wide variations.[13]

2.17 As argued in the next chapter, dumping that does not divert business from domestic industry to foreign exporters is unlikely to harm the importing country's welfare even under imperfect competition. However, according to the current GATT antidumping regulation, such dumping can nonetheless be judged as injurious since by reducing the domestic price it results in lower domestic industry profits.

2.18 The Antidumping Code explicitly states that injuries caused by other factors must not be attributed to dumped imports. But since the code does not specify a significant increase in dumped imports as necessary to prove material injury, levels of total import—covering both dumped and undumped imports—as well as the general economic conditions in the importing country can significantly affect the outcome of material injury investigations. In fact, such has been the case in decisions by the U.S. International Trade Commission. Baldwin and Steagall (1993) found that a higher ratio of import penetration increased the probability of an affirmative decision, even controlling for the impact of the rate of increase of the dumped imports. Similarly, their analysis of countervailing duty cases showed that the real GDP growth of the U.S. economy has significantly affected the probability of affirmative decisions on serious injury.

2.19 To judge the existence of material injury when imports are dumped by several exporters from a single country or from different countries, the major user countries assess the effect on the domestic industry on a cumulative basis. Even if each individual exporter does not cause material injury, antidumping measures can still be applied.[14]

2.20 In the application of competition policy, however, injury must be demonstrated for each defendant unless there is collusion among the defendants. Cumulation, therefore, is clearly not consistent with competition policy. Yet the new Antidumping Code authorizes the practice of cumulation under broad conditions.

Implementation of Antidumping Measures

2.21 Not all antidumping investigations lead to the imposition of antidumping measures. Some investigations are never concluded. An antidumping investigation may be suspended or terminated if the exporter voluntarily raises its export price or ceases to export. (The Antidumping Code stipulates that any price increase should not be higher than necessary to eliminate dumping margins.) At the request of the exporter or the authorities of the importing country, the injury investigation can be continued. Since the completion of an injury investigation is not mandatory, however, the possibility exists that the exporter will raise its

[13] The United States seems to have the most sophisticated system of injury investigations. Its International Trade Commission uses an econometric model to estimate the economic impact of dumped imports. However, the result of this analytical work does not seem to significantly influence the judgments of those commissioners who have low subject standards of material injury.

[14] According to one view (see Bierwagon 1990), it is not clear whether cumulation is fully consistent with the GATT, since the GATT provisions characterize dumping as a business practice of individual firms.

prices when a full investigation would have found that the domestic industry suffered no material injury.

2.22 Among the four major users of antidumping laws, only the European Union makes extensive use of price undertakings (that is, commitments by exporters to cease dumped exports). During 1980—89 the number of EU price undertakings was more than 60 percent higher than the number of duty impositions (see Bourgeois and Messerlin in OECD 1993). The United States has used price undertakings only in rare situations. At the same time, not all affirmative cases have resulted in the imposition of antidumping duties. When such duties could seriously harm the U.S. economy (for example, steel and semiconductor cases), settlements have been arrived at through quotas (such as voluntary export restraints) or special pricing schemes (such as trigger-price mechanisms).

2.23 Antidumping investigations may also be terminated by private settlements. The petitioning firm may be willing to withdraw its complaint if the exporter raises prices to the petitioner's satisfaction. During 1979-89 one-quarter of the cases brought by the United States were withdrawn before definitive decisions had been reached (see Shin in OECD 1993). Private settlements, however, infringe on the antitrust law of the importing country when they involve an agreement among domestic and foreign firms for higher export prices.

2.24 When an antidumping investigation goes forward and reaches definite conclusions on both the dumping margin and the material injury, the importing country can impose an antidumping duty. U.S. law makes the imposition of a duty mandatory, whereas both Canada and the European Union allow for administrative discretion based on the "public interest." According to the EU law, the most important determining factors include the interests of the domestic industry, users, and consumers.[15]

2.25 Yet public-interest considerations have rarely affected the imposition of antidumping duties in either Canada or the European Union. The interests of the European Union, for example, have in practice tended to be equated with those of the industries protected by antidumping measures (see Bellis 1990). Nevertheless, duties were not imposed in several cases because of concern that downstream industry would be harmed.[16] Moreover, in a June 1992 decision in *Extramet Industries v. the Council of the European Communities,* the European Court of Justice ruled that the council had failed to give proper consideration to possible distortion of competition in the European Union and ordered the duty annulled.[17]

2.26 There are major international differences in the method of assessing antidumping duties. Whereas duties are prospective in Australia, Canada, and the European Union, they are retrospective in the United States. In the case of prospective duties, importers know the amount

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[15] See Council Regulation (EC) No. 3283/94, December 22, 1994.

[16] These cases involved wrought titanium from Japan (1979), furfural from China (1981), and acrylontrile from the United States (1981).

[17] In this case, the petitioning firm was the sole EU producer.

of antidumping duty they will be required to pay before they import the goods—a major advantage. Australia and Canada calculate the duty as the difference from the predetermined normal value; the European Union calculates the duty as a fixed percentage of the import price. In a retrospective system, by contrast, the duty is determined only after goods have been imported and an annual review has been conducted. The uncertainty of this system discourages imports. A major advantage, however, is that retrospective duties can reflect subsequent changes in home-market price and production cost. When normal value declines, the importer is assessed a correspondingly smaller antidumping duty even if the export price remains the same.

2.27 In the Australian, Canadian, and U.S. systems, importers can avoid paying antidumping duty if the exporter raises its export price to the level of normal value. Although there is a refund provision in the EU regulation, few refund applications are made because the provision is quite restrictive (Bellis 1990). It requires the exporter to raise its price by the sum of the dumping margin and the antidumping duty when the importing company is related to the exporter.[18] Consequently, antidumping duty is levied in the European Union even if the dumping margin is absent for actual imports.

2.28 Sunset clauses in Australia, Canada, and the European Union automatically terminate the antidumping measures within a specified period (five years in Canada and the European Union, three years in Australia). Because a sunset clause does not exist in the United States,[19] U.S. antidumping orders have remained in effect considerably longer than those in Canada and the European Union.[20] The new Antidumping Code that resulted from the Uruguay Round introduced a sunset provision requiring antidumping orders to be terminated within five years unless termination would likely lead to both dumping and injury.

[18] This is due to the EU requirement that all costs and profit incurred by a related importer, including the antidumping duty, be deducted in order to derive the ex-factory export price.

[19] To obtain an order of revocation, an exporter must show no sales at less than fair value for two years and demonstrate no likelihood of resumption of dumping (Horlick 1990).

[20] The Japanese Industrial Structure Council (1994) reported that 39 percent (22 of 56) of currently effective U.S. antidumping orders against Japanese exports have lasted for 10 years or more. There are no such cases in Canada and only one case in the European Union.

3

Welfare Implications of Antidumping Policy

3.1 Antidumping policy can be evaluated in terms of its effect on both global and national welfare. Global welfare is the sum of the economic welfare of both the importing and the exporting country. National welfare as used here means the economic welfare of the importing country. Global welfare approximates national welfare when the importing and the exporting countries commit to identical antidumping rules and apply the rules similarly.

3.2 Because the GATT enables such mutual commitment by national governments, the GATT rule on antidumping policy is best evaluated in terms of global welfare. By contrast, because the GATT does not oblige its signatories to use antidumping measures—and each country can use its own discretion within the boundaries set by the GATT—national welfare must also be considered. The discussion that follows focuses first on the global welfare implications of international price discrimination and sales below cost and then analyzes the welfare implications of antidumping policy on the importing country.

International Price Discrimination

3.3 When an exporting firm faces more elastic demand in the export market, it sets its export price below its domestic price. This normal, profit-maximizing response does not imply anticompetitive motivation. Demand might be more elastic in the export market if a product mirrored home-market preferences better than it did export-market tastes. Domestic consumers then might be willing to pay a higher price than foreign consumers would pay.

3.4 Also, the exporter usually has a smaller market share in the export market than it does in its home market (due to transportation and other export-related costs). In this situation, the exporter may be willing to accept a lower price—cost margin in the export market. And if the importing country is a large economy, enabling many firms to profitably enter the market, the market in the importing country may be more competitive than the exporter's home market. In this situation, too, the exporting firm would have a smaller market share and might accept a lower margin in the export market.

3.5 Setting the export price below the domestic price—that is, international price discrimination—is possible only if there are costs or restraints to international arbitrage, such as

high transportation costs, trade barriers, or resale restrictions by suppliers. International price discrimination is not consistent with maximum global welfare. When the home-market price (PD) is higher than the export price (PE), the marginal switch of sales from the export market (E) toward the home market (D) increases global welfare directly by the amount (PD — PE), since price in each market signifies the marginal value of consumption and invites expansion of the import-competing industry in the export market, further increasing global welfare.[21]

3.6 Yet prohibiting international price discrimination through antidumping regulation does not guarantee an improvement in global welfare. Antidumping regulation can reduce global welfare by reducing global output if, to satisfy the regulatory constraint, the exporting firm increases the export price without lowering the home-market price. The extent to which the exporter raises the export price and lowers the home-market price depends on a number of factors, including the market's size and the price elasticities of demand.[22] The larger volume of home-market sales makes it more attractive for the exporting firm to raise the export price, whereas the more elastic export demand (a cause of dumping) makes lowering the home-market price more attractive.

3.7 One factor favoring an export-price increase is that antidumping action is permitted only if both dumping and injury to the importing country's domestic industry can be proved. Insofar as increasing the export price can relieve both constraints—while reducing the home-market sales price does not—antidumping regulation encourages higher export prices rather than lower home-market prices.

Sales Below Cost

3.8 A firm may set its export prices below cost without predatory intent in several situations. In all of these, the economic cost perceived by the exporting firm becomes significantly lower than the accounting cost of production, and competition results in below-cost sales by forcing the firm to price close to its economic cost.

- In industries with a high proportion of fixed and sunk costs, market prices may go below the accounting cost, particularly when demand is depressed and excess capacity develops. Such dumping, often called cyclical dumping, is most likely to be observed in industries that are both capital-intensive and cyclical (for example, the investment goods industry) or that have relatively rigid employment levels.
- When there is a learning curve for either production or consumption, the true marginal cost is below the current marginal cost of production, since current production generates information useful in reducing future production costs.

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[21] Given the profit-maximizing strategy of the exporting firm, the marginal switch of its sales between markets does not affect its profit.

[22] The second-order effect on profit of the price deviation from the optimal level is proportional to $2Q' + (P - C)Q''$ where Q' and Q'' are the first and second derivatives of the demand curve, respectively. For demand with constant price elasticity, this formula is equal to $-[(k - 1)^2 / k] \times Q/C$ where k is the elasticity of demand ($k > 1$) and C is the production cost.

Moreover, a firm may need experience merely to know the level of its own productivity and to be able to make correct production decisions in the future (see Clarida 1993).

- A firm's cost burden per unit of production during start-up or expansion (for example, amortization of R&D, capital goods investment, and other fixed costs) is significantly greater than it is over the life of the product. As a result, the economic cost of production may be significantly lower than the accounting cost of production, and goods may be priced below their accounting cost.
- The economic value of a firm's investment can depreciate significantly under unfavorable economic conditions. For example, the emergence of a competing product may make the existing product obsolete, or appreciation of the domestic currency may lower the value of export-oriented investment. In such cases, the exporting firm may be unable to price its product high enough to recover its initial investment.

3.9 When export prices fall below cost due to these nonpredatory motivations, antidumping measures reduce global welfare by forcing the exporting firm to increase its export price—and thereby reduce supply. Although import-competing firms might respond by expanding production, this increase would not compensate for the contraction of supply by the exporting firm. Even if antidumping measures are not actually applied, they reduce global welfare because the fear of an antidumping suit can force an exporting firm to restrict its investment.

3.10 When import-competing industries have significantly lower marginal costs of production than exporting industries, an antidumping measure may improve global welfare. If, for example, the importing country faces serious unemployment problems, and thus has a very low (social) marginal cost of production (relative to that of the exporting country), antidumping actions may increase global welfare by shifting output to the importing country and reducing unemployment, even if global output declines. Such a possibility does not provide a justification for the antidumping action per se, since neither the dumping nor the antidumping response is intrinsically linked to conditions in the labor market. Measures directly targeting the sources of unemployment are preferable.

3.11 Sales below cost may take place *with* predatory intent—that is, an exporting firm may seek to drive competitors out of business by increasing its supply to such an extent that the market price falls below the marginal cost of production.[23] Then, once the exporting firm has monopolized the market, it may raise its price to obtain monopoly profits. But predatory dumping seems only a rare possibility. To be a rational strategy, both concentrated market structure and high entry barriers are needed. Yet, as a study by the Organization for Economic

[23] If a firm's marginal cost of production is above price, it also is clearly above the marginal revenue of production. The firm could then increase its profit by reducing its supply, unless it expects the gain from predation.

Cooperation and Development (OECD 1993) found, in most U.S. and EU antidumping cases, the relevant domestic market was competitive, the import share was low, and there were several competing foreign enterprises, often from many countries. Nonetheless, if predatory dumping did occur, it would most likely reduce global welfare because overproduction takes place in the predatory stage, and significant underproduction occurs once the firm has gained a monopoly.

3.12 It is clear that current antidumping policy overprotects domestic industry against the risk of predation. Antidumping regulations usually do not take into account the extent of actual or potential competition, and they evaluate the pricing behavior of foreign enterprises based on the full cost of production, not the marginal cost. (The concluding chapter of this paper suggests reforms that would make antidumping legislation more consistent with competition.)

Dumping and the Importing Country

3.13 The GATT assigns to the importing country the explicit right to take antidumping measures.[24] Yet antidumping measures reduce the welfare of the importing country even more than they do global welfare. First, unrestricted imports are an important source of competitive discipline, with or without dumping, especially for smaller economies with limited domestic competition. Antidumping measures would enable those domestic enterprises whose competitive positions have fallen relative to that of foreign enterprises to recover lost markets and profitability without making productivity improvements.

3.14 Second, low import prices in principle improve the welfare of an importing country. The injury-related welfare cost to the domestic industry is smaller than consumers' and user industries' welfare gain, as long as domestic distortions are small. Injury to the domestic industry results from both the fall in prices (price injury) and the fall in output (output injury). Price injury is always offset by an equivalent consumer gain, and consumers can also enjoy the added benefit of the low import price—terms of trade gain. Output injury is bound to be negligible relative to the terms of trade gain because the output price is close to the marginal cost of production (again, assuming domestic distortions are small).

3.15 Several domestic distortions can make output injury non-negligible in static welfare calculation. Injury to the domestic industry may exceed consumers' welfare gain when the following distortions are large and the level of imports low:

- *Noncompetitive product markets.* When the domestic market of a specific industry in the importing country is not competitive even if import is free (for example, in the case of a globally oligopolistic industry), price exceeds the marginal cost of

[24] The GATT is silent on the exporting country's right to take antidumping action. In a dispute between the European Union on the one hand, and Japan and the United States on the other, about the exporting country's right to take an antidumping measure, the GATT panel did not take a definitive view. In a case involving the U.S.—Japan Semiconductor Agreement, the panel concluded only that the set of measures taken by the Japanese government to stop third-country dumping was inconsistent with GATT Article XI prohibiting the use of quantitative and other nonprice trade interventions.

production. As a result, the decline in output in this industry leads to a reduction in rent.

- *Noncompetitive factor markets (particularly labor markets).* When wage is set noncompetitively due to either the monopoly power of unions or efficiency wage considerations in a specific industry, price again exceeds the true marginal cost of production. The decline of employment in the industry leads to lower workers' wage "rent."

- *International differences in production cost structures and labor market incentives.* When the importing country has a synchronous business cycle with the exporting country in certain sectors, free trade can increase unemployment in the importing country through dumping during business downturns in those sectors (see Ethier 1982). This scenario may result if the industries of the exporting country have a high proportion of fixed costs, and the importing country tends to generate large unemployment during business downturns.

3.16 When domestic distortions are substantial, dumping may reduce the economic welfare of the importing country because the welfare effect of output injury becomes non-negligible. Such possibility, however, does *not* justify current antidumping policy for several reasons. First, the effect of dumping on the welfare of the importing country can be made positive if domestic distortions can be sufficiently reduced. Although such interventions are not always possible, some distortions, such as entry regulations by the government to protect noncompetitive markets or excessive unemployment compensation, are policy generated and therefore can be reduced by the government.

3.17 Second, the effect of dumping on the welfare of the importing country does not necessarily become more negative as either the injury to the domestic industry or the dumping margin increases. When the injury to the domestic industry is large due to low import price, the gain for consumers and for user industries also tends to be large. Moreover, the latter gain becomes increasingly important as import price declines because the level of imports increases.

3.18 Figure 3.1 illustrates how the economic welfare of the importing country changes as the export cost of the foreign industry changes, assuming the Cournot-Nash equilibrium of duopoly competition.[25] When the domestic monopoly firm suffers a small injury (A → B),

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[25] In a Cournot-Nash equilibrium domestic and foreign firms choose their capacities in the domestic market simultaneously given their respective costs of production. The change of the marginal cost of production of the foreign firm (dC^*) causes the supply changes of the domestic and foreign firms in the domestic market [$dq = a\ (dC^*)$ with $a > 0$ for the domestic firm, and $dq^* = -a^*\ dC^*$ with $a^* > a > 0$ for the foreign firm]. Given the price derivative of the demand by P' ($=\partial P/\partial Q$ with $Q = q + q^*$), the changes of the domestic consumers' surplus (CS) and of the domestic firms' profit (π) are given by

(1) $d\ (CS) = -(q + q^*)\ P'\ (dq + dq^*) = (q + q^*)\ P'\ (a^* - a)\ dC^*$

and

(2) $d\pi = q\ P'\ dq^* = -q\ P'\ a^*\ dC^*$.

Therefore there is a negative relation between consumers' surplus and the profit of the domestic industry:

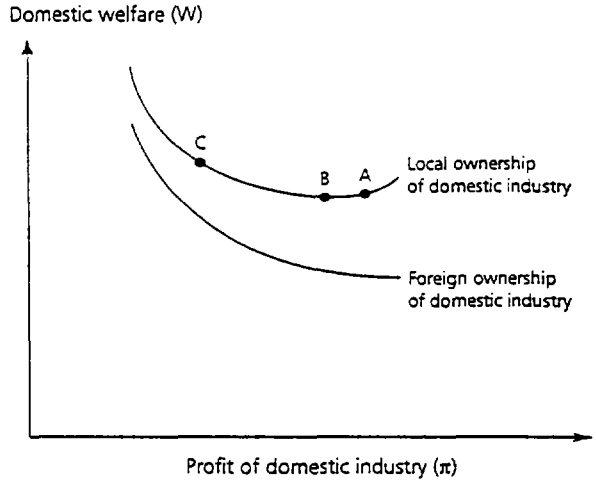
(3) $d(CS) = -(1 + q^*/q)\ (1 - a/a^*)\ d\pi$.

The change in the national welfare ($W = CS + \pi$) is given by

domestic welfare (W) also declines; when it suffers a large injury (A → C), domestic welfare increases because the size of imports becomes large. As this figure suggests, there is no uniform relationship between the injury to the domestic industry and the economic welfare of the importing country. Globalization of industry ownership tends to further weaken this relationship.

3.19 Third, if antidumping measures are taken only when they increase the welfare of the importing country, they often harm the welfare of the exporting country more than they benefit the importing country. This is because antidumping measures restrict global output and thereby tend to reduce global welfare. Since every country both imports and exports goods, all would stand to gain from the restrained use of these measures.

Figure 3.1: Effects of Dumping on Domestic Welfare and Industry Profits under International Duopoly



Note: Cournot-Nash equilibrium is assumed for duopoly competition.

3.20 One might question whether government revenues from antidumping duties make the net effect of antidumping measures positive for the importing country. Optimal tariff theory suggests that the welfare of the importing country increases if the country is able to improve its terms of trade by imposing a tariff because exporters may absorb the tariff to maintain their market positions. This conclusion does not apply to antidumping duties, however, since the size of the duty is determined endogenously by the dumping margin. Exporters have no incentive to reduce their export prices after the antidumping duty is imposed because a lower export price is

(4) $dW = d(CS) + d\pi = [1 - (1 + q^*/q)(1 - a/a^*)]\, d\pi$.

Equation (4) shows that there is a positive relation between welfare and the profit of domestic industry when q^* (the import) is small. On the other hand, if a^* is significantly larger than a, the relation between welfare and the domestic industry's profit turns negative when q^* (the import) becomes large relative to q (domestic production). In the case of linear demand, $a/a^* = 1/2$, so that the relation becomes negative when $q^* \geq q$ (that is, the import supply becomes larger than the domestic supply).

completely offset by a larger duty and has no effect on the duty-inclusive import price, which would equal the normal value.

4

New Issues and Recent Debates

4.1 Recent debates on antidumping policy have focused strongly on its relationship with competition policy. There are several reasons for this focus. First, contemporary experience as well as economic analysis have uncovered that the anticompetitive effects of antidumping law can be much stronger than suggested by conventional analysis. Second, there have been several developments to substitute antidumping law with regional application of competition law. Third, some seek new justification for antidumping law in the global enhancement of competition.

Strategic Use of Antidumping Law as an Anticompetitive Device

4.2 Antidumping law can be used in an anticompetitive manner: first, as a facilitating device for joint price hikes; and second, as a strategic weapon of a domestic firm to exclude foreign competitors.

Facilitating Device for Joint Price Increases

4.3 Since an antidumping measure, once introduced, forces the exporting firm to raise its export sales price by setting a minimum price, the measure severely limits price competition in the domestic market of the importing country. When the price of the exporting firm's product increases in a credible way, it is likely that domestic competing firms will also raise their prices. Although such an effect is anticompetitive, it may be inevitable if removing the material injury to the domestic industry is considered necessary.

4.4 The anticompetitive effects of antidumping law, however, can be much stronger than those caused by the unilateral price increase of the exporter in response to the imposition of duty. As Prusa (1992) has pointed out, a domestic firm may use antidumping law both as a threat to force an exporting firm to raise its prices and as a cover from domestic antitrust law in order to implement coordinated price increases. Based on a study of U.S. antidumping and countervailing duty cases in 1980—81, Prusa reported that even in cases in which petitions were withdrawn, imports declined as much as they did when duties were actually levied. The exporting firm may choose to increase its price rather than to incur the costs associated with a dumping investigation and the risk of high antidumping duties. Moreover, the threat of antidumping action may serve

as an effective deterrent against deviation from a price cartel by domestic and foreign firms (Staiger and Wolak 1994a). Thus, even in cases where material injury is not likely to be established, the antidumping law has the effect of facilitating joint price increases by competing firms in the market of the importing country.

4.5 An explicit agreement between import-competing firms and exporting firms whereby the former agreed to withhold or withdraw antidumping petitions in exchange for price increases by the latter would constitute private restraint of trade and therefore violate the antitrust law of the importing country. The guidelines of the U.S. Department of Justice, for example, clearly state that "agreements among competitors that do not comply with the law, or go beyond the measures authorized by the law, do not enjoy antitrust immunity" (U.S. Department of Justice 1995).

4.6 What steps could be taken to reduce the risk of such anticompetitive effect of antidumping law? First, the government of the importing country should use tighter criteria in calculating the dumping margin, evaluating material injury, and determining the causality between the two. Tighter criteria would make it more difficult for an antidumping action to be used as a punishment device. Reducing the size of the antidumping duty—through, for example, the more disciplined use of the below-cost sales standard and the use of injury margin—is particularly important.

4.7 Second, to discourage sham petitions, petitioners should be required to submit substantial evidence before the government of the importing country initiates an investigation.[26] Third, competition policy should be made available as a deterrent to coordinated price increases. Antidumping petitions should not provide opportunities for domestic firms to exchange information so as to maintain high domestic prices. Nor should domestic and exporting firms be allowed to enter into an agreement for the increase of an export price.

Predatory Weapon

4.8 A domestic firm can use antidumping law as a predatory weapon to shut out exports by foreign firms. By expanding its output, it could cause domestic prices to fall below foreign firms' current cost of production. Insofar as the antidumping law forces foreign firms to price their products above their current cost of production, they would be excluded from the market. Such a predatory strategy is rational if denying market share to foreign firms provides significant competitive advantage to the domestic firm, by enabling it to ascend the learning curve more quickly than foreign firms (see Gruenspecht 1988). Such an advantage may even enable the domestic firm to monopolize the domestic market.

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[26] An investigation itself has the effect of reducing price competition significantly since the exporting firm does not want to be found to cause injury to the import-competing industry by underselling during the investigation period (Staiger and Wolak 1994b). Nonetheless, an investigation is easily initiated in the United States, given only "notice pleading claims of dumping often with little more than U.S. import statistics and petitioner's own costs" (Horlick 1990, p. 111).

4.9 Under normal circumstances, predation is rarely more profitable than accommodation, since predation requires a large expansion of output. Antidumping law can make such a strategy more viable, however, by allowing the domestic firm to exclude the foreign competitor by expanding its output only to the point where price falls below foreign firms' current accounting cost of production.

4.10 To reduce the chance that antidumping law will be used for predatory purposes, the below-cost sales standard should be used in a disciplined manner. First, the standard must take into account learning and other dynamic factors that make the accounting cost of production substantially larger than the true economic cost. Second, the competitive consequences of antidumping measures should be carefully evaluated where domestic markets are highly concentrated. Third, the competition policy authority of the importing country should be fully aware of the constraints on foreign competitors imposed by antidumping law, which allows a domestic firm to monopolize the market even if prices are significantly above the marginal cost of production. When antidumping law is binding, the standard presumption that predation does not occur if price exceeds the marginal cost of production does not hold.

International Predation

4.11 International predatory pricing could be regulated by antitrust law as well as by antidumping legislation. Some scholars believe that antidumping laws should be repealed and antitrust law used instead (see Ordover, Sykes, and Willig 1983). Such substitution would be welfare enhancing since—due to its focus on injury to the domestic industry rather than injury to competition—antidumping law tends to overprotect domestic firms from the risk of predation.

4.12 Many industrialized countries and country groups, including the United States and the European Union, take the stance that domestic antitrust law is applicable to anticompetitive conduct by foreign firms, including predatory pricing, whenever domestic competition is restricted in an important manner.[27] But there are constraints on the international application of antitrust law. Because individual countries' antitrust authorities have no legal mandate in foreign jurisdictions, they are not allowed to conduct the investigations required to prove predatory pricing. Some countries, including Australia and the United Kingdom, have enacted statutes that block extraterritorial applications of competition law and can prevent domestic producers from complying with orders by foreign authorities, including providing information needed to prove anticompetitive conduct.

4.13 No such constraint exists with antidumping law, which enables the government of the importing country to collect the data it requires from foreign firms. Because GATT Article VI allows the government of the importing country to impose antidumping duty based on its own judgment, the government can impose duties on an exporting firm unilaterally, based on

[27] In 1986 in a suit brought in the United States, *Zenith et al. v. Matsushita et al.*, it was alleged that a group of foreign firms had engaged in collusive predatory pricing in violation of U.S. antitrust laws.

available information.[28] Under the GATT, the action of the importing country cannot be blocked by the government of the exporting country. As for the remedy, the antidumping law may be as effective as antitrust law. The process leading to the imposition of the duty is relatively swift, and the duty forces the foreign firm to raise prices above full cost through a customs-clearing process. Unlike antitrust law, however, antidumping law does not impose punitive measures such as treble damages or surcharges.

4.14 The constraints on the international application of antitrust law could, however, be overcome by international agreements. In fact, some regional arrangements—such as the European Union, the European Economic Area, and the Australia/New Zealand Closer Economic Relations Trade Agreement (ANCERTA)—have led to the suspension of intraregional applications of antidumping laws, with the understanding that antitrust law can be effectively applied on a regionwide basis. ANCERTA, which took effect July 1, 1990, seems to have succeeded in removing antidumping procedures under the least common institutional setup. It empowers the competition policy authorities of the two countries to obtain evidence from and issue orders to firms in the other country. But suspension of antidumping law has generally taken place only in the context of fairly deep economic integration, since it requires not only harmonization of competition policy within a region but also mutual recognition of extraterritorial or supranational application of competition law. The U.S.—Canada Free Trade Agreement and the North American Free Trade Agreement have not succeeded in replacing antidumping law by antitrust law.

4.15 Even if full substitution of antidumping law by antitrust law is not feasible, reform of antidumping law is still possible if it is agreed that the sole objective should be the prevention of international predation. This is because there are unreasonable discrepancies between antidumping policy and competition policy in terms of their standards for evaluating alleged anticompetitive conduct. Some discrepancies may be justified, as suggested by Ordover and others (1983). First, weaker foreign antitrust laws may permit substantially greater cooperation between firms in their home market, which in turn may make coordination of overseas activities easier. Second, many countries exempt export cartels from the applications of their antitrust laws. If ineffectiveness of antitrust laws results in collusion among foreign firms in the importing-country market that cannot be effectively prevented by the domestic competition law, foreign firms then must be viewed as a single entity rather than competing entities.

4.16 But such justifiable differences between antidumping and antitrust laws do not prevent the importing country from taking steps to make antidumping policy more consistent with competition policy, including the following:

- Using market structure standards (including entry barriers) to evaluate the risk of injury to competition, thus avoiding the use of antidumping measures when the structure is competitive or entry barriers are low.

[28] This power to impose duties unilaterally can, of course, be abused for the purpose of protection.

- Cumulating material injury by many exporters only if they are in collusive predation.
- Using significantly tighter criteria on below-cost sales in evaluating predatory intent. For example, to be consistent with antitrust analysis, marginal cost should be used as the standard instead of full cost of production, and appropriate adjustments should be made for learning-curve and promotional motivations.

4.17 As another alternative to antidumping law, Deardorff (1990) has suggested that the importing country should tax away the monopoly profits gained by predation to encourage a foreign predator firm to abandon its strategy. The advantage of this approach is that the importing country could fully realize the gain of cheap imports as long as they were not predatory. Ex-post taxation may not be credible, however. First, the foreign firm that has monopolized the market can also threaten the importing country, since by suspending exports it could significantly harm the importing country's interest. Second, when the instrument available is limited to proportional import duty or subsidy, subsidization rather than taxation of imports may be the optimal policy. Finally, once competing firms have left the market, it may become difficult to collect evidence on predation.

Globalization of Industry and Antidumping Policy

4.18 The globalization of industry poses three new issues for antidumping policy. First, it is claimed that an exporting firm can "circumvent" antidumping measures by shifting the location of final assembly or parts and materials processing from its home country to the importing country or to a third country. Both the United States and the European Union introduced "anticircumvention" measures in their national antidumping regulations to allow extension of antidumping duties to parts assembled outside the exporting firm's home country. Such measures have been controversial, however, since their consistency with GATT is questionable.

4.19 Second, the globalization of industry has increased the number of markets in which competition takes place. Industries compete in their domestic market in intermediate goods as well as final goods, and they compete in their domestic market as well as in third-country markets. As global sourcing of inputs has become an increasingly important competitive practice in electronics, automobile, and other industries, pressure to expand the scope of antidumping measures for input dumping has also increased. Globalized competition has also made third-country dumping an important issue, and preventing third-country dumping was one of the major points in the U.S.—Japan Semiconductor Agreement.

4.20 Third, the globalization of industry has made the identification of domestic industry with national ownership increasingly inadequate. Thus, antidumping measures that protect domestic production do not necessarily protect national enterprises. This last point may have important implications in those countries with industrial and regulatory policies targeting the development of national industry.

Globalization and "Circumvention"

4.21 The U.S. Omnibus Trade and Competitiveness Act of 1988 allows antidumping duty to be extended to imported parts and components from which a product similar to one subject to a U.S. antidumping order can be assembled or completed. The U.S. law requires no investigation to prove injurious dumping. It also contains an anticircumvention provision that allows antidumping duty to be extended to goods completed or assembled in third countries and then shipped to the United States, also with no proof of injurious dumping. The EU regulation includes a similar anticircumvention provision.

4.22 The consistency of these provisions with GATT is highly questionable. GATT Article VI allows antidumping duty to be imposed on imports only if injurious dumping has been established. In fact, the GATT panel ruled in 1990 that duties the European Economic Community had imposed on Japanese parts for anticircumvention purposes were unjustified and violated GATT Article III on national treatment. The panel also concluded that anticircumvention measures are not covered by GATT Article XX, which allows governments to take measures necessary to secure compliance with national laws or regulations. This is because Article XX does not allow governments to prevent enterprises from taking actions designed to avoid incurring an obligation, for example, by transferring production to the duty-levying country. Shifting the location of production in response to an antidumping duty, the panel held, cannot be viewed as a violation of the GATT.

4.23 Circumvention of antidumping law is desirable from a welfare standpoint, except when it involves predation. Because circumvention mitigates the restrictive effects of antidumping measures on competition and output, it generally increases global output and welfare as well as the welfare of the importing country. Circumvention efforts by exporting firms indicate that there is competition in the market.

Global Competition and Antidumping Policy

4.24 Imposition of antidumping duty on parts and components can significantly affect the competitiveness of downstream industries. It could be argued that when dumping is in the form of pure international price discrimination (that is, a low export price relative to the home-market price), antidumping duties would simply offset the artificial competitive advantage of the importing country's downstream industry. As discussed earlier, however, current antidumping policy is significantly biased toward a finding of larger dumping margins and is dependent on artificially constructed values for determining margins. Consequently, antidumping measures may well harm the international competitiveness of downstream industry. It is not surprising that U.S. firms such as IBM and Apple have expressed strong concerns about antidumping duties on semiconductors and flat panel displays.

4.25 The economic loss of downstream industry from antidumping duties, like consumers' welfare loss, is generally larger than the gain of the domestic parts and components industry. Thus, even from the viewpoint of producers, increasing global interdependency of the industries

of different countries may make liberalization of antidumping policy more desirable. However, pressure has also increased to expand the use of antidumping measures against input dumping.[29] Pressures from global competition nonetheless should be used to promote liberalization of antidumping measures rather than their expansion.

4.26 Globalization of competition also has made third-country dumping an increasingly important issue. Third-country dumping is best understood using the example of three hypothetical countries—countries A, B, and C. Dumping by country A's industry in country C (third-country market) injures the export interests of country B. The industry of country B then demands removal of the injury from such dumping.[30] Article XIV of the GATT Antidumping Code provides a mechanism for addressing third-country dumping. It allows an importing country with no competing domestic industry (country C) to impose antidumping duty based on the request of another country (country B).

4.27 It is clear that third-country dumping both reduces the economic welfare of the competing exporting countries and increases the economic welfare of the importing countries, with positive net welfare in nonpredatory cases. From a global welfare point of view, it is therefore important to be cautious in using the provision of Article XIV. The importing country should respond to the request only when it judges that low import price harms its interest because it endangers competition.

Diversification of Ownership and Antidumping Policy

4.28 The diversification of ownership due to direct foreign investment, especially in industrializing countries, has important implications for antidumping policy since such policy cannot discriminate on the basis of ownership. Most importantly, injury to domestic industry becomes an irrelevant criterion for evaluating the economic impact of dumping on the importing country (except, again, when dumping is predatory). If owners of capital are the dominant stakeholders of the domestic industry and if they are primarily foreign, the injury to the domestic industry is excluded from the calculation of the importing country's welfare, unless competition is at stake. In this situation, the importing country can only gain from dumping, even if the market is not fully competitive (see Figure 3.1). The increasing diversification of ownership therefore calls for antidumping policy to be focused on competition.

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[29] There was an attempt to introduce offsetting measures against diversionary input dumping in the 103rd U.S. Congress. If input used in the manufacture of a product had been purchased at a dumped price, the provision provided that the diversionary dumping benefit could be offset by antidumping measures. This proposal was not enacted, and it is highly questionable whether such provision is consistent with GATT Article VI.

[30] Third-country dumping became a major issue in negotiations for the U.S.—Japan Semiconductor Agreement. The agreement, which called for a commitment by the government of Japan to stop its companies from dumping into third-country markets, was challenged by the European Economic Council and several countries as being inconsistent with the GATT.

The Global Competition Rationale

4.29 Many support the view that antidumping policy is justified as a corrective response against distortions of global competition by an exporting firm that faces either weak competition or a policy of strategic import protection by the exporting country in its home country. But is dumping a good indicator of these distortions, and can antidumping policy contribute to their removal?

4.30 The view that dumping is the product of weak competition in the exporting country was expressed by former chairman of the European Economic Community, Willy de Clercq:

> Dumping is made possible only by market isolation in the exporting country, due primarily to such factors as high tariffs or non-tariff barriers, and anticompetitive practices. This prevents the producers in the importing country from competing with the foreign supplier on his own ground, while allowing him to attack their domestic market by sales which are often made at a loss, or are financed from the profits made from the sale of the same or different products in a protected domestic market (Financial Times, November 21, 1988).

4.31 It is clear that exporting firms protected by import barriers, such as quantitative restrictions, can engage in international price discrimination and set higher prices in the domestic market than those in the international market. Anticompetitive practices such as cartelization of the domestic market also result in domestic prices that are higher than international prices. Even if there are barriers to competition abroad, however, antidumping policy is generally not a solution. First, the importing country does not generally get hurt from cheap imports, as explained earlier. Second, the main effect of antidumping policy is to reduce competition in the importing country, which is antithetical to global competition policy. This effect has become more important with the increasing use of the below-cost sales standard in determining dumping margins.[31] Furthermore, international price discrimination is not always caused by the absence of competition in the exporting country. Absence of competition in the importing country can also cause price-discriminating dumping, as Weinstein (1992) demonstrated recently.

4.32 Consider the situation in which country A has one firm and country B has two competing firms. Assume that all three firms have an identical unit cost of production (C). If there is no international trade, country A has a higher domestic price (PA) than country B (PB). Also assume that there is a non-negligible transportation cost (t). If $PA > C + t > PB > C$, the firm in country A finds its export to country B unprofitable, whereas the two firms in country B find their exports to country A profitable. Exports by the two firms in country B then can be deemed dumping, since both firms have a smaller market share in country A than they do in country B, implying a larger profit margin for domestic sales than for export sales. If, however,

[31] The view that below-cost sales are financed by the profit gained by the exporting firm in its noncompetitive home market makes no economic sense. The exporting firm sells below costs since competition forces a low price which, however, exceeds its economic cost. The profit-maximizing export price is generally independent of the size of the profit made from domestic sales.

country A has two domestic firms instead of one, firms in country B will find their exports unprofitable, and no dumping will take place.

4.33 In this example, dumping is caused by the absence of competition in the importing country and helps to make the monopolistic market more competitive. As this example clearly shows, dumping is not a good indicator of the degree of competition in the exporting country's market. For antidumping policy to have a meaningful role as a global competition policy, one would need direct measures of the barriers to competition in the exporting country's market, and the antidumping measure would have to be contingent on the presence of those barriers.

4.34 Dumping also may be caused by an import restriction policy of the exporting country aimed at strengthening a strategic domestic industry that requires static or dynamic economies of scale. Market reservation provides advantages to the domestic industry in global competition. Willig (in OECD 1993) called dumping caused by such policy—either price discrimination or sales below cost—"strategic dumping."

4.35 Strategic dumping may reduce global efficiency not only by its static effects on global output but also by its dynamic effects on the speed of cost reduction since import protection reduces global output, on which incentives for cost reduction depend. (This will certainly be the case if the industry injured by dumping has room for significant cost reduction through learning-by-doing whereas the protected industry has exhausted such opportunities.) Moreover, such dumping over time may also reduce the degree of global competition by permitting dominance by the protected firms.

4.36 However, here again, the essence of the problem is not dumping but the country's desire to protect the strategic industry. Focusing on dumping is counterproductive since dumping, especially below-cost sales, frequently can occur in such industry even without home-market protection. This is because industries with economies of scale tend to have large fixed and sunk costs and large room for learning. Moreover, strategic dumping does not necessarily reduce either the welfare of the importing country or global efficiency.[32]

4.37 Finally, even if there are barriers to competition abroad, antidumping policy further reduces global welfare and the welfare of the importing country when it fails to eliminate or reduce such barriers—a highly likely outcome for importing countries with small domestic markets (a situation that would provide limited incentives for the exporting country to reduce

[32] According to Willig (in OECD 1993), whether dumping is truly harmful will depend on (a) the existence of home-market protection; (b) the existence of static or dynamic economies of scale in the product supply; and (c) whether excluding exporters from the home market significantly affects rivalry. Although Willig does not explicitly mention the impact of such dumping on competition as a necessary condition for harmful strategic dumping (because he assumes a symmetric case), it is necessary to investigate as well whether such dumping tends to significantly reduce competition by, for example, further strengthening a dominant position of the exporter.

protection). When an antidumping measure has no effect on the level of home-market protection of the exporting country, it ends up simply raising import prices. If international predation is the problem, the injury to the domestic industry will be removed and the risk of monopolization reduced. If competition is not at stake, however, such a price increase further reduces global efficiency since it leads to contraction of global output.

5

Conclusions

5.1 Based on the preceding analysis, this chapter offers a set of policy recommendations and points to priority areas for research.

Policy Recommendations

5.2 Developing countries should be very cautious in introducing antidumping regulations. Even if these regulations are most rationally used, they tend to bring about a small benefit to the country that administers them since only in limited circumstances do dumped imports significantly harm the national welfare of the importing country. By contrast, antidumping regulations can cause large damage to the importing country when they are abused for protectionist purposes. The experiences of industrialized countries suggest that such risk is large.

5.3 In introducing antidumping regulations, countries should adhere to the new Antidumping Code agreed to in the Uruguay Round as an element of basic discipline. Accession to the World Trade Organization will automatically oblige member countries to adopt the new code.

5.4 Countries should introduce other elements of discipline as well, in view of the fact that the new code does not put sufficient constraints on antidumping measures. Weak discipline can harm developing countries, in particular, since in these countries importing is a more important source of the supply of goods as well as competition, and foreign-owned firms often have a larger share of domestic supply. Moreover, they typically maintain higher conventional trade protections. Once they are full members of the World Trade Organization's antidumping committee, developing countries should actively advocate for further reform of the Antidumping Code.

5.5 Developing countries should avoid imposing high antidumping duty since the risk of complete blockage of imports and of domestic shortages is high in economies with small domestic markets. This risk can be reduced by introducing more strict rules for calculating dumping margin. In particular, recourse to the cost standard of dumping should be avoided. Developing countries would be well advised to introduce the lesser-duty rule, as Australia and the European Union have done.

5.6 In evaluating injury to the domestic industry, a significant increase in the volume of dumped imports should be considered as a necessary condition for the affirmative decision. Considering only the level of import as a measure of injury will permit domestic industry to seek redress through antidumping measures even when injury is due to domestic factors. Furthermore, it is generally true that the higher the import level, the more harmful is the antidumping measure to the national welfare.

5.7 An injury investigation should be completed even when price undertakings are accepted. If the investigation does not prove dumping, import price ceilings should be withdrawn.

5.8 Countries should introduce a public interest clause that allows them to forgo imposing antidumping duty when the cost to the national welfare is high. The loss to the downstream industry or to consumers resulting from an antidumping measure can far exceed the gain to the upstream industry, when import supplies a large share of the domestic market and domestic goods are poor substitutes for the imports.

5.9 Countries should make clear that submission of substantial evidence on behalf of the domestic industry is required before the government will initiate an investigation, since the mere fact of the investigation can have an anticompetitive effect on the domestic market. An automatic sunset clause terminating antidumping measures within several years would also be a desirable feature (the new Antidumping Code has a five-year sunset provision).

5.10 Finally, countries should make competition policy available as a deterrent to the abuse of antidumping law. Petitions for antidumping measures should not be used as vehicles for domestic firms to exchange information in order to maintain high domestic prices. Nor should domestic and foreign firms be allowed to enter into an agreement to increase export prices. The consequences of antidumping measures for competition should be assessed in highly concentrated industries, and this assessment should be used in deciding whether the imposition of antidumping measures is in the public interest.

Directions for Future Research

5.11 The preceding discussion suggests four priority research tasks. The first is an assessment of developing countries' experiences in applying antidumping measures as importing countries. Since developing countries only recently began using antidumping laws, there is no systematic assessment of their experience, which may vary substantially from that of industrial countries, due to differences in size, market structure, level of industrial development, and share of foreign-owned firms.

5.12 The major questions to be addressed include:

- Why have developing countries become so active in using antidumping measures?
- What are the major features of their antidumping regulations? Have developing countries avoided the protectionist biases of some industrial countries' regulations? How do developing countries evaluate material injury to the domestic industry?

- When developing countries have applied antidumping legislation, what has been their experience? Have foreign exporters responded satisfactorily to requests for data? How high have the duties been? What has been the impact of duties on trade, domestic industry, competition, and the economy?

5.13 Second, an empirical assessment of the welfare effects of antidumping measures, focusing particularly on industrial countries, should also be conducted. Such an assessment could prompt the reform of antidumping policy, which would benefit both industrial and developing countries. The focus of antidumping law primarily on injury to the domestic industry has been an important cause for its drift toward protectionism. Although the U.S. International Trade Commission is working on such a welfare impact assessment, a parallel effort with a global perspective is strongly suggested.

5.14 Although many studies have been conducted on trade restrictions such as voluntary export restraints and multifiber agreements, few empirical welfare studies of antidumping measures exist since, until recently, the economic impact of antidumping measures may have been dominated by the other trade restrictions.[33] In addition, antidumping measures may have been viewed as perfectly legitimate responses against distortions in competition. As pointed out in this paper, however, neither is the case today.

5.15 This assessment could address the following questions:

- What have been the economic effects of antidumping measures on domestic industry and consumers?
- What have been the fiscal implications?
- What net welfare loss have antidumping measures caused?
- How have antidumping measures affected the economies of exporting countries?
- How much would each country gain (as both an importer and an exporter) from reciprocal reform of antidumping measures?

5.16 Third, there should be an attempt to clarify the following questions regarding antidumping regulations and their economic effects:

- How many antidumping petitions have been withdrawn? Why were they withdrawn? What has been the economic effect of the withdrawn cases?
- How is "like product" determined in practice, and how does it differ from the market definition of antitrust analysis?
- Why is the public interest clause so rarely effective in influencing antidumping measures?
- Do prospective duty collection systems have a different impact than retrospective systems? What is the economic impact of each type of system?

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[33] One of the few studies is that by Staiger and Wolak (1994b).

- What is the economic impact of price undertakings versus duty impositions?

5.17 Finally, to promote the reform of antidumping regulations, an empirical assessment of the economic impact of several possible reforms would be useful, including:

- Reducing the biases in dumping margin calculations by averaging and zeroing, asymmetric adjustment of sales cost, and use of constructed value.
- Making the criterion of material injury to domestic industry more consistent with economic welfare by accounting for both price and output injury (business diversion) and effects on competition.
- Substituting antitrust policy for antidumping policy.

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