

WTO Research Series No.4

ICRIER

The WTO Anti-dumping Code: Issues for Review in Post-Doha Negotiations

Aradhna Aggrawal

September 2004



INDIAN COUNCIL FOR RESEARCH ON INTERNATIONAL ECONOMIC RELATIONS

Core-6A, 4th Floor, India Habitat Centre, Lodi Road, New Delhi-110 003, www.icrier.org

WTO Research Series No.4

ICRIER

The WTO Anti-dumping Code: Issues for Review in Post-Doha Negotiations

Aradhna Aggrawal

September 2004



INDIAN COUNCIL FOR RESEARCH ON INTERNATIONAL ECONOMIC RELATIONS

Core-6A, 4th Floor, India Habitat Centre, Lodi Road, New Delhi-110 003, www.icrier.org

Contents

List of Tables	ii
Abbreviations	iii
Foreword	iv
1 Introduction	1
2 Dumping Determination	1
2.1 Like Product	1
2.2 Use of Constructed Normal Value	3
2.2.1 Five Per Cent Viability Test	3
2.2.2 Sales in the Ordinary Course of Trade	4
2.2.3 Sales to Domestic Related Customers	5
2.3 Construction of the Normal Value	6
2.3.1 Use of Cost of Production Methodology	6
2.3.2 Constructed Normal Value—Use of Appropriate Third Country Method	8
2.3.3 Constructed Normal Value—Best Available Information	8
2.4 Estimation of Export Prices	10
2.4.1 Constructed Export Price	10
2.5 Fair Comparison	11
2.5.1 Duty Drawback	11
2.6 Dumping Margin	12
2.6.1 Zeroing of Dumping Margins	12
2.6.2 Comparison of Weighted Normal Value with Individual Export Prices	13
3 Injury	13
3.1 Domestic Industry	13
3.1.1 Support Criterion	13
3.1.2 Related Parties	14
3.1.3 Captive Production	14
3.1.4 Exports vs. Domestic Sales	14
3.2 Injury Indicators	15
3.2.1 Price Undercutting	17
3.3 Causation	17
3.4 Cumulation	18
4 Other Procedural Issues	20
4.1 Initiation of Anti-dumping Case	20
4.1.1 Condition	20
4.1.2 Back-to-Back Investigation	21
4.2 Questionnaires	21
4.3 Disclosure of Information	21
4.3.1 Compliance	22
4.4 Sunset Reviews	22
4.5 Anti-dumping Duty: Lesser Duty Law	23

5	Special and Differential (S&D) Treatment	24
5.1	Background	24
5.2	Conceptual Justification for S&D Treatment in the Anti-Dumping Agreement	26
5.3	S&D Treatment and the Anti-dumping Agreement	27
5.4	Suggestions	28
5.4.1	Exceptions to the Rule to Which Developing Countries May take Recourse	28
5.4.2	Conduct or Actions to be Undertaken by Developed Country Members for Developing Country Member	30
6	Conclusion	31
	References	32

List of Tables

Table 1:	Comparison of USDOC Profit Rates and US Industry Profit Rates: Some Illustrations	7
Table 2:	Summary of Methodologies Adopted for Constructing Normal Value by USDOC, 1980–95	9
Table 3:	Summary of Dumping Margin Calculation Methodologies Used in AD Investigations, 1995–8	9
Table 4:	Comparison of Weighted Normal Value with Individual Export Prices: An Illustration	13
Table 5:	Case-wise Summary of Injury-Assessment: EC Investigations against Indian Exporters	15
Table 6:	Use of the Cumulation Principle: Analysis of USITC Cases	18
Table 7:	Summary of Naming Patterns in the EC* and US Cases**	19
Table 8:	Summary of Naming Patterns in Cases Involving India	19
Table 9:	Domestic Market Structure of Industries Subject to AD Investigations	20
Table 10:	Distribution of Petitioners' Market Share	20
Table 11:	Year-wise Distribution of the US AD Duties (Country-specific) in Force as of 14 August 2002	23
Table 12:	Comparison of Injury and Dumping Margins in Selected EC Cases Investigated against India	24
Table 13:	Initiation of Anti-Dumping Cases by Targeted Country Group, 1979–80 to 1999–2000	26
Table 14:	Patterns of AD Duties in the US and the EC	27
Table 15:	Structure of AD Duties: EC and the US	29
Table 16:	Summary of Dumping Margins Calculated by USDOC and European Commission in AD Investigations against Indian Companies	29
Table 17:	Distribution of Market Shares held by Developing Countries Subject to AD Actions in the US, 1980–95	30

List of Abbreviations

AB	Appellate Body
AD	anti-dumping
ADA	Anti-dumping Agreement
ADD	anti-dumping duty
APO	Administrative Protective Order
ASCM	Agreement on Subsidies and Countervailing Measures
CVD	countervailing duty
DEPB	Duty Entitlement Passbook Scheme
DSB	Dispute Settlement Body
DSU	Dispute Settlement Undertaking
EC	European Communities
EINTAD	EU–India Network on Trade and Development
EU	European Union
FDI	foreign direct investment
GATT	General Agreement on Tariffs and Trade
GIMELEC	Groupeement des industries de l'équipement électrique, du contrôle-commande et des services associés (French Industry Association for Electrical Equipment, Automation and Related Services)
GSP	Generalised System of Preferences
HFCS	High Fructose Corn Syrup
ITA	International Trade Administration
MFA	Multi-fibre Agreement
MFN	most favoured nation
OECD	Organisation for Economic Co-operation and Development
PET	Polyethylene terephthalate
PSF	Polyester Staple Fibre
PTY	polyester textured filament yarn
R&D	research and development
S&D	special and differential
SAA	Statement of Administrative Actions
SAIL	Steel Authority of India Limited
SGA	administrative, selling, and general costs
SWR	Steel Ropes and Cables
UNCTAD	United Nations Conference on Trade and Development
USDOC	United States Department of Commerce
USITC	United States International Trade Commission
WTO	World Trade Organisation

Foreword

ICRIER's objective is to foster improved understanding of policy choices for India in an era of growing international economic integration and interdependence. ICRIER undertakes research in areas of international economic relations of current and future interest. The commencement of the new round of multilateral trade negotiations at Doha in November 2001 has brought to the fore a number of issues that impinge on the trade and economic prospects of India as well as its trading partners. In this context, ICRIER has undertaken a programme of research to study from India's perspective the approaches being suggested for further liberalisation of trade, the proposals for improvement and clarification of existing rules, and the initiatives for developing multilateral disciplines in new areas. The objective is to equip stakeholders and policymakers with full analytical information so as to enable them to take a view on where India's interests lie on each issue and to decide on the positions that India must adopt at the negotiations. The studies would also serve the purpose of enlightening the public at large on various facets of the subjects being negotiated. This paper, 'The WTO Anti-dumping Code : Issues for Review in Post Doha Negotiations' by Dr Aradhna Aggarwal, Consultant, ICRIER and Reader Kirori Mal college, University of Delhi is part of a series of studies under this programme. The study was supported by the Ministry of Commerce and Industry, Government of India.

This paper offers a detailed, step-by-step guide to how dumping is defined and measured under current rules. It identifies methodological quirks and biases in each step of dumping calculation and injury determination that allow normal, healthy competition to be stigmatized as 'unfair' and punished with antidumping duties. In addition, it covers a number of issues concerning procedural aspects of dumping investigations and special and differential treatment for developing countries, fairly extensively. For illustrating the antidumping law's serious methodological flaws it uses actual case records from different dumping investigations carried out against Indian exporters in the US and the EU. The study also proposes reforms in each step of dumping investigation to tighten the antidumping code so that domestic 'unfair trade laws' cannot be used as 'a tool for protectionism.' Policy suggestions are based on the rulings given by panels and appellate bodies in various antidumping cases in the Dispute Settlement Body, provisions in other WTO agreements and the existing literature.

Arvind Virmani
Director & Chief Executive
ICRIER

September 2004

The WTO Anti-Dumping Code: Issues for Review in Post-Doha Negotiations

1 Introduction

According to the GATT principle of most favoured nation (MFN) treatment, trade must be conducted on the basis of non-discrimination between Members of the WTO. 'Like products' must be taxed the same way and placed under similar entry conditions. However, in some circumstances, a country may *temporarily* break this principle and impose higher protection against import of one or more goods from one or more countries. This arrangement, termed 'contingent protection', may be used by the governments to protect their domestic producers from unfair competition. Contingent protection measures fall under three categories—anti-dumping, countervailing, and safeguard measures. Of these, anti-dumping remains the most commonly used contingent protection measure. It proliferated in the 1990s and is now used extensively by developed and developing countries alike.

Broadly speaking, a product is said to have been dumped if it is introduced into the commerce of another country at less than the normal value of the product and it causes/threatens material injury to an established industry of that country. Though the concept in itself appears to be simple, it is subject to several complexities at the operational level. There are ambiguities in the very definition of dumping and in every step of calculating dumping and injury margin (see, for example, Tharakan 1991, 1999; Tharakan and Waelbroeck 1994). The anti-dumping policies of most countries (both developed and developing) have been criticised by both lawyers and economists (Aggarwal 2002; Murray and Rousslang 1989; Lindsey 2000; Araujo et al. 2001; Jackson and Vermulst 1989; Tharakan 1994, 1995; Didier 2001; Hsu 1998; Almstedt and Norton 2000, among others). The present paper, however, argues that it is difficult to define general policy guidelines that would make anti-dumping more rational within the existing international rules. The GATT rules are themselves in need of reform, with the existing laws being vague. This vagueness has allowed the authorities to have their own interpretation of the law. It is, therefore, important to review the legal provisions and conduct of the Anti-dumping Agreement (ADA) in order to see what provisions need to be clarified and improved. This is all the more so in view of the fact that the revision of the GATT ADA is on the agenda of the post-Doha Negotiations.

Critics of the anti-dumping legislation argue that there is little economic argument that can support the practice of anti-dumping. In their view, the anti-dumping law is fundamentally flawed and its reform cannot be found in the details of its code. According to them, further fine-tuning and refining of the anti-dumping policy is not the answer to prevent its (mis)use. They believe that the Doha Round would be a good occasion to take bold initiatives that aim at changing the basic framework of the AD mechanism (see Aggarwal 2003a for a detailed discussion). One must, however, bear in mind that serious objections to any such efforts will come up as the decision of the Ministerial Conference of the WTO at Doha emphasises the preservation of the basic concepts, principles, and effectiveness of the ADA, its instruments, and its objectives. Article 28 of the Doha Declaration mandates Members to enter into 'negotiations aimed at clarifying and improving disciplines' under the Agreement on Subsidies and Countervailing Measures (ASCM) and the Anti-dumping Agreement. This study, therefore, will address, within the perimeter of these limitations, some of the issues concerning anti-dumping that need to be reviewed in the post-Doha Negotiations to make the ADA more precise and less discretionary. In particular, the objective of the study will be to identify the provisions of the Agreement that need to be clarified and improved from *the perspective of India's interest*. The study will draw heavily on three sources of information: one, anti-dumping investigations carried out in the United States against Indian exporters; two, anti-dumping proceedings in the European Communities (EC) against Indian exporters; and three, Dispute Settlement cases on anti-dumping, in general.

The study is organised as follows, Section 2 dwells upon issues concerning dumping determination, Section 3 deals with injury-related provisions, while Section 4 discusses provisions related with other procedural aspects of the ADA. Finally Section 5 examines the issue of special and differential treatment for developing countries.

2 Dumping Determination

2.1 Like Product

A proper identification of 'like product' based on economic considerations is the first step in calculating the normal value. The ADA (Article 2.6) defines like product as a product which is identical, i.e. alike in all respects to the

product under consideration, or in the absence of such a product, another product which, although not alike in all respects, has characteristics closely resembling those of the product under consideration.

This definition of like product leaves much to the discretion of the authorities. Several instances may be cited to illustrate this point. In the Sulphanic Acid case against India, the European Commission treated the technical and purified grades of the acid as one single product. Several parties claimed that the definition of the product concerned was incorrect. They argued that the technical and purified grades of the acid were substantially different in terms of their purity and had different properties and applications. Whilst the purified acid could be used in all applications, the same could not be said of technical grade acid because of the level of impurities that it contained.

The authorities, however, argued that the purification process does not alter the molecular properties of the compound, and therefore, technical and purified grades share the same chemical characteristics. The authorities did not consider the fact that interchangeability was only in one direction in certain applications, sufficient justification that purified and technical grades constituted different products. In the Polyester Staple Fibre (PSF) case, exporting parties argued that a differentiation should be made between PSF types used for spinning applications and PSF used for non-spinning application because of different specific physical characteristics and limited interchangeability. The European Commission, however, did not find the available evidence sufficient to allow a product differentiation on this basis. In the Polyethylene Terephthalate Film (PET film) case against India investigated by the European Commission, exporting producers argued that metallised PET film should be excluded from the product scope of the current proceedings on the ground that metallised PET film cannot be considered alike to base PET film since it had different physical and technical characteristics, required different production equipments and processes, being consequently more expensive to produce and thus sold at a higher price. These parties also argued that the use of metallised PET film is different from that of base PET film. The authorities however, felt that the metallisation process does not alter the basic physical, technical, and chemical characteristics and that base and metallised PET film are in many applications interchangeable and may have similar uses. It was noted that an additional production step required for the production of metallised PET film, with resulting higher cost of production and sales price, is not an element which could justify *per se* the exclusion of a certain type of PET film from the scope of the product. Interestingly, the United States Department of Commerce (USDOC) in the anti-dumping investigation against PET film originating in India excluded from the scope of the investigation, metallised film and other finished films that had one of their surfaces modified by the application of a performance enhancing resinous.

In many cases, Indian exporters argued that the EC producers were producing more specialised product while Indian exporters were exporting mainly standardised products. They thus claimed that the product concerned which they produced and sold was not interchangeable and not comparable as such with the EC produced products, as for instance, claimed by the exporting producers in the Hot-Rolled Flat Steel Products (1758/2000) case against India. In this case, the exporting producers claimed that the production process of the EC producers was more advanced and even used different technology, thus producing a higher quality product. They further pointed out that users sometimes had to re-roll the imported products before they could be processed further and thus claimed that their product was not a like product to that of the complaining EC producers. The European Commission admitted that the products were not identical but it argued that 'this cannot lead to the conclusion that hot-rolled coil imported from the countries concerned were not a like product to that produced by the community industry'. In the Steel Ropes and Cables (SWR) case, Indian exporters argued that the EC was producing more specialised SWR while the Indian exporters were exporting mainly commodity SWR. The community suggested that while SWR in the top end and in the bottom end are clearly not interchangeable, SWR in the adjoining groups are interchangeable. Given this overlap between groups, no clear dividing line could be established and, therefore, all SWR were considered to be one product.

The above instances suggest that within the existing ADA framework the authorities enjoy wide discretion to define the scope of product under investigation. There is both the incentive and the opportunity to manipulate the category of like products in order to achieve specific goals. If 'like product' is defined in too strict a manner then it may lead to imposition of duties in cases where it should not. If, on the contrary, the relevant market is defined too broadly then duties will not be applied when they should be (Hoekman and Mavroidis 1996). In the interest of legal certainty therefore, the scope of manipulation should be limited. Rules need to provide a more rational and disciplined framework to define the scope of product under investigation.

The *market based approach* taken by the Panels and Appellate Body in the Liquor Taxes cases to the determination of like products in the context of Article III.2 could be useful for the determination of like product in the anti-dumping

field. The Liquor Taxes cases¹ emphasised that what counts in defining like products is competition in the market place which is determined from the consumer's perspective. *Products that are not substitutable cannot be like products simply because they do not compete.* According to this view, showing that directly competitive and substitutable products are like products should be a starting point in the determination of like product. Products that are not in direct competition should be excluded from the definition of like products even though they might be physically similar. Thus the focus needs to be on substitutability.

Treating market factors as the starting point could provide a way for the AD authorities to address the problem of high quality, high priced imports that also fall into the same category as dumped imports. The famous Bed Linen case may illustrate this point. In this case, an Indian exporter of luxury bed linen was also subject to AD duties even though the bed linen he exported was at the top of the range and was many times more expensive than the standard bed sheets, so much so that consumers could not easily substitute between them. The use of market factors could, therefore, result in an altogether different decision. Thus when quality differences translate to large price differences it will be possible to argue that the two products are not in direct competition with each other, which means that they are not substitutable. It is, therefore, suggested that the definition of 'like products' needs to be reconsidered. A mere reference to similarities in physical characteristics or even 'uses' is not enough. What is crucial is whether from a consumer's perspective, 'like products' are substitutable (or sufficiently competitive). Showing the products to be directly competitive/substitutable could be a starting point for the 'like product' determination in anti-dumping. In that regard, the use of economic analysis and concepts, including basic actors such as cross-price demand elasticities, could prove to be useful (see Hoekman and Mavroidis 1996).

The above suggestion is in compliance with Article 15.2(b) of Rules on Custom Valuation. It defines 'similar goods' as goods which although not alike in all respects, have like characteristics and like component materials which enable them to perform the same functions and to be commercially interchangeable. It should not, therefore, be difficult to amend the WTO ADA also along similar lines. Thus adding '*...substitutable (or directly competitive) product...*' (emphasis added) to the definition of 'like product' and highlighting this element would be a welcome addition.

2.2 Use of Constructed Normal Value

Article 2.2 of the ADA establishes the framework within which an investigating authority is to determine the normal value to be compared with the export price. It establishes a presumption that normal value will be the representative market price in the exporter's country. It may not, however, always be possible to use the actual information on normal price and the investigating authorities may have to *construct* normal price. Article 2.2 lists three situations in which the investigating authorities may reject the use of sales in the domestic market of the exporter in the calculation of normal value. Some major issues related to these situations are discussed below.

2.2.1 Five Per Cent Viability Test

One situation in which normal values are constructed is when there is a low volume of sales in the domestic markets of the exporting country. Home market sales will normally be considered a sufficient quantity for the determination of the normal value when the similar product destined for the home market of the exporting country constitutes 5 per cent or more of the sales of the product under consideration destined for sale in the importing country. The 5 per cent criterion is an arbitrary one without any economic rationale behind it. However, any proposal to drop this provision is likely to meet a stiff opposition within the framework of the Doha mandate. The provision may, therefore, be reviewed and modified to make it less restrictive. Within the existing legal framework this check may be performed at the following two different levels:

- i. total domestic sales of like product vs. total exports of like products;
- ii. domestic sales of each particular model/type/category vs. exports of that particular model/type.

The law does not specify which of the above two is preferable or is referred to. In the EC, the rule of 5 per cent is applied at both these levels. Didier (2001) observed that in most cases the requirement fails to meet at the model/type level and this provides the authorities an opportunity to use constructed value. It may, therefore, be suggested that the 5 per cent rule should not be applied at the model/type level. It requires a manufacturer to sell each model/type of the like product exported on the domestic markets also, irrespective of the local demand. Thus, viability of the domestic sales needs to be assessed at the like product level only. In this context, the Report of the Appellate Body in the Bed

¹ *Japanese Liquor Case II (1996) and Korean Liquor Taxes (1998).*

Linen case from India has important implications. The Appellate Body (AB) noted that

... from the wording of Article 2.1, it is clear to us that the Anti-Dumping Agreement concerns the dumping of a product ...

While commenting on the calculation of dumping margins by the European Commission, the Appellate Body (AB) argued:

The European Commission clearly identified cotton-type bed linen as the product under investigation in this case. Having defined the product as it did, the European Commission was bound to treat that product consistently thereafter in accordance with that definition. We see nothing in Article 2.4.2 or in any other provision of the Anti-Dumping Agreement that provides for the establishment of 'the existence of margins of dumping' for types or models of the product under investigation; to the contrary, all references to the establishment of 'the existence of margins of dumping' are references to the product that is subject of the investigation.

This judgement has important implications for other AD provisions, as well, including the 5 per cent viability test. For instance, footnote 2 under Article 2.2 of the ADA states

Sales of the like product destined for consumption... shall normally be considered a sufficient quantity... if such sales constitute 5 per cent or more of the sales of the product under consideration...

There is thus nothing in this provision to support the notion that, in an anti-dumping investigation, two different stages are envisaged or distinguished in any way by this provision of the Anti-Dumping Agreement, nor to justify the distinctions made among types or models of the same product on the basis of these 'two stages'. Clearly, viability of the domestic market ought to be assessed at the like product level only. In the light of the above Appellate Body (AB) judgement, it is important to review footnote 2 under Article 2.2 of the ADA and amend it to provide that the 5 per cent domestic sales shall be calculated against export sales of the like product (not model/type/category).

Moreover, a careful reading of footnote 2 under Article 2.2 suggests that it is not rigid about the 5 per cent viability test. It clearly states that

...lower ratio should be acceptable where the evidence demonstrates that domestic sales at such lower ratio are nonetheless of sufficient magnitude to provide for a proper comparison.

Nevertheless, in practice the 5 per cent viability rule is applied mechanically by the investigating authorities. This is because the provision is open ended. It leaves it entirely to the discretion of the authorities to decide on when and under what conditions a lower ratio could be used. This is a major loophole in the law from the developing countries' perspective. This is because domestic markets are very small for many export oriented products in these countries. In order to make this provision effective, the law needs to elaborate on the conditions under which lower ratio could be considered of sufficient magnitude to provide for proper comparison.

2.2.2 Sales in the Ordinary Course of Trade

Where there are no sales of the like product *in the ordinary course of trade* in the domestic market of the exporting country, the investigating authorities may choose to construct the normal value. Sales of the like products in the domestic markets of the exporting country at prices below per unit cost (plus administrative and selling costs) may be treated as not being in the ordinary course of trade and may be disregarded in determining normal value only if such sales are made within an extended period of normally one year (but not less than six months) in substantial quantities (i.e. they represent not less than 20 per cent of the total transaction volume) and are at prices which do not provide for the recovery of all costs within a reasonable period of time. According to the wordings of this provision (Article 2.2.1), *Sales of the like product ...may be treated as not being in the ordinary course of trade if ...such sales...are at prices which do not provide for recovery....*

In the context of Article 2.2.1, there is a peculiar practice adopted by the EC. In cases where per product type the volume of sales above unit cost represented 80 per cent or more of the total sale volume, the normal value was established on the basis of the weighted average price of *total domestic sales* transactions. In cases where per product type the volume of sales above unit cost represented less than 80 per cent but more than 10 per cent of the total sales volume, the normal value was established on the basis of the weighted average price of *profitable domestic sales* transactions only. Where per product type the volume of sales above unit cost represented less than 10 per cent of the total sales volume then all domestic sales are considered insufficient, price data on domestic sales are discarded, and the use of constructed normal value is made. This practice is contrary to the spirit of Article 2.2.1 which clearly

states that only those sales that are not in the ordinary course of trade should be disregarded provided they constitute more than 20 per cent of domestic sales. The wording of Article 2.2.1 needs to be tightened to restrain such practices that result into the use of constructed normal value. Footnote 5 to Article 2.2.1 may further be clarified by adding '...only sales not in ordinary course of trade are to be disregarded...'

2.2.3 Sales to Domestic Related Customers

The current AD agreement does not specifically address the issue of whether home market sales to affiliates may be included in or excluded from the calculation of normal value. While Article 2.2.1 sets forth a method determining whether sales between any two parties are within the ordinary course of trade, it does not, however, address the more specific issue of sales to related parties. Article 2.3 directs investigating authorities to construct export prices at ex-factory level when exports take place via related importers. However, the law has no provision for adjustments in normal value when sales are made through affiliates (as discussed above). As a result, export prices constructed at the ex-factory level are generally compared with domestic sales prices to the first unrelated buyer without effective adjustments. This creates asymmetry between the level of trade of the constructed export price and that of the normal value. Some illustrations may be given.

Under the European Commission interpretation, a product is sold in the ordinary course of trade on the domestic market only where sold to an unrelated domestic customer. Hence in many cases the reference price is the first resale price by a related distributor to unrelated customers. This gives an upward bias to the normal value as 'further downstream in the domestic distribution chain the reference price is taken the higher it is. Those who sell direct to the related consumers are better placed than those who sell via a captive network in domestic markets. Thus the structure of domestic sales affects the dumping margin calculations and in this process, the producers who sell through subsidiaries are penalised (see Didier 2001). The USDOC also ignores sales to affiliated parties in calculating normal value. Instead, it uses the first resale price by the distributor/dealer to unrelated consumers as the normal value. In the *Certain Hot Rolled Steel Products from Japan* case, however, Japan raised this issue at the WTO level. The Panel noted that downstream sales made by affiliates of exporters/producers though in the ordinary course of trade has no relevance because they are not sales of the exporters for whom normal value is calculated. The Panel found support for this view in Articles 2.2 and 2.3 of the Anti-Dumping Agreement, which provide alternative methods of calculating, respectively, normal value and export price. While Article 2.3 expressly allows the use of downstream sales where the 'export price is unreliable because of association', Article 2.2 is silent as to whether the use of downstream sales is a permitted alternative method of calculating 'normal value'. The Panel could 'see no basis' for concluding that, because Article 2.3 allows the use of downstream sales to construct export price, it must also be possible to use a similar method to 'construct' normal value. In other words, the Panel ruled to exclude sales to related parties as not being made in the ordinary course of trade. The Appellate Body, however, reversed the Panel judgement. In its view, the identity of the seller is no ground for precluding downstream transactions and the authorities may make allowances under Article 2.4 to arrive at a price that is comparable with the export price. The Appellate Body, therefore, ruled that in the case of sales to a related party, domestic prices may be adjusted at the same level of trade as export prices. Thus the unfairness described above could be corrected by a 'level of trade adjustments' guaranteeing that domestic and export prices are comparable.

It is, however, observed that investigating authorities are highly restrictive in granting level of trade allowances. Therefore, we suggest here that Article 2.2 should have a provision on the normal value of sales that are made through affiliated parties. This provision needs to be complemented by a sentence that makes it clear that prices to related parties may be held as not being made in the ordinary course of trade only where authorities demonstrate that they are *affected* by the relationship. In this context, it is important to note that prices charged to related parties are generally assumed to be lower than the prices to unaffiliated customers. This is because those who sell directly to unrelated customers may have to incur costs in marketing functions while those who sell domestically via a captive network do not perform such functions themselves. The USDOC carries out a test termed 'arm's length test or 99.5 per cent test' on the basis of this assumption, to determine whether home market sales to affiliates are made in the ordinary course of trade. If prices to the affiliated party are on average 99.5 per cent or more of the price to the unaffiliated parties, the USDOC determines that sales made to the affiliated party are at arms' length. This practice has been used by the USDOC in all AD cases. Indian exporters have also been subject to this practice (see, for instance, *Certain Hot Rolled Carbon Steel Plates from India* case). In the *Certain Hot Rolled Steel Products* case, however, Japan questioned this practice in the Dispute Settlement Body (DSB). Their argument was: this law treats low prices as abnormal but ignores that high prices can also be abnormal, skewing the normal value upwards. The Appellate Body agreed with this argument

and found the application of the 99.5 per cent test inconsistent with the term 'ordinary course of trade' due to the distortion that it is likely to introduce in the calculation of the normal value. It argued that Article 2.1 applies to any sales not in the ordinary course of trade and not just sales that lower normal value.

Thus, a provision may be appended stating that 'when domestic sales are not in ordinary course of trade because of association or a compensatory arrangement between the manufacturer and the domestic distributor or a third party, and the domestic price is *demonstrated* (emphasis added) to be affected by the relationship (resulting in high/low prices), the normal value shall be constructed on the basis of the price at which the products are first resold to an independent buyer by adjusting that for costs (including taxes and duties) incurred between manufacturer's sales to distributors and resale and distributor's profits accrued'.

The above suggestion is in agreement with Article 1(2) of Rules on Custom Valuation, which states:

In determining whether the transaction value is acceptable for the purpose of paragraph 1, the fact that the buyer and seller are related ...shall not be the ground for regarding the transaction value as unacceptable. ...provided that the relationship did not influence the price.

Furthermore, there is no clear definition of 'affiliation' in the ADA. Footnote 11 provides the definition of affiliation in the context of determining the domestic industry. The concept of related producers in the agreement depends on control. While defining 'control' the law stipulates that 'one shall be deemed to control another when the former is *legally or operationally* in a position to exercise restraint or direction over the latter'. Legally, this means that one of them holds 50 per cent or more (majority share) of the outstanding voting stock of the other. In practice, however, investigating authorities interpret this concept using their discretion. For instance, the EC continues to deem the existence of control even in the case of minimal shareholding of 1–5 per cent. It is, therefore, important to provide a clear definition of affiliation for all practical purposes. Here again Article 15.4 of the 'Rules on Custom Valuation' provides a comparatively more elaborate definition of affiliation for the purpose of these Rules. It states that persons shall be deemed to be related only if

- (a) they are officers of one another's business;
- (b) they are legally recognised partners in their business;
- (c) they are employer and employee;
- (d) any person directly/indirectly owns, controls, or holds 5 per cent or more of the outstanding voting stock or shares of both of them;
- (e) one of them directly/indirectly controls the other;
- (f) both of them are directly controlled by a third person;
- (g) together they directly or indirectly control a third person;
- (h) they are members of the same family.

These criteria could be adopted in the ADA.

2.3 Construction of the Normal Value

Alternative methods for constructing normal value have been provided in the ADA. One, the authorities may use the cost of production in the country of origin plus a reasonable amount for administrative, selling, and general costs and for profits. Two, the authorities may use the price of goods exported to third countries adjusted for the differences in terms and conditions of sale, in taxation, and other differences relating to price comparability between the goods sold to the importing countries and the like goods sold by the exporter to importers in the third country, in a prescribed manner. Three, in the absence of information on actual price and costs, the investigating authority, for constructing normal values, can rely on the best available information. All these methods are fraught with ambiguities and need reconsideration.

2.3.1 Use of Cost of Production Methodology

2.3.1.1 Start-up operation and non-recurring items of costs

The ADA generally provides for costs adjustment for those non-recurring items of cost which benefit future and/or current production, or for circumstances in which costs during the period of investigation are affected by 'start-up operations'. The provision is subject to different interpretations with regard to the treatment of the non-recurring costs,

treatment in case of start-up operations, and the length of a start-up operation. The law directs authorities to ignore, when computing normal values, abnormally high costs and/or losses in domestic prices where production is in a start-up phase. The ADA provides that in case of start-up operations, the cost at the end of the start-up period will be taken into account, which generally would be the time when the cost of production in the new line would have stabilised. However, if the start-up period extends beyond the investigation period, the most recent cost will be taken into account.

No limit is made in the text with respect to the types of costs or the types of operations or the types of adjustments. It is thus not clear whether this applies to start-up losses due only to the new production facilities or whether the launching of new products within old facilities is also to be taken into account. It is also not clear what costs are included in this special regime? Does it include start-up overheads or R&D expenditure? The European Commission allows respondents to claim for adjustments for new production facilities only. Furthermore, it does not allow for R&D expenditures or start-up sales expenses. The US legislation, however, allows adjustments for start-up operations where a producer is using new production facilities or producing a new product for which substantial investments are required and where production levels are limited by technical factors associated with the initial phase of production. These conditions are somewhat generalised and may allow for any number of start-up scenarios. In several instances (such as Stainless Steel Wires case investigated by the European Commission, Preserved Mushroom case, Administrative Review by the USDOC) Indian exporters who sustained losses throughout the investigation period claimed that these losses had occurred during the start-up phase and that this should be taken into account. However, the investigating authorities rejected their claim. It is therefore important to clarify Article 2.2.1.1 in the light of the experience of different countries by examining ambiguities and their effects on the computation of dumping margins.

The USDOC has recently incorporated into the US Anti-dumping law concepts from the 'Statement of Administrative Actions' (SAA) at 836–838 that help to define start-up operations and explain start-up adjustments. These include definition of new products, new production facilities, as well as guidance on whether improvement to products or expansion to facilities qualify for start-up operations. The SAA also provides guidelines on the determination of the duration of the start-up period, adjustments for start-up operations, and amortisation of start-up operations. These provisions may be examined to clarify Article 2.2.1.1.

2.3.1.2 Computation of sales and general administration expenses and reasonable profits

For constructing the normal value, the investigating authorities adjust the cost data by a reasonable amount for administrative, selling, and general costs and for profits. When the amounts for administrative, selling, and general costs (SGA) and for profits cannot be determined on the basis of actual information, the investigating authorities have full discretion to choose (i) profits and SGA either of the exporter in question in respect of production and sales in the same general category of product or (ii) of any other exporter/producer subject to investigation in respect of production and sales of the like product in the domestic market of the country of origin or (iii) any other reasonable method.

Clearly, the current law under which the authorities have complete discretion may lead to substantial bias in the calculation of normal values. Moreover, this approach is often unfair as different producers of a like product often incur significantly different SGA/profits from each other either because they are selling different types of like products or because they have different cost efficiency. Lindsey (2000) has observed that the profit rates used by the USDOC in constructed value are frequently much higher than any conceivable norm. Comparing the profit rates actually used by the USDOC for some products to the average profit rates of the equivalent US

Table 1: Comparison of USDOC Profit Rates and US Industry Profit Rates: Some Illustrations

(in per cent)

Investigation	USDOC rate	US industry rate
Dinnerware from Taiwan	25.77	5.23
Brake drums and rotors from China	12.50	5.93
Cut-to-length steel plate from China	10.14	3.43
Dinnerware from Indonesia	22.61	5.23
Collated roofing nails from China	20.50	7.20

Source: Lindsey (2000).

industries during the year the respective initiations were made, he found that the difference between them ranged between 6.57 per cent to as large as 20.7 per cent. Thus, unrealistic normal profits and/or SGA costs may introduce

serious ambiguities in the calculation of constructed normal value. Another illustration is provided by the cotton bed linen case investigated by the EC. In this case, the European Commission had constructed normal value for most exporters, using for all of them a profit margin of 18.65 per cent found to have been obtained by an Indian producer on his domestic sales for a limited volume of the product concerned. It is, therefore, important to impose an obligation to apply a separate reasonability test to the methodologies set forth in Article 2.2.2 (i) to (iii). Our suggestion is that Article 2(6) as a whole would need to be safeguarded by a general reasonability test such as has been foreseen only for Article 2(6)(iii) now. The definition of reasonable could be the same as that which has been implied in Article 2(6)(iii) itself, i.e. profits should not exceed profits *normally* realised by sales of other producers in the same general category of products on the domestic markets. If the methodologies set forth in Article 2.2.2 (i) to (iii) are by definition reasonable, at most there is a rebuttable presumption that the results generated by these methodologies are reasonable.

One may note that leaving in 'any other reasonable method' in Article 2.2.2 (iii), even with the status of last priority, will continue to cause problems. However, we do not propose to drop this provision altogether. In our view it is a residual method that may be used by the authorities when other methods fail.

Another gap in Article 2.2.2 that needs to be addressed is that the options provided in the Article have no preferential significance. In the Cotton Linen dispute case, India argued that rather than using profits and SGA of any other exporter/producer subject to investigation in respect of production and sales of the like product in the domestic market of the country of origin [Article 2.2.2 (ii)] the European Commission should have used profits and SGA of the exporter in question in respect of production and sales in the same general category of product [Article 2.2.2 (i)]. The Panel, however, asserted that the provision does not entail any preference of one option over others, and the order in which the options appear in this Article has no preferential significance. The Panel further noted that 'Certainly we would have expected something more than simply a numbered list' but concluded that under the present law, Members have complete discretion as to which of the three methodologies they use in their investigations. Against this background, it is suggested that Article 2.2.2 of the ADA should be amended to set out an order of preference among different methodologies of approximating profits. The use of Article 2.2.2 (iii) which provides for 'any other reasonable method' without specifying such method needs to be given the last priority.

2.3.2 Constructed Normal Value—Use of Appropriate Third Country Method

The law stipulates that the authorities may also use the price of goods exported to third countries to construct normal values by adjusting it for the differences in terms and conditions of sale, in taxation, and other differences relating to price comparability between the goods sold to the importing countries and the like goods sold by the exporter to importers in the third country, in a prescribed manner. Where the 'third country approach' is used it is usually the 'third country' suggested by the complainants that is retained by the investigating authorities for the calculations. In many cases, therefore, that dumping is to be found is a foregone conclusion. Moreover, price to any third country may not be a comparable representative price due to different market conditions and different demand elasticities. One may, therefore, like to suggest that this provision should be dropped in the next round of negotiations. The Agreement on Implementation of Article VII of the GATT 1994 does not allow the use of the third country price in custom valuation. Article 17(2) of Rules on Custom Valuation states:

No customs value shall be determined under the provisions of this Article on the basis of... the price of the goods for exports to a country other than the country of importation.

It should not, therefore, be difficult to negotiate modifications in the ADA that are in agreement with WTO spirit. However, it is likely to meet stiff opposition from most countries. The second best suggestion in this regard therefore is to have a well-defined criteria for choosing 'appropriate third country'. Specific criteria in terms of economic parameters may be a welcome precision. The level of income, export shares, presence of viable domestic industry, and competition conditions are among the factors to be considered in choosing appropriate third country.

2.3.3 Constructed Normal Value - Best Available Information

Article 6.8 states:

In the cases in which any interested party refuses access to or otherwise does not provide necessary information within a reasonable period or significantly impedes the investigation, preliminary and final determinations, affirmative or negative may be made on the basis of the facts available.

Investigating authorities frequently rely on the ‘facts available’ method for calculating dumping margins. This method increases the probability of finding dumping. Blonigen (2003) analysed all AD cases investigated between 1980 and 1995 to examine the methodology adopted by the USDOC in determining normal value. He found that affirmative findings were made for 631 companies in all over this period. Of these, 201 were based on ‘the best available information’. Aside from this, 15 Indian exporters faced dumping charges. Affirmative findings for 11 of them were made on the basis of the ‘best available information’.

Table 2: Summary of Methodologies Adopted for Constructing Normal Value by USDOC, 1980–95

	Best information		CP	Export	NME	Total
	Complete	Partial				
Cases (company-wise) with affirmative findings	195	6	33	19	84	631
Cases against India	11	-	1	1	-	15 (6 cases)

Note: CP: cost of production method; Export: third country export data; NME: Non-market economy.

Source: Blonigen (2003).

In another exercise, Lindsey (2000) examined all USDOC AD investigations from 1995 through 1998 (see Table 3). He found that the USDOC made affirmative findings for 107 of the 141 companies investigated over this period. Of the 141 total determinations, 36 were based on facts available. What is more interesting to note is that in all the cases based on facts available, the USDOC made affirmative dumping findings. The success rate was 50 per cent for those companies for which the USDOC used actual home market price.

Table 3: Summary of Dumping Margin Calculation Methodologies Used in AD Investigations, 1995–8

Calculation methodology	Determination (affirmative only)	Average dumping margin for affirmative findings (%)
Best information	36 (36)	95.58
Constructed value	20 (14)	35.70
Third country price	1 (0)	0
Non-market economy	47 (28)	67.05
Home market price	4 (2)	7.36
Mixed	33 (27)	17.20
Total	141 (107)	58.79

Source: Lindsey (2000).

Thus there has been an overwhelming use of ‘facts available’ and this apparently introduces bias in favour of affirmative dumping findings.

The use of ‘facts available’ not only increases the probability of affirmative finding but also results in higher dumping margins. Baldwin and Moore (1991) find that the use of ‘facts available’ nearly doubles the average US dumping margin from around 35 per cent to over 65 per cent. Lindsey (2000) has shown that the average dumping margin in the cases based on facts available had been as high as 95.58 per cent against an average of 58.79 per cent in all the affirmative findings. In contrast, in the four cases that were based on the actual price data, the average margin was just 7.36 per cent!

A review of the anti-dumping cases suggests that any failure by the foreign firms to respond to the authorities’ onerous reporting requirements allows the authority to disregard all its data and instead use the best information available, which typically means data reported in the domestic firm’s petition. This may very well be illustrated by the Steel Plate case against India investigated by the USDOC. Initially, the USDOC had problems with the originally submitted

electronic databases that were formatted incorrectly and were incomplete. The USDOC issued several supplemental questionnaires. The subject firm (SAIL) responded to all of them. On product specific costs, it admitted that the company did not maintain costs on the product specific basis as required by the questionnaire but it did report different costs for different products using certain cost allocation. The USDOC, however, expressed its doubts over the reliability of these figures and finally, discarded all information provided by the exporter and used instead the information provided by the petitioners. The case was referred to the Dispute Settlement Body. India argued that the US should have resorted to facts available only with respect to particular categories of information that were either flawed or not available. The US argued that the Anti-Dumping Agreement permits an investigating authority to resort to facts available for all aspects of its determination if some necessary information is not provided without considering the information actually submitted. The Panel did not accept the US position and concluded that the authority must use every element of information submitted which satisfies the provision of Annex II and that Members do not have unlimited right to reject all information submitted in a case where necessary information is not provided. In the Argentina–AD Measures on Carton-Board Imports from Germany and Ceramic Floor Tiles from Italy case, the Panel concluded that the investigating authority may not disregard information and resort to facts available under Article 6.8 on the ground that a party has failed to provide sufficient supporting documentation in respect of information provided unless the investigating authority has clearly requested that party to provide such supporting documents. In the US–AD Measures on Certain Hot Rolled Steel Products from Japan, the Appellate Body clarified that the application of Article 6.8 is not confined to cases where there is no information available whatsoever and where the entire margin is established using only facts available. Authorities can have recourse to this Article for remedying the lack of any necessary information. The Panel also defined the factors that may be taken care of while deciding on whether information has been submitted within a reasonable period of time or not. In this case, the Panel and the Appellate Body also rejected the automatic recourse to ‘facts available’ where deadlines are missed. It stated

... a rigid adherence to such deadlines does not in all cases suffice as the basis for the conclusion that the information was not submitted within a reasonable period and consequently that facts available may be applied... particularly where information is submitted in time to be verified or actually could be verified... it should generally be accepted....

In view of the fact that Article 6.8 has been referred repeatedly at the WTO level, clarifications in this Article could be brought to the effect that the authorities would use facts available with respect to that element of information that has not been provided. It may also be appropriate to append a footnote clarifying the term ‘reasonable period of time’.

2.4 Estimation of Export Prices

Ex-factory export prices are arrived at after making numerous adjustments. These include adjustments for taxes, discounts and rebates actually granted and directly related to the sales concerned, packaging costs, costs relating to the export and transportation of the product, costs charged for the product’s entry into the country, including transport, maintenance, insurance, loading and unloading and handling costs, and other unforeseen costs incurred from the commencement of transportation at the point of export until delivery to the buyer. Adjustments that are claimed by the exporters are examined by the designated authority. It is at the discretion of the authority whether to accept or reject them. Some of the specific problems indicated in the calculation of the export price are as follows.

2.4.1 Constructed Export Price

In cases where there is no export price or where it appears to the authorities concerned that the export price is unreliable because of association or a compensatory arrangement between the exporter and the importer or a third party, the export price has to be constructed on the basis of the price at which the imported products are first resold to an independent buyer, or if the products are not resold to an independent buyer, or not resold in the condition as imported, on such reasonable basis as the authorities may determine (Anti-dumping Agreement, Article 2.3). The law stipulates that in such cases allowances for costs (including duties and taxes) incurred between importation and resale and for profits accruing should be made. When a manufacturer performs all export functions (for instance, administration of exports and networking, etc.) in-house, his export price reflects these costs and is comparatively high. On the contrary, when he sells to a related importer who performs all these functions on his behalf then the price does not reflect this cost and is comparatively low. Adjustments made in the price in these cases therefore result in anomaly, penalising exports via related importers.

This issue needs to be addressed, as with increasing globalisation more and more exports are being undertaken via

trading houses. Article 2.3 could thus be suitably amended, as suggested in the case of the normal value, to accommodate the possibility that the association between the exporter and the importer does not affect the export price.

2.5 Fair Comparison

Article 2.4 stipulates that 'a fair comparison shall be made between the export price and the normal value'. This comparison shall be made at the same level of trade, normally at the ex-factory level, and in respect of sales made at as nearly as possible the same time. Due allowance shall be made in each case, on its merits, for differences which affect price comparability, including differences in conditions and terms of sale, taxation, level of trade, quantities, quality, physical characteristics, currency conversion and any other differences which are also demonstrated to affect price comparability. There are however many instances where authorities apply unreasonable rules at the expense of fairness. The issues that have been repeatedly raised by Indian exporters in anti-dumping investigations against them relate to the *treatment of duty drawback, other indirect taxes, and credit costs*.

2.5.1 Duty Drawback

If any interested party demands price adjustments because of a difference in physical characteristics or quantity and condition of sales, he/she shall establish the fact that the difference directly affected the market price or the manufacturing costs and that the difference is quantifiable. However the investigating authorities at times do not permit the required allowances on unreasonable grounds. One such allowance is duty drawback claims. This problem is particularly serious for developing countries where import duties are higher than in developed countries. In the Synthetic Fibres Polyester (from India) Case (1992) where the provisional dumping margins exceeded 100 per cent as a result of the European Commission not taking into account duty drawback, the final margins were reduced significantly when such allowances were made. However, in most cases the authorities reject the claims for duty drawback adjustments.

Detailed guidelines for the duty drawback scheme, including effective monitoring systems and procedures, are laid down in Annexes II and III of the ASCM. But the problem is that such monitoring systems and procedures are not considered adequate by investigating authorities in developed countries. They insist upon the producers positively establishing that domestically purchased raw materials have at no times been used in exported finished goods. The European Commission, for instance, insists that a duty adjustment is only granted provided two conditions are satisfied: first, it must be shown that import charges are borne by the like product and by materials physically incorporated therein, and second, these import charges are refunded/not collected when the product is exported to the community. Exporters find it extremely difficult to conclusively provide evidence with regard to the first requirement. This has become one of the most contentious issues from India's perspective. There are several instances where duty drawback claims made by Indian exporters had been rejected by the European Commission. In fact, in 7 of the 13 cases currently in force, claims for duty drawback adjustment were rejected by the Commission. In the case of Certain Flat Rolled Products of Iron or Non-alloy Steel two Indian companies claimed an allowance for such charges. These requests were partially granted to the extent that the above two requirements were satisfied. In the Polyester Staple Fibre case against India, the European Commission rejected the claim at the provisional stage due to lack of evidence. One exporter before the final determination submitted new information to support the duty drawback claim but the EC did not consider this claim on the ground that it was not submitted in time. In the Certain Polyethylene Terephthalate case, the European Commission rejected the claim made by Indian companies on the import duties refund. The companies argued that the findings of the AD investigations were in contradiction with the findings in the parallel anti-subsidy proceedings in which the Duty Entitlement Passbook Scheme (DEPB) scheme was considered as an export subsidy that benefited the companies. The Commission, however, changed its stance and argued that since countervailing duty will be deducted from AD duties, any adjustment made in the normal value would amount to double adjustment. There are several other cases in which importers claims on duty drawback were rejected. These are, for instance, Steel Fasteners, Polyethylene Terephthalate Film, and Sulphanic Acid cases also. In a recently concluded Polyester textured filament yarn (PTY) case against India, all the three investigated companies claimed a duty drawback adjustment. However, the Commission rejected the duty drawback adjustment claim made by all Indian exporters on the ground that there was no evidence that any import charge was borne by the like product when destined for domestic consumption. The exporters claimed the same adjustment under the DEPB Scheme on post-export basis. The Commission rejected this claim as well on the basis that companies failed to demonstrate that DEPB/Advanced License Schemes affect price comparability and that customers consistently pay different prices on the domestic market because of the benefits of the above mentioned schemes. The Commission also rejected the exporting producers argument that the requirement to demonstrate that the input raw materials for production in the exporting

country contains a duty component imposed an undue burden of proof. Two Indian exporters argued that in the context of the parallel anti-subsidy investigation the Commission had accepted the scheme as non-countervailable. Therefore, in order to remedy this contradiction between the two proceedings the said allowance should have been granted. However, the Commission argued that each AD case is examined on the basis of its own factual circumstances, which may differ from all other proceedings.

The USDOC's practice is to evaluate duty drawback adjustment claims with a 'two-part test' to determine (i) whether the import duty and rebate are directly linked to, and dependent upon, one another, and (ii) whether the company claiming the adjustment can show that there are sufficient imports of raw materials to account for the duty drawback received on exports of the manufactured product. Often exporters find it difficult to provide sufficient proof to satisfy these requirements. In the Stainless Steel Wire Rod from India case, the Indian exporter Viraj could not submit adequate evidence to meet these conditions in repeated administrative reviews. It was only when the company submitted all the documents which the USDOC requested to show a link between its claims for duty adjustments, its purchases of imported raw materials, its reported sales, and its financial statements that it was granted duty drawback claim. The USDOC stated categorically that relying on the Indian government's predetermined import content for exported merchandise is an inadequate means of calculating and reporting duty drawbacks. The above discussion indicates the importance of addressing this issue. It is important to have case-based information on the experience of exporters regarding certain allowances and to examine how the law can be modified in the light of such experiences.

One suggestion² is that the requirement of establishing that import charges are borne by the like product and by materials physically incorporated therein (or import duty and rebates are linked) must go on the presumption that if an exporter is importing raw materials, the domestic prices that he is faced with are either equal to the landed value (export price plus custom duty) or are higher. Since domestic prices in such cases are inclusive of the custom element, it is immaterial whether the imported material is physically incorporated in the exported product. So long as the exporter avails of duty drawback, he should be granted this adjustment. This adjustment may be calculated by discounting the domestic price by custom duty. In no case will this result in excess revision.

2.6 Dumping Margin

The WTO Agreement stipulates that 'the dumping margin shall be the amount by which the normal value exceeds the export price'. The existence of margins of dumping during the investigation phase shall normally be established on the basis of a comparison of a weighted average normal value with a weighted average of prices of all comparable export transactions or by a comparison of normal value and export prices on a transaction-to-transaction basis. A normal value established on a weighted average basis might be compared to prices of individual export transactions if the authorities find a pattern of export prices, which differ significantly among different purchasers, regions or time periods. Major problems noted in this stage of the calculation of dumping margin relate to zeroing of dumping margins and comparison of weighted normal value with individual export prices

2.6.1 Zeroing of Dumping Margins

In those cases in which margins of dumping during the investigation phase are established on the basis of a comparison of a weighted average normal value with export prices on a transaction-to-transaction basis or by a comparison of normal value and export prices on a transaction-to-transaction basis, average dumping margins are based on the average of all comparisons. However, in this process when the export price is substantially higher than the normal value, i.e. dumping margin is negative, the authorities treat such sales as having zero dumping margin. By doing so, the authorities skew their calculations in favour of higher dumping margins. Prior to the conclusion of the Uruguay Round, it was standard practice of some WTO Members to apply this method. Because of pressure exerted by other WTO Members, Article 2.4.2 was adopted and WTO Members generally resorted to the use of the weighted average method (comparing a weighted average normal value with a weighted average export price). However, within the weighted average method, some WTO Members applied a new type of zeroing: *inter-model* zeroing. If, for example, model A was dumped while model B was not dumped, the Members would not allow the negative dumping of model B to offset the positive dumping of model A, inflating the weighted dumping margin ascertained for the like product as a whole. In the Bed Linen case against India, the Panel stated

We recognise that Article 2.4.2 does not in many words prohibit zeroing. However this does not mean that the practice is permitted, if it produces results inconsistent with the obligations set forth in that Article as we believe it

² My thanks to Mr Parthasarthy (Lakshmi, Kumaran and Shridharan firm) for making this useful point.

does. This is equivalent of manipulating the individual export prices counted in calculating the weighted average, in order to arrive at a weighted export price.

The Appellate Body supported this ruling. Dumping margins reduced significantly once the practice of zeroing was dropped and the EC had to withdraw AD duty on cotton bed linen originated in India.

In the US–Stainless Steel from Korea Case, the Panel ruled that the United States’ use of multiple averaging periods in the Plate and Sheet investigations was inconsistent with the requirement of Article 2.4.2 to compare a weighted average normal value with a weighted average of all comparable export transactions. The United States had divided the investigation period for the purpose of calculating the overall margin of dumping into two averaging periods to take into account the devaluation of the Republic of Korea’s won in November–December 1997, corresponding to the pre- and post-devaluation periods. The USDOC had calculated a margin of dumping for each sub-period. When combining the margins of dumping calculated for the sub-periods to determine an overall margin of dumping for the entire investigation period, the USDOC had treated the period November–December, where the average export price was higher than the average normal value, as a sub-period of zero dumping—where in fact there was *negative dumping* in that sub-period. The Panel concluded that this was not allowed under Article 2.4.2.

In view of the rulings given by various Panels, zeroing needs to be prohibited at all levels. Article 2.4.2 needs to be redrafted so as to provide that dumping margins should be based on comparisons that fully reflect all comparable export prices.

2.6.2 Comparison of Weighted Normal Value with Individual Export Prices

A normal value established on a weighted average basis may be compared to prices of individual export transactions if the authorities find a pattern of export prices, which differ significantly among different purchasers, regions, or time periods. A review of the anti-dumping proceedings indicates that in many cases export prices on transaction-to-transaction basis are compared with one estimate of normal value. In this process the exporter may suffer yet another disadvantage from the method of comparison. In the following example, the weighted average normal value is \$10 $(15+10+5/3)$.

Table 4: Comparison of Weighted Normal Value with Individual Export Prices: An Illustration

Date of sale	Domestic price	Normal value	Export price	Dumping margin
1 August	15	10	16	0
10 September	10	10	12	0
22 December	5	10	8	2

Thus, 22 December exports though above the domestic price are nevertheless dumped because the export price happens to be less than the weighted average normal value. The use of this practice for fair comparison, therefore, needs to be restricted by law. There is need to amend the law to prevent its extensive misuse.

A broad overview of the issues related to the calculation of dumping margins has been attempted above. The analysis is primarily based on the problems faced by Indian exporters in anti-dumping proceedings carried out against them in the US and EC. It shows that the use of constructed normal values and export prices, imposition of unrealistic conditions for granting relevant allowances that need be made to ensure comparability between export price and normal values, and unfair comparisons between export and normal values create a high degree of risk of artificial dumping.

3 Injury

3.1 Domestic Industry

3.1.1 Support Criterion

The AD authorities must identify the domestic industry before addressing the injury issues. Domestic industry is defined by Article 4.

It means ‘the domestic producers as a whole of the like products or those of them whose collective output of the products constitutes a major proportion of the total domestic production of those products’. (Article 4)

Legally, it implies that the domestic producers must account for 50 per cent or more of the total domestic production of those products. However, an analysis of the injury determinations made by the EC and the United States International Trade Commission (USITC) shows that non-complainant firms are generally reluctant to co-operate. In practice, therefore, injury determinations are normally based on the data submitted by the complainants and the best available

information. Since investigations may be initiated when domestic producers expressly supporting the application account for 25 per cent or more of total production of the like product, injury analysis may also be carried out for producers who account for as low as 25 per cent of the domestic production.

A footnote clarifying the term 'domestic industry' may be appended. For the purpose of injury analysis, domestic industry should be defined to include more than 75 per cent of domestic production. The 25 per cent condition that is necessary for the initiation of AD investigations is not sufficient for the analysis.

3.1.2 Related Parties

Some experts (see, for instance, Didier 2001) argue that the practice of excluding related party is less tenable where these affiliates no longer import the like product from a dumping country but produce it in the importing country only. In Korea, producers who imported six months prior to the date of receipt of the application and those whose import quantity is insignificant are included in the definition of domestic producers. In countries with substantial presence of foreign direct investment (FDI), a number of producers are likely to be excluded from the definition of domestic producers.

3.1.3 Captive Production

The law does not have any provision regarding the treatment of captive production, in which, therefore, the authorities can exercise their discretion. The US statute has 'captive production' provision. Under this provision the USITC *must* focus its injury analysis on the free (merchant) market and potentially may find injury in the merchant market even if the industry as a whole is not experiencing injury. The EC law has no captive production provision but in practice the EC normally excludes captive production from injury assessment. In the Hot Rolled Steel Product Originating in India case, around 70 per cent of the hot-rolled coils manufactured by EC producers was used in a captive market, i.e. they were further transformed by the producers in an integrated process. The complainant claimed that two separate markets should be distinguished and that only the hot-rolled coils sold on the free market should be subject to the complaint. Exporting producers, however, suggested that the assessment of the market should include the captive market and the free market taken together. In support of this claim, reference was made to the GIMELEC judgement of the European Court of Justice (case no. C-315-90 of 27 November 1991). In this ruling the Court referred to the following factors to rule out the existence of two separate markets: (i) the product concerned was sold on the same market and used for the same purpose; (ii) the EC producers sold the product concerned both to related and unrelated customers and charged more or less the same price; companies on the downstream market used to buy the product concerned not only from related EC suppliers but also from importers/unrelated producers. However, the Commission considered that the separation between the free and the captive market is in line with the requirement of the past practice. *Consequently, the situation of the community industry in terms of the development of various economic indicators such as production, sales, market share, and profitability was examined with respect to the free market.*

Japan, however, challenged the practice of ignoring captive production in injury analysis. In the US-AD Measures on Hot Rolled Steel Plates from Japan dispute case, Japan argued that the captive production provision of US law violates Article 3 and 4 of the ADA. The EC supported the US practice as a third party and argued that where a significant proportion of domestic production is for captive consumption, it is not inconsistent with the ADA to focus the analysis on the merchant market since it is there that the immediate injurious effect of the dumped imports takes place. Developing countries like Chile, Brazil, and Korea, however, supported the argument given by Japan. The Appellate Body in this case ruled that Article 3.1 *does not entitle investigating authorities to conduct a selective examination of a domestic industry*. Rather, where one part of an industry is the subject of separate examination, other parts of the industry should also be examined in like manner. It thus ruled that the authorities need to examine both the captive and the free market and argued that the US acted inconsistently with the ADA by not analysing the data for the captive market. It is, therefore, important to amend the Agreement to categorically mention the treatment of captive production so that in future cases this loophole is not exploited in the injury analysis.

3.1.4 Exports vs. Domestic Sales

Should exports be taken into account in the injury analysis? The European Commission does not think so. In one of the cases investigated by the Commission, Indian exporters argued that limiting the analysis of the Commission's sales to the domestic sales in terms of volumes and prices does not comply with the provision of Article 3(4) of the ADA on the ground that the Agreement refers to total sales, thus including exports. The Commission, however, argued that Article 3(4) in conjunction with Articles 3(1) and (2) of the ADA clearly refers to the evaluation of the impact of

dumped imports on prices in the domestic market and on the situation of the domestic industry. Injury of the EC industry must be found to exist on the domestic market only and the situation with respect to exports is therefore irrelevant. The Appellate Body judgement on the captive production provision in the US–AD measures on Hot Rolled Steel Plates for Japan dispute case has important implications for the treatment of export sales and needs to be taken into account while negotiating on this issue. It is suggested here that Article 4 may be extended to include special provisions regarding treatment for the exports.

3.2 Injury Indicators

The methods used for injury determination may be a matter of grave concern. There is no mathematical formula for determining the existence of injury. The decision about whether the standard of material injury has been satisfied is essentially a matter of judgement about which few general principles can be stated. In a pioneer study Finger et al. (1982) observed that the injury decisions are primarily motivated by political factors. Their findings were supported by a number of studies (see among others Anderson 1993; Moore 1992; Tharakan and Waelbroeck 1994; Hansen and Prusa 1996, 1997). These studies suggest that political pressures matter a lot. Evidence suggests that industries with production facilities in the districts of the oversight members of two key House and Senate Subcommittees that control the USITC's budget fare better at the Commission. Political pressures can also take the form of bias against certain trading partners. For instance, these empirical studies suggest that cases against Japan and non-market economies are far more likely to result in duties. Strong lobbies also affect the decisions. For instance, the steel industry in the US fares remarkably well in the AD investigations due to strong producers' lobby. Among economic factors, the larger is the volume of imports and the larger the profit loss the greater is the chance of an affirmative decision. Thus, much depends on how the authorities argue. There is no scientific method of determining injury.

We analysed the movement of 11 economic indicators as examined by the European Commission in 12 AD investigations against India. These are tabulated in Table 5. In almost all the cases, production, productivity, investment, and capacity have gone up. Profits and employment are the two indicators that have shown downward trends in most cases. Apparently, injury assessment means confirming employment and profits are down. There is no formal economic analysis. In the PET film case, Indian exporters pointed out that the EC industry's situation improved dramatically since the investigation period and that the EC was no longer suffering material injury. The European Commission argued that Article 6(1) of the basic rule provides that information relating to a period after the investigation period should not normally be taken into account. On the basis of the jurisprudence of the Court, the Commission examined developments in the PET markets during the nine months period following the investigation period. It was found that prices increased continuously. Market share and sales also increased. However, it was concluded that if the ongoing proceeding was terminated, it was likely that dumped imports would rapidly regain market share and thus the case was made for the injury. No evidence was given to support the argument. Apparently, the authorities enjoy a wide discretion in deciding on whether injury has occurred. Making an analysis of the USITC decision making process, Kaplan (1991) reaches the same conclusion.

Table 5: Case-wise Summary of Injury-Assessment: EC Investigations against Indian Exporters

Case	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
Synthetic fibre ropes	Up	N.C.	down		up	up	up	down	down	up	up
Steel fasteners	Up	up	down	up			down	down	up	up	up
Potassium Permanganate	Down		up		up	up	up	down	down		up
Stainless steel wires					up	up		down			up
Steel ropes	up	up	down	up	down	N.C.		down	down	up	up
Flat rolled steel products	up		down	up	down	down	up	up	down		up
Certain PET			N.C.		up			down		up	
Cathode ray colour TV	down		N.C.		down	up			down		
PSF			down						down		
PET Film	down	up	down	up	up	up		down		up	N.C.
Sulphanic Acid	up	up	up	N.C.		Up	up	down	N.C.	up	N.C.
PTY	up	up	N.C.	up	down	down	down	down	down	N.C.	down

Note: I=Prices; II=Stocks; III=Market Share; IV=Capacity; V=Sale; VI=Production; VII=Capacity utilisation; VIII=Profit; IX=Employment; X=Productivity; XI=Investment; N.C.: No Change.

Source: Official Journal of the European Communities, various issues.)

Furthermore, Article 3.4 requires that the examination of the impact of the dumped imports on the domestic industry shall include an evaluation of all relevant economic factors and indices having a bearing on the state of the industry producing the like product in the importing country. It mentions 15 specific factors in this context. The scope of this obligation has been examined in four Panel proceedings thus far. These are: Panel Report, Mexico–Anti-Dumping Investigation of High Fructose Corn Syrup (HFCS) from the United States (Mexico–Corn Syrup) WT/DS132/R; Panel Report, Thailand–H-Beams; Panel Report, EC–Bed Linen; Panel Report, Guatemala–Cement II. All four Panels, strongly supported by the Appellate Body in Thailand–H-beams, held that the evaluation of the 15 factors is mandatory in each case and must be clear from the published documents. Every Panel in the Agreement on Safeguards also has reached the same conclusion. It has thus been consistently held that the investigating authorities are required to evaluate all the 15 factors described in Article 3.4.

Notwithstanding the importance attached to these factors, the wordings of the provision suggest that these are merely illustrative factors. The law states:

The examination of the impact of dumped products...shall include an evaluation of all economic factors including....The list is not exhaustive...

In the light of the Panel rulings, it is important to review these factors carefully. Only those factors that can be meaningfully evaluated for the subject product need to be included. For this it is important that a framework is developed for injury analysis. In the US–AD Measures on Certain Hot Rolled Steel Products from Japan Dispute case, the Panel ruled that

... it would not be sufficient if the investigating authorities merely mentioned data for Article 3.4 factors without undertaking an evaluation of that factor....

But an evaluation requires context and a well-defined framework. The law, however, describes a wide array of economic factors without giving a proper framework as to how the authorities need to evaluate them. Many factors are systematically related. For instance, productivity may have a negative relationship with employment. Similarly, the economic theory suggests that increased competition in the market results in a fall in profits. This may not, therefore, be a sign of injury. Apparently, analysing 15 factors in a single framework is not practical. Furthermore, many of the Article 3.4 factors are applicable to the business enterprise as a whole and cannot be examined product-wise in multi-product corporations (Bhansali 2002). These are, for instance, employment, wages, growth, ability to raise capital, and investment. Since dumping margin is calculated on product basis, injury should also be product-specific. These problems can be tackled if a proper framework is developed for assessing injury.

In this context, some have suggested that the injury standard for anti-dumping cases should be brought closer to the antitrust standard, which takes into account the behaviour's effect on the competitive structure of the industry as a whole, rather than the material injury it causes to petitioner domestic firms. The factors that have implication for the competition should therefore be included and evaluated within a perspective of protecting competitive process.

However, there is little evidence of analogue between anti-dumping and competition laws (see Aggarwal 2002). It is therefore a challenging task to evolve a suitable framework for injury assessment. Member countries may decide to set up a Working Committee to address this issue. The elimination of subjectivity may be difficult to achieve but attempts may be made to reduce ambiguity in injury finding.

Another issue that may be raised in the context of injury is whether initiating AD investigations on the basis of threat of injury alone should be permissible. The law permits the application of AD measures in cases where a domestic industry alleges that though it is not yet suffering material injury, it is threatened with material injury, which will develop into material injury unless anti-dumping measures are taken. Article 3.7 offers special provisions for a threat case. These are: (i) a significant rate of increase of dumped imports into the domestic market, indicating the likelihood of substantially increased importation; (ii) sufficiently freely disposable, or an imminent substantial increase in, capacity of the exporter, indicating the likelihood of substantially increased dumped exports to the importing Member's market, taking into account the availability of other export markets to absorb any additional exports; (iii) whether imports are entering at prices that will have a significant depressing or suppressing effect on domestic prices, and would likely increase demand for further imports; and (iv) inventories of the product being investigated.

In the Mexico–Corn Syrup case the Panel concluded that a threat analysis must also include evaluation of the Article 3.4 factors. The Panel was of the view that

While an examination of the Article 3.7 factors is required in a threat of injury case, that analysis alone is not a

sufficient basis for a determination of threat of injury, because the Article 3.7 factors do not relate to the consideration of the impact of the dumped imports on the domestic industry....In our view, consideration of the Article 3.4 factors in examining the consequent impact of imports is required in a case involving threat of injury in order to make a determination consistent with the requirements of Articles 3.1 and 3.7.

Such statements are easy to make but any investigation based on threat of material injury will necessarily be speculative because it involves analysis of events that have not yet happened. It is therefore suggested that no injury decision should be based on the 'threat of injury alone'.

3.2.1 Price Undercutting

For estimating injury most countries, including the EC (Vermulst and Waer 1991), rely mainly on price undercutting by dumped imports. The methodology is to compare the weighted average net sales price of the dumped imports on a model-by-model basis with the weighted average net sales price by EC industry in the EC market. While calculating price undercutting, the EC practises zeroing practice. Price undercutting are inflated because any negative amount by which the exporting producers' price undercut those of the Community industry are not offset with any positive amounts. In the Steel Wires case against India (12.7.1999) Indian exporters raised this issue but did not get heard. In the Polyester Staple Fibre case, again Indian exporters argued that it was wrong to exclude negative price undercutting. The Commission confirms this but since no further arguments were put forward, the claim was rejected. In the same case, certain Indian exporters argued that the injury should be calculated on the like product and not on the comparable models. The argument was based on the conclusions of the WTO Appellate Body in the bed linen case (1.3.2001). The EC, however, argued that these conclusions were drawn in the context of dumping calculations and hence were not relevant in this case. It is, however, felt that the Appellate Body (AB) ruling has a wide implication and that in the light of this ruling, zeroing practice on injury should also be reconsidered.

3.3 Causation

Besides injury, it must also be demonstrated that the dumped or subsidised imports are, through the effects of dumping, causing injury. Disentangling various causes of injury to domestic industry and finding out that part of injury which could be ascribed to dumping is a complicated task. In the US-AD Measures on Certain Hot Rolled Steel Production from Japan case, the Appellate Body ruled that investigating authorities must make an appropriate assessment of the injury caused to the domestic industry by the other known factors. They must separate and distinguish the injurious effects of the dumped imports from the injurious effects of those other factors. In the *United States-Wheat Gluten Safeguard and United States-Lamb Safeguard* case, the Appellate Body interpreted Article 4.2(b) of the Agreement on Safeguards—which is substantially similar to Article 3.5 of the ADA—to mean that authorities must separate and distinguish the effects of other factors and assess the 'bearing', 'influence', or 'effect' that each factor has on the overall situation of the domestic industry.

These rulings notwithstanding, there appears to be no serious attempt to disentangle the injurious effects of dumped imports from other sources. We recommended in Section 2.2 that Member countries need to set up a working committee to address the issue of injury assessment. The same committees, we suggest here, may be entrusted with the task of the causal relationship related issues.

The WTO Committee on Anti-Dumping Practices adopted a 'Recommendation Concerning the Periods of Data Collection for Anti-Dumping Investigations G/ADP/6' (adopted on 5 May 2000), which states that the period of data collection for injury investigation should be at least three years. Such a relatively long period is needed particularly because of the causation requirement. While the industry must be suffering material injury during the regular investigation period and detailed injury margin calculations in the case of application of a lesser duty rule will be based on the data existing during the regular investigation period, the analysis of injury and causation needs a longer period in order to examine trend factors, such as those mentioned in Articles 3.4 and 3.5 of the ADA. The new committee that we have recommended should be constituted needs to examine whether a three years' period is sufficient for analysing the causal relationship. There is evidence of a positive relationship between economic downturn and the number of AD initiations in developed countries (see Aggarwal 2003b). Apparently, these countries accommodate import competition when the market is expanding but protect their market share when the rate of expansion slows. Thus injury may be associated with economic downturn. A three years' period may fail to control for the business cycles. Aside from the injury period, the committee may also devise a formal economic analysis to disentangle the effect of various other factors in the trend analysis. What is required is some form of 'counterfactual estimate' which would show what the

situation of the domestic industry would have been if there were no dumping and then to compare it with the actual situation. Boltuck (1991) and others have proposed methods for such an analysis. It is time that the ADA incorporates the requirement for some form of counterfactual analysis in injury determination as a clarification to Article 3.5.

3.4 Cumulation

A widely criticised provision in injury determination is that of cumulation. The WTO ADA *permits* an investigating authority to accumulate dumped imports of a product from more than one country that are simultaneously subject to anti-dumping investigations. Using this provision, the authorities aggregate all like imports from all countries under investigation and assess the combined effect on domestic industry. Though the ADA states that the authorities *may* cumulatively assess the volume and effects of dumping imports, anti-dumping legislation in almost all countries state that the authority *shall* cumulatively assess the volume and effects of such imports, provided that the imports compete amongst themselves and with products identical or alike to those imported which are manufactured in the country. In actual practice the authorities follow the practice of cumulation in almost all cases.

Until 1984, the use of cumulation was discretionary in the US. Only 13 per cent of the anti-dumping cases were subject to cumulation during 1980–4. Injury decisions were made on a country-by-country basis even if multiple countries were named. It meant that the authorities rarely found injury by reason of dumped imports unless the import volume was substantial. In 1984, due to aggressive lobbying by domestic industries, the US Congress amended the AD and countervailing duty (CVD) laws, making it mandatory to cumulate imports across countries when determining injury. Rather than being rare, cumulation became the norm. In the post 1984 period, there was a dramatic increase in the use of cumulation provision. Between 1985 and 1994, 75 per cent of the USITC decisions involved cumulation (Table 6). In the Uruguay Round this provision was included in the ADA.

Table 6: Use of the Cumulation Principle: Analysis of USITC Cases

	Final determinations (No.)		Affirmative determinations (per cent)	
	No cumulation	Cumulation	No cumulation	Cumulation
1980–4	205	30	22	30
1985–94	123	367	40	51

Source: Prusa (1998).

Cumulation increases the likelihood of affirmative findings. If the imports from individual countries are aggregated, the market share of investigated firms will rise and the impact of foreign imports will become more significant. This in turn will result in greater likelihood of affirmative findings. Table 6 shows that over the period from 1985 through 1994, affirmative findings were made in 51 per cent of cases with cumulation while only 40 per cent of the cases without cumulation were successful. Hansen and Prusa (1996) found that cumulated cases were about 30 per cent more likely to result in duties than non-cumulated cases. Their findings suggest that more than 50 per cent of USITC affirmative determinations from 1985 through 1988 would have been negative without cumulation.

Aside from this, cumulation also has what Hansen and Prusa (1996) have called the ‘super additivity effect’. They observed that even if the market share effect is controlled by holding the market share of defendant firms constant, aggregating over the exports of several countries itself increases the probability of an affirmative injury determination. Thus the greater is the number of small defendant firms (holding the market share constant), the higher is the probability of a positive finding by the USITC. According to an example considered in Hansen and Prusa (1996), when 40 per cent of imports are under investigation and a single country is involved, the probability of an affirmative injury finding is 0.60. But when the petition is filed against two countries with a cumulated market share of 40 per cent, divided equally between them, the probability rises to 0.72. This change represents a 20 per cent increase in the probability of affirmative action. Extending the example to five countries, holding constant the market share of imports, the probability rises to 0.78 or by 30 per cent. Tharakan et al. (1998) confirmed this finding for the EC injury determination as well. Their estimates for the EC suggest that the probability of an affirmative finding rises from 0.92 for two countries to 0.98 for three countries, holding constant the market share of imports under investigation. Gupta and Panagariya (2001) explained this empirical finding using a theoretical framework. They suggested that the presence of a large number of exporters exacerbates the free rider problem, which leads every firm to invest less on defence and results in the super additivity effect. Thus, cumulation has played a significant role in yielding a positive injury determination not only by increasing the market share of defendant firms but also due to super additivity effect

of cumulation. Naming a multitude of small countries with very small import market share raises the probability of gaining protection because it results in super additivity effect. This practice is likely to be primarily harmful for those developing countries that constitute small fractions of the import market.

To examine the use of cumulation in the post Uruguay Round period, we now analyse naming patterns in all AD duty orders in place in the US and EC.³ In the case of the US, several duty orders in effect were the result of pre-1995 period investigations. These cases are analysed separately. Table 7 shows that the WTO ADA had a significant impact on the use of cumulation. While in the pre WTO years multiple countries were named in around 25 per cent of the cases initiated, in the post WTO period 39 per cent cases had multiple countries. Furthermore, naming patterns also changed with an increasing number of cases having more than three named countries. These patterns appear to be more pronounced in the EC where multiple countries were named in 58 per cent of the cases and almost the same proportion of cases involved more than three countries. Some cases even involved 10–12 countries.

Table 7: Summary of Naming Patterns in the EC* and US Cases**

No. of named countries	US	EC	
	AD cases continued from the past	Initiated in post 1995 period	Initiated in post 1995 period
2	11	7	8
3	4	5	6
4–7	4	9	14
8–12	2	3	5
Total cases naming multiple countries	21	24	33
Duties in effect (product-wise)	86	62	58

* as of 29 November 2002.

** as of 14 August 2002.

Source: Author's computations based on data provided on
USITC website http://usitc.gov/7ops/ad_cvd_orders.htm and
EC website <http://europa.eu.int/comm/trade/policy/dumping/stats.htm>

Table 8 shows that cumulation is applied in most of the US and EC cases involving India. In the US, ten AD duties are in effect against India. In all these cases multiple countries were named in the investigation process. In the EC, 13 AD duties are in effect currently. Cumulation was applied in 10 of these 13 investigations.

Table 8: Summary of Naming Patterns in Cases Involving India

Cases against India	US	EC
Multiple countries	10	10
Only India	0	3
Total	10	13

Source: USITC website: http://usitc.gov/7ops/ad_cvd_orders.htm
EC website: <http://europa.eu.int/comm/trade/policy/dumping/stats.htm>

Thus under cumulation, naming more countries has become a profitable strategy, particularly against developing countries. It needs to be recognised a harmful practice.

The USITC generally considers four factors when deciding whether to cumulate: (i) interchangeability between imports from different countries and between imports and domestic product; (ii) overlap between the domestic product and the imported product in four geographical markets of the US; (iii) similar distribution channels; and (iv) simultaneous presence of imports. These conditions are rather easy to meet and regardless of whether one country's imports actually harm domestic producers or not, it can be lumped together with big exporters.

For elaborating on the conditions provided in Article 3.3, a sentence could be added stating that significant differences in market share/export volume trends over the past years of different exporting countries indicate a difference in the conditions of the competition and the inappropriateness of cumulation.

³ The analysis covers all AD duty orders in place in the US as of 14 August 2002 and in the EU as of 29 November 2002. Henceforth these will be the reference periods for AD duty orders.

4 Other Procedural Issues

4.1 Initiation of Anti-dumping Case

4.1.1 Condition

The WTO ADA stipulates that an investigation shall not be initiated unless the authorities have determined, on the basis of an examination of the degree of support for, or opposition to, the petition expressed by domestic producers of the like product, that the application has been made 'by or on behalf of the domestic industry'. The petition will be considered to be made 'by or on behalf of the domestic industry' if it is supported by 50 per cent of the industry expressing opinion and 25 per cent of the total domestic production. In practice, however, the authorities examine the share of the petitioners in the total domestic production and if it is established that the petitioners constitute 25 per cent of the domestic production, the case is initiated. There is no procedure whereby it is ascertained at the time of initiation whether there is dissemination of information regarding the petition among all the producers in the industry. No provision is made to determine support/opposition of producers in the industry before the case is initiated. Thus, a mere 25 per cent of domestic producers can trigger protection affecting 100 per cent of consumers.

In the second submission to the WTO (TN/RL/W/26), India has argued that domestic industries that are fragmented and have a very large number of producers face an enormous problem in initiating AD investigations because they find it difficult to meet the standing requirement contained in Article 5.4. This is particularly true in the case of goods produced in industries in the unorganised sector. On the basis of the above argument India has recommended to apply the sampling rule (footnote 13) to the 25 per cent condition also.

To evaluate the significance of this argument, the market share patterns of all those firms that filed AD cases in India from 1993 through 2001 was examined (see Table 9). Preliminary empirical evidence suggests that AD cases in India are filed by firms that are operating in highly concentrated domestic markets. In more than one-quarter of the cases, the industry had a sole producer. In around 80 per cent of the cases, the industry had one to four producers. In only 11 cases, the industry had more than six producers. What is more striking is the level of concentration among petitioners. In 90 per cent of the cases the number of petitioners was between one and three. In those cases where there was only one petitioner, his average market share was 89.7 per cent. In the cases where the number of petitioners was two and three, the average market share was 62.7 per cent and 76.6 per cent respectively. Clearly, the petitioners were the dominant producers in their industry. In around 49 per cent of the cases there was a sole petitioner and on an average his share was 89.7 per cent. Of the 97 cases there were only three cases in which the number of petitioners exceeded five.

Table 9: Domestic Market Structure of Industries Subject to AD Investigations

No. of producers/petitioners	No. of cases (producers)	No. of cases (petitioners)	Average market share* (per cent)
1	23	47	89.7
2	11	22	62.7
3	9	18	76.6
4	12	4	59.3
5	13	3	67.8
6	3	0	-
More than 6	11	3	-
Total	82	97	-

Note: * this information is based on 83 cases.

Source: Aggarwal (2002).

Table 10 shows the distribution of petitioners' market share. This information was available for 83 cases. Of the 83 cases, 77 cases are such in which petitioners' market share is 50 per cent or more.

Table 10: Distribution of Petitioners' Market Share

Petitioners' market share	Number of cases	Average market share of petitioners
25-50	6	30.2
50-75	20	61.3
75-90	16	81.2
90-100	41	97.4

Source: Aggarwal (2002).

This is in contrast with the findings for the US where unconcentrated industries initiated more than 50 per cent of all dumping cases; at most, only one-third were initiated by highly concentrated industries (Shin 1998). Moreover, empirical evidence in the EC and US suggest that domestic industry concentration do not seem to have much influence on petition.

Thus India's proposal may prove to be counter-productive. It is likely to facilitate filing of AD cases in developed countries where meeting the necessary conditions for filing AD petitions may be a constraint. In India, important constraints are very high legal cost of AD investigations, lack of expertise, weak lobbying power, and free rider problem. Feinberg and Hirsch (1989) find that more firms in an industry tend to lower the likelihood of a petition which supports the effects of the free rider problem. The conditions for domestic industry standing need to be tightened to protect Indian exporters in the foreign markets.

The current law may be abused where the non-complaining firms do not express their opinion. Thus we propose that Article 5.4 may be modified (see also Didier 2001) by clarifying that the application shall be considered to have been made 'by or on behalf of the domestic industry ... if the domestic industry expressing either support or opposition to the application represents more than 50 per cent of the total domestic production'. Domestic industry includes captive production, production for exports, and production by parties related to exporter.

The 25 per cent condition and the sampling condition should be done away with. Sampling technique is frequently resorted to by advanced countries. Any bias in the sample selection may have an immediate effect on the outcome.

4.1.2 Back-to-Back Investigation

Repeated/Back-to-back AD investigations in some countries on the same product originating in the same countries is an important issue particularly from a developing country point of view and needs to be addressed. As an illustration one may cite the Synthetic Fibre Ropes case investigated in the EC. In June 1997 an anti-dumping proceeding related to imports of synthetic fibre ropes originating in India was terminated without the imposition of measures on the ground that a causal relationship between dumping and injury was not sufficiently established to justify such an imposition. In July of the same year, the European Commission announced the initiation of a new AD proceeding against this product on the ground that information made subsequently available to the Commission contained sufficient *prima facie* evidence that the situation of the Community industry had further deteriorated as a result of continued dumped imports from India. The Indian exporters raised objections to the opening of the proceeding. They argued that compared with the negative finding on causation made in the previous proceeding concerning imports of synthetic fibre ropes originating in India there were no changed circumstances to explain a different finding in the present case on the causal link between dumping and injury. However, the Commission was convinced that it had reliable information to establish a causal link between injury and dumping in the present case.

The EC is ready to agree to a separate provision in the draft implementation decision for making it harder for industry to bring back-to-back cases in a period of 365 days. However, we propose that there should be a separate provision in the Agreement to preclude the initiation of any investigation for a period of 365 days from the date of termination of a previous investigation on the same product from the same country.

4.2 Questionnaires

Replying to questionnaires, some of which extend to hundreds of pages, constitutes a major burden, particularly for small and medium-sized exporters from developing countries. Exporters find the questionnaires too time consuming and complicated. It has been observed that in traditional user-countries the questionnaires have become more and more complicated over time. Long and detailed questionnaires have harassment value. This is one possible reason why these firms choose not to participate in the AD investigations against them and instead allow the case to proceed using 'facts available', which always means much larger tariffs. Baldwin and Moore (1991) find that the use of facts available nearly doubles the average US dumping margin from around 35 per cent to over 65 per cent. Hence the use of simple questionnaires is recommended. The questionnaires should be as simple as possible, focusing only on the necessary information.

4.3 Disclosure of Information

The ADA stipulates that only non-confidential summaries of confidential information are available to the parties concerned. In principle this is to protect the companies' interest. However, this may be of little value to the defendants and complainants. Such a situation may lead to increased propensity to affirmative findings in dumping and injury

determination. Tharakan and Waelbroeck (1994) argue that the European Commission is more susceptible than the USITC to non-economic factors due to the Commission's strict confidentiality rules where little information is revealed to parties. This makes it easier for political factors to influence the Commission's decisions. The situation may be tackled by abolishing the strict confidentiality rule and the use of more technically sophisticated and economically relevant injury determination methods.

The Thailand–Anti-dumping duties on angles, shapes and section of iron or non-alloy steel and H beams from Poland case brings out the importance of a greater transparency in the system. In this case, the Appellate Body ruled that there is nothing in Article 3.1 that limits an investigating authority to have an injury determination only upon non-confidential information. 'It permits an investigating authority making an injury determination to base its determination on all relevant reasoning and facts before it.' This ruling makes it all the more important to ensure a greater transparency in the system.

Some countries like USA and Canada have a system under which confidential information submitted by one interested party may be accessed by the attorneys of other interested parties under an Administrative Protective Order (APO). Under APO the counsel gets access to such information. However, he is first required to provide strict undertaking of confidentiality (Tharakan 1994). The attorneys cannot provide this information to their clients but they can use it to double check the correctness of the information as well as the use made thereof by the agency.

Some experts (for example Vermulst 1997) argue that this system is difficult to maintain for developing countries and might create substantial problems if information were ever leaked. However, most experts observe that it is clearly preferable for a greater transparency.

4.3.1 Compliance

After a ruling, the prospect of an Article 21.5 'compliance' panel review (and possibly appeal) and Article 22 'arbitration' panel increases the incentives for foot-dragging. The Cotton Bed case may illustrate this point. Following the DSB recommendations in March 2001 in this case, the European Commission amended the original anti-dumping duties on bed linen from India in August 2001 but simultaneously suspended its application. While appreciating the steps taken by the Commission, the Trade Commissioner of the EC stated:

... it shows the EC's prudent use of the trade defence measures in particular against developing countries. This development dimension, a constant and distinct feature of the EU trade policy, is at the heart of the initiatives presented by the EC in the Doha Development Round....

However, India was not satisfied with the EC's implementation of the AB ruling. It strongly disagreed that the re-determination of the original anti-dumping duties was in compliance with the AB ruling. India requested the establishment of a compliance panel challenging the implementation of the AB ruling. The WTO Compliance Panel, however, ruled in favour of the EC. In February 2002, upon request by the Community industry, a review was initiated. India raised this issue as well. However, the Panel upheld the partial interim review also initiated by the European Commission. It ruled that provision 21.2 does not impose any specific or general obligation on Members to undertake any particular action. Although the review decision has gone in favour of India, these reviews are likely to have hit Indian exporters in a major way. We, therefore, propose further reforms in the dispute settlement system that would limit post-ruling foot-dragging. Special and differential treatment provisions in this regard are discussed in Section 5.

4.4 Sunset Reviews

The introduction of the process of the 'sunset review' of anti-dumping orders in the Uruguay Round was perhaps one of the most important reforms in the AD process. Pre-WTO GATT rules were relatively vague about when governments were required to terminate anti-dumping duties. This meant that duties could remain in place indefinitely. Under Article 11.3 of the WTO Agreement all anti-dumping orders are to be terminated five years after their initiation unless the authorities determine in a review that the expiry would be likely to lead to a continuation of dumping and injury. Sunset review was originally deemed friendly to developing countries. However, developing countries gain little because the anti-dumping measures under the law can be extended for successive new terms of five years if the authorities determine that the expiry of the duty would lead to recurrence of dumping and injury. This has led traditional users to renew the AD measures almost indefinitely, and they have in fact got an overwhelming proportion of anti-dumping measures in force, for which AD orders had been made several years ago. In the US, out of 305 sunset reviews only 143 have been revoked. This constitutes 47 per cent of the total reviews. Anti-dumping is continued in 53 per cent of

the cases. There are several cases that have been continuing since the 1970s. Table 11 provides a year-wise distribution of the US AD duties in force in the reference period. Of the 278 duties currently in force as of 14 August 2002, 161 (58 per cent) were ordered before 1996. In other words, these duties have been in place for more than one term. Of the 161 cases, 98 (61 per cent) cases are against non-OECD countries. Thus, an overwhelmingly large number of such cases are against non-OECD countries.

Table 11: Year-wise Distribution of the US AD Duties (Country-specific) in Force as of 14 August 2002

Order date	No. of cases currently in force	No. of cases against non-OECD countries
Before 1983	10	1
1983–6	22	20
1987–9	37	18
1990–2	35	25
1993–6	57	34
1996–2002	117	98
Total	278	

Source: USITC website: http://usitc.gov/7ops/ad_cvd_orders.htm

In order to demonstrate fairness and massively reduce the anti-dumping cases in force in which developing countries are mainly the targets, it is important to make this code effective. Article 11.2 states:

...Interested parties shall have the right to request ...to examine whether the continued imposition of the duty is necessary to offset dumping, whether the injury would be likely to continue or recur if the duty were removed...

Under the current system the subject matter of the review investigation is only the likeliness or recurrence of dumping and injury. However, a WTO Panel in the US-DRAMS' from Korea case ruled,

If the only injury under examination is future injury ...the authority must necessarily be examining whether that future injury would be caused by dumping with a commensurately prospective timeframe.

Thus the Panel indirectly upheld that the current system should be replaced by a requirement of a new proceeding all over again. In view of this ruling and also the post Uruguay Round experience, it seems important to make Article 11.3 effective. It is therefore suggested here that the sun should be allowed to set; only one sunset review should be permitted and the initiation of any new proceeding should be precluded for a period of 365 days.

Article 11.3 could thus be amended by adding the following: 'the continuation of AD measures is however admissible only once. The duty may remain in force for a maximum of 10 years. No review shall be carried out after that. If an anti-dumping duty order is terminated after completing 10 years a new application concerning the same product and country shall only be admissible after the lapse of one year'.

4.5 Anti-dumping Duty: Lesser Duty Law

The decision about whether the amount of the anti-dumping duty to be imposed shall be the full margin of dumping or less is to be made by authorities of the importing Member. The ADA (Article 9.1) expresses preference for a lesser duty; however, it does not make it mandatory. Member countries therefore use wide discretion in this matter as well. While in Mexico, Brazil, Argentina, and India this rule is not mandatory, the EC statute has made this rule mandatory. In the US and Canada, on the other hand, once injury is proved and its causal effect is established AD duty equivalent to the dumping margin is imposed. Many experts, however, have expressed their preference for the lesser duty rule and have argued that it needs to become mandatory.

The lesser duty rule implies that dumping duties should be less than the dumping margin and only high enough to remove injury. WTO Members, who apply a lesser duty rule in accordance with Articles 8.1 and 9.1, have to calculate injury margins. The ADA does not give any guidance on such calculation and arguably leaves its Members with substantial discretion. Normally, injury margin is calculated as the difference between the fair selling price due to the domestic industry and the landed cost of the product under consideration. Landed cost for this purpose is taken as the assessable value under the Customs Act and the basic customs duties. More specifically,

Injury elimination level = selling price of the domestic industry + the profit shortfall + reasonable level of profit – price of the dumped products.

This calculation of the extent of injury itself is subject to several ambiguities. There is ambiguity in the calculation of the fair domestic price. Fair domestic price is calculated by projecting the actual cost at the optimum level of capacity utilisation. In doing so, the authorities use the actual price data for the whole industry and not for the most efficient units. This method gives upward bias to the fair domestic price for two reasons. First, the calculations are based on the information provided by the domestic producers. Two, in many cases, the industry has highly inefficient cost structure due to wrong location, smaller size, obsolete technology, high cost of electricity, and waste of raw materials. No account is taken of the fact that the price difference can be caused by a host of factors other than dumping such as competitiveness, better policies of the exporters, and difference in quality. The more inefficient the industry is, the greater is the likelihood of higher injury margins. Thus the system primarily protects inefficiency. The choice of profit shortfall and reasonable levels of profits are also at the discretion of the authorities. Injury elimination levels can be inflated by giving higher values to these two parameters. It is therefore quite possible that injury margins are higher than dumping margins and that even if the lesser duty rule is applicable, dumping duties are the full dumping margins. The effect of lesser duty rule is likely to be insignificant unless there is an unambiguous methodology of calculating injury elimination level.

Table 12: Comparison of Injury and Dumping Margins in Selected EC Cases Investigated against India

Case	No. of exporters investigated (incl. residual category)	No. of exporters for whom injury margin > dumping margin	Col. 3 as a percentage of col. 2
(1)	(2)	(3)	(4)
Synthetic fibre ropes	2	0	0
Steel fasteners	4	3	75
Potassium permanganate	1	1	100
Stainless steel wires	11	8	73
Steel ropes	3	3	100
Hot-rolled flat steel	2	0	0
Certain PET	5	1	20
Cathode ray colour TV	1	1	100
PSF	3	2	67
PET film	7	7	100
Sulphanic acid	2	2	100
PTY	5	5	100
Total	48	33	

Source: Official Journal of the European Communities, various issues.

To test the above hypothesis, we examined injury and dumping margins in almost all the cases which were investigated in the EC against Indian exporters between 1998 and 2002 and which resulted into duties. Table 12 summarises the patterns. For 33 of the 48 firms⁴ (69 per cent) investigated in 12 cases, injury was found to be higher than the dumping margin. In 6 out of the 12 cases, injury levels were higher than dumping margins for all exporters. The rule appears to have benefited exporters in only three cases (Synthetic Fibre Ropes, Hot-rolled Flat Steel, and Certain PET). Apparently the lesser duty rule in the EC is not very effective.

The objective of this exercise is not to suggest that lesser duty rule should not be made mandatory. Rather, it suggests that in the absence of a non-ambiguous methodology for calculating injury elimination level, the lesser duty rule may not be effective.

5 Special and Differential (S&D) Treatment

5.1 Background

The term 'special and differential treatment' refers to GATT rights and privileges given to developing countries, but not extended to developed countries. The concept of special and differential treatment in the GATT evolved from debates in the 1960s on how the growth and development of developing countries could be facilitated by trade rules. The term itself derived from a reference in the 1973 Tokyo Round Declaration which recognised the importance of the application

⁴ This includes the category of residual exporter firms.

of differential measures in developing countries in ways that would provide special and more favourable treatment for them in areas of negotiation wherever feasible.

The inclusion of S&D treatment in GATT reflects a long history of calls by developing countries for special treatment in global trade arrangements. No principles applying specifically to developing countries existed in the GATT at the time of its inception. Moreover, GATT was dominated by the developed countries, who were not receptive to the idea of forging a link between trade and development. The first attempt to accommodate developing countries' concerns was made in 1954 through Article 18 (Whalley 1999). However, developing countries felt that their trade concerns were not being effectively addressed in the GATT. In 1965 they succeeded in getting Part IV also incorporated into GATT Articles. Part IV introduced a development dimension into GATT. It introduced the notion of non-reciprocity in tariff negotiations for developing countries and thus made it possible to grant preferential treatment to developing countries in international trade rules. This was essentially an effort in the direction of making GATT more acceptable to developing countries.

Part IV of the GATT did not provide for a GATT Article 1 exception for developing country trade preferences, although it did contain the first formal statement in a GATT legal text of the principle of non-reciprocity. In 1968 the developing countries succeeded in establishing a Generalised System of Preferences (GSP) under the auspices of the United Nations Conference on Trade and Development (UNCTAD). In 1971, a GATT waiver from MFN obligations was granted after the US agreed to it. The 1971 Waiver from Article 1 (MFN) was a temporary arrangement, initially for a period of 10 years, under which developed countries could grant tariff concessions to developing countries on a non-reciprocal basis.

In the Tokyo Round (1973–9), developing countries succeeded in getting the 'Enabling Clause' (1979) incorporated in the GATT. The Clause enabled developed Member countries to give differential and more favourable treatment to developing country Members. It provided for: (i) the preferential market access of developing countries to developed country markets on a non-reciprocal, non-discriminatory basis; (ii) 'more favourable' treatment for developing countries in other GATT rules dealing with non-tariff barriers (iii); the introduction of preferential trade regimes between developing countries; (iv) and the special treatment for the least developed among the developing countries in the context of any general or specific measures in favour of developing countries. This Clause made the 1971 GSP waiver permanent. It also provided legal basis for the special and differential treatment to developing countries. In the Tokyo Round, a number of the codes that were negotiated contained special and differential treatment provisions. The declaration launching the Uruguay Round contained a clear and unequivocal reaffirmation of special and differential treatment as a principle of the trading system. While negotiating on complex WTO disciplines, developing countries sought comforts in this provision. Special benefits were offered in almost every agreement and were readily accepted by developing countries, even if in many agreements they were ad hoc in formalisation.

Despite a long history of efforts by developing countries for S&D treatment, there has been an intense debate among scholars as to whether it really is worthwhile for developing countries to drive towards reinvigorating S&D treatment, or whether to focus negotiating efforts elsewhere. One school of thought suggests that S&D treatment provisions are not the best way to safeguard developing countries' interests and that any drive towards strengthening these provisions would involve huge opportunity costs in terms of sacrifice of substantial gains that may be achieved by focusing on more concrete negotiations. Some have suggested that S&D treatment reflects a token compensation offered to developing countries for their agreeing to complex WTO disciplines that are tailored to suit the interests of developed countries while others have expressed their doubts on the importance of the S&D treatment provisions. They have criticised these provisions on theoretical grounds and have advocated their narrowing. In support of their argument they cite several studies that have examined the benefits that GSP schemes have yielded for developing countries. The picture that emerges is that benefits seem to be modest in aggregate, and are more important for some countries than others (see for instance, Karsenty and Laird 1987; McPhee 1989). There are no serious studies on the post Uruguay Round S&D treatment provisions and the initial indications from the first five years of operation of the Uruguay Round decisions provide an incomplete picture both on the use of S&D treatment provisions and their impact. However, it is felt (Footer 2001) that there has been a trend towards stricter and narrower interpretation of S&D treatment provisions, thereby making them ineffective in protecting developing countries' interests. These arguments notwithstanding, several scholars (see for instance, Michalopoulos 2000) have argued that as long as there is a gap in economic capacities and levels of development of WTO Members, S&D treatment will be required and will be important for world trade and stability. The challenge is to more carefully rationalize these provisions and to elaborate on them. Developing countries must defend their interests in the new round of multilateral trade negotiations. Leaving these provisions to the discretion of developed countries would invite scepticism with regard to the benefits of these provisions.

5.2 Conceptual Justification for S&D Treatment in the Anti-Dumping Agreement

There are several conceptual premises underlying the provision of S&D treatment in the WTO Agreements. Several scholars have discussed the theoretical underpinnings of S&D treatment arrangements in GATT in detail (see, for instance, Michalopoulos 2000; Whalley 1999). This paper argues that there are special motivations for providing such treatment in the ADA.

A central problem for the developing countries in respect of possible anti-dumping measures against their exports is that their home market prices for domestically manufactured products are in most cases higher than those in their export markets. This home market price distortion is largely due to inefficient cost structures that result primarily from the production conditions under which firms in these countries operate. These include high cost of capital, labour market conditions, labour, laws, poor infrastructure facilities, and bad governance. It is, therefore, not a sound policy to rely on home market prices/production costs as normal values in dumping investigations against developing countries. The normal value of all exports should be based on international prices for the goods concerned and not on home market prices/production costs. During the Kennedy Round the developing countries raised this issue and proposed a footnote to Article 2(d) of the 1967 Code that would have allowed for reference to third country export prices instead of prices in their home country whenever they were alleged to be dumping. The proposal was, however, rejected due to strong objections by the developed countries who finally 'tailored the 1967 Code to suit their interests' (Kufuor 1998). In 1970 a GATT working committee was established to examine the special problem of the developing countries under the 1967 Code. Developing countries again raised the basic problem in adhering to the 1967 Code. Though the working committee admitted that a solution to the problem would have to be based on the recognition that in the case of the developing countries it was not reasonable to use home market prices/production costs as normal values in anti-dumping investigations, it concluded that a compromise on that matter was not possible at the time. It also pointed out that under Article 2(d) of the 1967 Code, prices for like products exported to third countries could be used for price comparison when there was an unusual market situation in the exporting country. In the final analysis it set out concessions in Article 15. However, no elaborations on Article 15 were made in subsequent rounds. Against that background, it becomes important in the Development Round of negotiations to give due recognition to 'the special situation' of developing country Members when considering the application of anti-dumping measures under the ADA.

Furthermore, empirical evidence suggests that though the cases reported by low and middle income countries have increased, the number of cases reported against them are still larger. Table 13 provides details on anti-dumping actions by targeted country group. The table shows that in the early 1980s, close to 71 per cent of the reported cases were against OECD countries. Nearly 13 per cent cases were reported against the upper middle income group of developing countries. Low and lower middle income country-groups together constituted around 10 per cent of the cases. In the late 1980s, these patterns remained the same. In the early 1990s, however, there was a quantum jump in the number of cases initiated against low- and lower middle-income countries. While in the late 1980s only 15 per cent of the cases were reported against them, in the early 1990s their share doubled to 34 per cent. It rose further to 40 per cent in the late 1990s. More than 22 per cent cases were directed against upper income developing countries. Taken together, developing countries were targeted in around 62 per cent of the cases.

Table 13: Initiation of Anti-Dumping Cases by Targeted Country Group, 1979–80 to 1999–2000

Year	Number of cases			
	1980–5	1986–90	1991–5	1996–2000
Developing countries				
Low	37 (4.0)	42 (6.3)	240 (19.4)	303 (22.7)
Middle	70 (7.5)	75 (11.2)	183 (14.7)	232 (17.4)
Upper	210 (22.6)	171 (25.6)	288 (23.2)	301 (22.5)
Developed countries				
OECD	562 (59.5)	302 (45.2)	441 (35.5)	398 (29.8)
Non –OECD	60 (6.4)	78 (11.7)	88 (7.1)	101 (7.6)
Total	930 (100)	668 (100)	1240 (100)	1335 (100)

Source: Aggarwal (2003b).

Table 14 shows the patterns of AD duties in force in the US and the EC. These patterns reveal the extent of victimisation of developing countries. While in the US, 60 per cent of the AD duties in force in the reference period are against developing countries, in the EC over 86 per cent of such duties are against these countries. Anti-dumping has thus become primarily a developing countries' issue.

Table 14: Patterns of AD Duties in the US and the EC (per cent)

	US (as of 23 October 2003)	EC (as of 4 June 2003)
OECD	34.0	5.6
Non-OECD (developed and developing) of which:	66.0	94.4
Developing countries	60.4	85.7
Total	100.0	100.0

Source: for the US: http://www.usitc.gov/7ops/ad_cvd_orders.htm
for the EC: <http://www.europa.eu.int/comm/trade/policy/dumping/stats.htm>

In the recent past, the developing countries have embarked on structural reforms to their economies. The Uruguay Round further resulted in massive reduction of tariffs. These reform programmes could be seriously threatened by AD investigations targeted against them by developed countries. To protect the interests of developing country Members and help them integrate their economies globally, it is important to elaborate on constructive remedies that may be granted to them by the ADA.

Restraining the use of AD measures by developing countries is yet another reason for granting special treatment to these countries. Aggarwal (2003b) documents a positive relationship between the use of AD measures against developing countries and AD filings by them. This suggests that AD actions against developing countries motivate them to use similar policies against their trading partners. The use of AD measures helps them in creating capacity to take such actions and thus posing retaliation threats to counter such activities against them. The capacity to retaliate may in turn have dampening effects on AD activities of a trading partner. In an empirical analysis of the determinants of the US AD behaviour, Blonigen and Bown (2003) observed that the retaliation capability of trading partners have had dampening effects on the US AD activity. In view of this, it may be argued that as long as the traditional users continue to use the AD instrument against developing countries, it will also be used by developing countries to retaliate (see also Vermulst 1997). One may like to suggest that increased AD familiarity and ability across developing countries may ultimately help put the brakes on AD use by traditional users. However, this may also result in AD wars reversing hard won trade liberalisation gains. This may therefore prove to be a costly strategy to restrain AD use. The use of AD actions is still not widespread among developing countries. If these countries continue to become targets of such activities, whether by developed or other developing countries, they will be motivated to use it themselves.

Finally, after the Multi-fibre Agreement (MFA) comes to an end in 2005, there is likely to be a stupendous increase in AD cases against developing countries. It is therefore important to negotiate S&D treatment in the next round to safeguard their interests.

5.3 S&D Treatment and the Anti-dumping Agreement

The S&D treatment in the ADA is enshrined in Article 15 as follows:

It is recognised that special regard must be given by developed country Members to the special situation of developing country Members when considering the application of AD measures under this Agreement. Possibilities of constructive remedies provided for under this Agreement shall be explored before applying anti-dumping duties where they would affect the essential interests of developing country Members.

While Article 15 thus requires developed countries to give special regard to the situation of developing countries when considering the application of AD measures it does not make any specific provision for addressing the manner in which this is to be done. It is therefore not surprising that the developing country Members are of the view that developed Members do not comply with Article 15 when imposing anti-dumping duties.⁵ India raised this issue in both the DSB cases in which it was an affected party.

⁵ G/ADP/W/416 dated 8 November 2000, G/ADP/M/15 dated 14 March 2000, G/ADP/M/16 dated 20 September 2000, G/ADP/M/17 dated 9 April 2001, G/ADP/M/18 dated 21 November 2001.

The Panel in *European Communities–Anti-dumping Duties on Imports of Cotton-Type Bed Linen from India* admitted that Article 15 imposes no obligation to actually provide or accept any constructive remedy that may be identified and/or offered. It also pointed out that Article 15 does not require that ‘constructive remedies’ must be explored but rather that the possibilities of such remedies must be explored and the explorations may conclude that no such possibilities exist. The Panel, however, suggested that the exploration of possibilities must be undertaken by the developed country Members. It was thus of the view that ‘Article 15 does impose an obligation to actively consider, with an open mind, the possibility of such a remedy prior to the imposition of an anti-dumping measure that would affect the essential interests of a developing country.’ The Panel, however, did not come to any conclusion as to what might constitute ‘constructive remedies provided for under this agreement’.

The Panel in the ‘*United States–Anti-dumping and Countervailing Measures on Steel Plates from India*’ opined that the first sentence of Article 15 imposes ‘no specific or general obligation’ on developed country Members to undertake any particular action’. The Panel held that ‘Members cannot be expected to comply with an obligation whose parameters are entirely undefined’. The Panel also disagreed with India’s view that special regard must be given throughout the course of the investigation. It was of the view that it refers to the final decision whether to apply a anti-dumping measure.

The above discussion clearly suggests that Article 15 of the ADA on the implementation of Article VI of the General Agreement on Tariffs and Trade 1994 is operationally ineffective. Though it is a mandatory provision, the modalities for its application need clarification. Special and differential treatment is widely accepted by all Member States to deal with the vulnerability of developing countries in the free trading system. But this issue has not been well addressed in the anti-dumping regime. Article 15 is too general to be enforceable. Therefore, Article 15 should be made more concrete in the next round of negotiation.

5.4 Suggestions

The Secretariat identifies two types of S&D treatment provisions in WTO Agreements: These are as follows.

- A. Exceptions to the rule to which developing countries may take recourse;
- B. Conduct or actions to be undertaken by developed country Members for developing country Members.

While the first constitutes provisions of flexibility of commitment, actions, and use of policy instruments, the second is comprised of provisions under which WTO Members should safeguard the interest of developing country Members and provide them technical assistance. To make S&D treatment provisions effective in the anti-dumping regime it is important that there are negotiations on both types of provisions.

5.4.1 Exceptions to the Rule to Which Developing Countries May take Recourse

5.4.1.1 De minimis level: dumping margin

De minimis dumping margin is fixed at 2 per cent. Many scholars have proposed to raise this margin to 5 per cent for developing countries and 8 per cent for the least developed countries. To evaluate the impact of raising the *de minimis* dumping margin to 5 per cent we examined dumping margin figures provided by the USDOC and European Commission in final determination of AD cases investigated in recent years. For the US, Lindsey (2000) provides a detailed database of company-specific anti-dumping duty rates in all final determinations from 1995 through 1998 and it may be recalled that AD duty rates imposed by the USDOC are full dumping margins. For the EC, we had information on *country-specific* AD duties in force as of 4 June 2003. In cases with more than one exporter, our database provided the duty range specifying the minimum and maximum duty for the exporters within the subject country. For our analysis we considered the maximum duty imposed in a given country. One must note here that in the EC lesser duty law is applicable which means that actual dumping margins could in fact be greater than AD duties. Anti-dumping duties set lower limits for dumping margins and thus serve as a good proxy for dumping margins in this analysis. Table 15 summarises the available information. It shows that even if the *de minimis* margin is raised to 10 per cent, it will not have a significant impact on the use of the AD measure. In the EC, in only ten out of 113 country specific cases, AD duty is less than 10 per cent. In the US, less than one-fifth of the exporters faced less than 10 per cent AD duty. In the EC, more than 50 per cent of AD duties are above 25 per cent. The distribution is more highly skewed in the US where 65 per cent of the duties are above 25 per cent.

Table 15: Structure of AD Duties: EC and the US

Duty (per cent)	EC* No. of target countries (as of 4 June 2003)	US No. of target companies between 1995 and 1998
2–5	2	10
5–10	8	10
10–25	46	17
Above 25	57	67
	113	104

* EC provides data on the range of AD duty levied against target companies in each country.

Source: Author's computation based on the information provided by the EC website <http://www.europa.eu.int/comm/trade/policy/dumping/stats.htm> and Lindsey (2000).

For examining the issue further, we examined dumping margins calculated for Indian companies by AD authorities in the EC and the US. Data on dumping margins was compiled from the official documents of these countries. Table 16 shows the distribution of company-specific dumping margins calculated by the EC and USDOC in cases investigated and found affirmative against India. In most cases, dumping margins are above 10 per cent. This paper therefore argues that it is not appropriate for developing countries to spend time and energy in getting the *de minimis* dumping margin raised.

Table 16: Summary of Dumping Margins Calculated by USDOC and European Commission in AD Investigations against Indian Companies

Dumping margins (per cent)	EC (as of 4 June 2003)	US (as of 23 October 2003)
2–5	0	0
5–10	4	1
10–25	14	7
Above 25	28	7
Total	46	15

Source: Author's computation based on Official Journal of the European Communities, various issues and USITC website http://www.usitc.gov/7ops/ad_cvd_orders.htm.

5.4.1.2 De minimis: import shares

De minimis import shares under the Anti-dumping Agreement are 3 per cent and collectively 7 per cent. Though the objective of introducing this condition is that the exporter accused of dumping should have a significant market share, experts criticise the law for such low standards of dominance. The threshold is much lower than those used by the competition authorities for defining 'dominant position' (30 per cent or 40 per cent in general). They argue that if dominance is defined in a specific way for domestic competition, the same criterion should be applied to foreign competition as well (Hoekman and Mavroidis 1996). No special or differential treatment is accorded to developing countries. As far as *de minimis* import shares under the ASCM are concerned, developing countries enjoy 4 per cent and collectively 9 per cent while there is no accurate proportion for developed countries. As far as *de minimis* import shares under the Agreement on Safeguards are concerned, developing countries enjoy 3 per cent and collectively 9 per cent while there is no *de minimis* provision for developed countries. One may like to argue therefore that S&D treatment should be granted to developing countries in the ADA also. There is, however, economic justification also for granting S&D treatment to developing countries in the threshold levels of imports shares. In general, individual shares held by exporting developing countries in developed country Members' markets are very small. Their import shares exceed the *de minimis* threshold due to the system of cumulation. Special and differential treatment provision in the *de minimis* in imports may therefore help in restraining the use of AD duty against developing countries.

Following the existing literature, we offer two suggestions in this regard. One, the thresholds for executing negligible imports should be based on market share rather than on the share of total imports. Two, a sentence could be added to Article 5.8 of the WTO Agreement stating that 'no collective account will be made of dumped imports from developing country Members holding less than 3 per cent of the importing Members' consumption'.

This would mean those countries with less than 3 per cent of market share will automatically be excluded from the

purview of AD investigations. This raises a pertinent question as to how effective will these reforms be. For addressing this question one needs to examine the individual market share of investigated firms from developing countries in developed country markets. Blonigen (2003) has compiled a unique database on US anti-dumping investigations, which provides firm-level data on all foreign firms that were involved in any US anti-dumping investigation initiated from 1980 through 1995 and received at least a preliminary firm-specific anti-dumping (AD) duty. Most of the data come from *Federal Register* notices of the USITC and the International Trade Administration (ITA) of the US. This database provides information on market share of US domestic producers, subject firms, and other firms in the US market. Table 17 summarised this information. It shows that in around 50 per cent cases, the share of developing country firms was less than 3 per cent. One can therefore conclude that an introduction of this clause is likely to yield substantial benefit to developing countries.

Table 17: Distribution of Market Shares held by Developing Countries Subject to AD Actions in the US, 1980–95

Market share (per cent)	No. of firms
0–3	54
3–9	20
Above 9	33
Total	107

Source: Blonigen (2003) and author's computation.

5.4.1.3 Prior consultation

It has been proven that anti-dumping investigations are harmful for parties affected regardless of what the final results are. There is evidence that AD petitions have a profound impact on imports even if they do not result in duties (Staiger and Wolak 1989; Prusa 1992). Staiger and Wolak (1994) found that imports fall dramatically during the investigation period regardless of the case's ultimate outcome. Legal scholars often refer to this as the 'harassment' effect of an AD investigation. Using extremely disaggregated trade data, Blonigen and Prusa (2003) found that AD actions have a very large effect on imports. When an AD dispute results in duties or is settled, on average import quantities fall by almost 70 per cent and import prices rise by more than 30 per cent. Interestingly, even when an AD dispute is ultimately rejected, the scrutiny has a significant impact on trade. The data reveal that even when the case is rejected imports fall by about 20 per cent. The Synthetic Fibre Rope case against Indian exporters investigated in the EC may illustrate this point further. In June 1997, an AD investigation concerning synthetic fibre ropes originating in India was terminated without imposition of measures. In July 1997, a new AD proceeding was initiated. The period of investigation in this proceeding was from 1 July 1996 to 31 May 1997, which coincided with the period of earlier proceeding. It was observed that even if no AD measure resulted from the earlier AD proceeding, import from the Indian exporter had declined by 8 per cent.

It is necessary to establish a mechanism to prevent such damages to developing countries. Following the existing literature, it is recommended here that consultation before anti-dumping investigation is procedurally practical. Under this system, developed countries should inform the developing country involved of the facts of violation of the anti-dumping laws and request them not to continue their violation prior to the initiation of investigations. As a response to the request from the complaining developed country, the developing country may correct its violation if it believes the claim of the complaining country to be reasonable. If there is no agreement reached by the two sides within a fixed period, the complaining country may set out investigation and follow what the authorities can do according to the existing procedure. This additional procedure will benefit both sides. Developing countries can get a chance to correct their aggressive conducts and possibly avoid an expensive lawsuit while developed countries can solve dumping problems more efficiently and effectively.

5.4.2 Conduct or Actions to be Undertaken by Developed Country Members for Developing Country Member

5.4.2.1 Institutional capacity

Greater emphasis needs to be placed on instruments that would strengthen developing countries' institutional capacity. The main differences between developed and developing countries lie not in the trade policies they should pursue but in the capacities of their institutions to pursue them. This means that S&D treatment provisions related to technical and

financial assistance as well as longer transition periods (which are linked to institutional reform and capacity building) should be emphasised. Explicit legally binding commitments regarding technical and financial assistance need to be obtained. The legal obligations assumed by developing countries in the WTO Agreements need to be balanced by legal commitments of the developed countries to fund the assistance needed to implement them.

5.4.2.2 Financial support

Legal fees should be conditionally shouldered by the losing developed countries and expertise support should be available when developing countries face anti-dumping cases. Developing countries have not been positively participating in anti-dumping lawsuits due to the heavy financial burden involved. If a developed country initiates an anti-dumping investigation against a developing country and finally the complaints are not justified, the legal fees in this case should be shouldered by the losing party. If this proposal is adopted in the next round of negotiation, developing countries are likely get rid of any hesitation to defend their lawful rights.

5.4.2.3 Professional training

The complex procedure of the anti-dumping regime, like other regimes under the WTO, makes it difficult for developing countries to use it both as a complaining party and as a defending party. These countries are typically lacking in human resource and financial support. Not surprisingly, their response rate is very low and their anti-dumping charges are always not justified according to the ADA 1994.

The provision of professional expertise is critical for developing countries to participate in anti-dumping actions. There should be a special training programme for developing countries. Expertise support should be made available especially when the developing countries face anti-dumping actions or intend to set up their own anti-dumping institutions.

5.4.2.4 Prioritisation

The overall objective of the international community should be a more meaningful and real provision of S&D treatment through appropriate instruments to countries that truly need it. Special and differential treatment may be linked to the level of development in the developing country. One possibility would be to extend S&D treatment for all low and lower middle income countries (based on the World Bank definition) while considering the rest on a case-by-case basis.

5.4.2.5 Legal assistance and dispute settlement

Most observers (see for instance, Busch 2000; Reinhardt 2001; Busch and Reinhardt 2002) note that developing countries have been more active in WTO dispute settlement. Of the ten AD dispute settlement cases so far, seven have been initiated at the request of developing countries. This greater participation is typically traced to the legal reforms ushered in by the Dispute Settlement Undertaking (DSU), notably the 'right' to a panel and automatic adoption of panel reports. However, empirical evidence (Busch and Reinhardt 2003 and references therein) suggests that developing countries have not won greater concessions (more favourable outcomes) under the WTO as compared to that under GATT. Developed country complainants have become significantly more likely to secure their desired outcomes under the WTO, while this is not true for the poor complainant countries. It is observed that the gap between developed and developing countries in winning concessions from a defendant is due to their differential rates of securing early settlement. In general, defendants tend to offer the greatest concessions in consultations or at the panel stage prior to a ruling. It is at this stage that developed countries extract concessions and developing countries do not. It is not surprising therefore that there are more panel disputes notably against developed countries. More attention needs to be directed at helping developing countries take more advantage of consultations as well as negotiations at the panel stage prior to a ruling. Since developing countries are relatively disadvantaged in this regard due to a lack of capacity, they require assistance prior to litigation. This also constitutes a constructive remedy.

6 Conclusion

Drafting of regulations is required to fill gaps in the Anti-dumping Agreement, and to address issues where the Agreement explicitly offers Members choices between different approaches. Several ambiguities in the legal provisions such as a number of allowable adjustments with limited interpretation, the use of constructed normal and export values, use of surrogate country methodology for non-market economies, and asymmetrical comparisons between the export and normal values introduce bias in favour of finding positive dumping margins. Determination of injury margin is subject to even more severe ambiguities and is highly discretionary. The administrative procedure is considered

highly confidential, increasing the risk of its misuse. It is therefore necessary to introduce reforms in the system to minimise misuse of the law. The procedure of determining dumping should be made more transparent to minimise the risk of positive bias in favour of finding dumping. In addition, the injury standard for anti-dumping cases should be improved. Procedural aspects need be addressed and S&D treatment provisions should be strengthened. To minimise the manipulation of the law for protectionist purpose and to limit the discretionary powers of the authorities, more explicit rules should be developed and definitions of different concepts used in the process should be given clearly.

References

Aggarwal, A. (2002), 'Anti-dumping Law and Practice: An Indian Perspective', Working Paper No. 85, Indian Council for Research on International Economic Relations, New Delhi.

—— (2003a) 'Anti-dumping: What Really Needs to be Done', *Economic and Political Weekly*, forthcoming.

—— (2003b), 'Patterns and Determinants of Anti-dumping: A Worldwide Perspective', Working Paper No. 113, Indian Council for Research on International Economic Relations, New Delhi.

Almstedt, K. and M. Norton (2000), 'China's Anti-dumping Laws and the WTO Anti-dumping Agreement, (including Comments on China's Early Enforcement of its Anti-dumping Laws', *Journal of World Trade*, Vol. 34, No. 6, pp. 75–113.

Anderson, James E. (1993), 'Domino Dumping II: Anti-dumping', *Journal of International Economics*, Vol. 35, Nos. 1–2, pp. 133–50.

Araujo Jr, J. T., C. Macario and K. Steinfatt (2001), 'Anti-dumping in the Americas', *Journal of World Trade*, Vol. 35, No. 4, pp. 555–74.

Baldwin, R. and M. O. Moore (1991), 'Administration of the Unfair Trade Laws by the Department of Commerce: A Political Economy Analysis', in R. Boltuck and R. Litan (eds), 'Down in the Dumps'—*Administration of U.S. Trade Remedy Law*, Washington, D.C.: Brookings Institution.

Bhansali, S. (2002), 'Anti-dumping: Some Suggestions', Paper presented at the EU–India Network on Trade and Development (EINSTAD) seminar held in Jaipur, organised by Consumer Unity & Trust Society, December.

Blonigen, B. (2003), US Anti-dumping database and links, <http://www.nber.org/antidump/>.

Blonigen, Bruce A. and Chad Bown (2003) 'Anti-dumping and Retaliation Threats', *Journal of International Economics*, Vol. 60, No. 2, pp. 249–73.

Blonigen, Bruce A. and Thomas J. Prusa (2003), 'Anti-dumping', in E. K. Choi and J. Harrigan (eds), *Handbook of International Trade*, Oxford, U.K. and Cambridge, MA: Blackwell Publishers.

Boltuck, R. (1991), 'Assessing the Effects on the Domestic Industry of Price Dumping', in P. K. M. Tharakan (ed.), *Policy Implications of Anti-dumping Measures*, Amsterdam: North Holland, pp. 99–141.

Busch, Marc (2000), 'Democracy Consultation and the Paneling of Disputes Under GATT', *Journal of Conflict Resolution*, Vol. 44, No. 4, pp. 425–46.

Busch, M. and E. Reinhardt (2002), 'Testing International Trade Law: Empirical studies of GATT Dispute Settlement', in Daniel M. Kennedy and J. D. Southwick (eds), *The Political Economy of International Trade Law: Essays in Honour of Robert Hudec*, New York: Cambridge University Press, pp. 457–81.

Didier, P. (2001), 'The WTO Anti-Dumping Code and EC Practice: Issues for Review in Trade Negotiations', *Journal of World Trade*, Vol. 35, No. 1, pp. 33–54.

Feinberg, Robert M. and Barry T. Hirsch (1989), 'Industry Rent Seeking and the Filing of "Unfair Trade" Complaints', *International Journal of Industrial Organization*, Vol. 7, No. 3, pp. 325–40.

- Finger, J. Michael, H. Keith Hall and Douglas R. Nelson (1982), 'The Political Economy of Administered Protection', *American Economic Review*, Vol. 72, No. 3, pp. 452–66.
- Finger, M. and K. C. Fung (1994), 'Will GATT Enforcement Control Anti-dumping?', *Journal of Economic Integration*, Vol. 9, pp. 198–213.
- Footer, M. (2001), 'Developing Country Practice in the Matter of WTO Dispute Settlement', *Journal of World Trade*, Vol. 35, No. 1, pp. 55–98.
- Gupta, P. and A. Panagariya (2001), 'Injury Investigation in Anti-dumping and the Super-Additivity Effect: A Theoretical Explanation', IMF Working Paper No. WP/01/110.
- Hansen, Wendy L. and Thomas J. Prusa (1996), 'Cumulation and ITC Decision Making: The Sum of the Parts is Greater than the Whole', *Economic Inquiry*, Vol. 34, No. 4, pp. 746–69.
- Hansen, W. L. and Thomas J. Prusa (1997) 'Economics and Politics: An Empirical Analysis of ITC Decision-Making', *Review of International Economics*, Vol. 5, No. 2, pp. 230–45.
- Hoekman, B. and P. Mavroidis (1996b), 'Dumping, Anti-dumping and Antitrust', *Journal of World Trade*, Vol. 30, No. 1, pp. 27–52.
- Hsu, L. (1998), 'The New Singapore Law on Anti-dumping and Countervailing Duties', *Journal of World Trade*, Vol. 32, No. 1, pp. 121–45.
- Jackson, John H. and Edwin A. Vermulst (1989), *Anti-dumping Law and Practice*, Ann Arbor, Michigan: University of Michigan Press.
- Kaplan, Seth (1991), 'Inquiry and Causation in USITC Anti-dumping Determinations: Five Recent Approaches', in P. K. M. Tharakan (ed.), *Policy Implication of Anti-dumping Measures*, Amsterdam, Oxford, Tokyo: North Holland, pp. 143–73.
- Karsenty, Guy and Sam Laird (1987), 'The GSP, Policy Options, and the New Round', *Weltwirtschaftliches Archiv*, Vol. 123, No. 3, pp. 262–95.
- Kufuor, K. O. (1998), 'The Developing Countries and the Shaping of GATT/WTO Anti-dumping Law', *Journal of World Trade*, Vol. 32, No. 6, pp. 167–96.
- Lindsey, Brink (2000), 'The US Anti-dumping Law: Rhetoric verses Reality', *Journal of World Trade*, Vol. 34, No. 1, pp. 1–38.
- McPhee, C. R. (1989), 'A Synthesis of the GSP Study Programme', Mimeo., Report prepared for the United Nations Conference on Trade and Development.
- Michalopoulos, Constantine (2000), 'Special and Differential Treatment for Developing Countries in GATT and the WTO', Policy Research Working Paper No. 2388, The World Bank, Washington, D.C.
- Moore, Michael O. (1992), 'Rules or Politics? An Empirical Analysis of ITC Anti-dumping Decisions', *Economic Enquiry*, Vol. 30, No. 3, pp. 449–66.
- Murray, Tracy and Donald J. Rousslang (1989), 'A Method for Estimating Injury Caused by Unfair Trade Practices', *International Review of Law and Economics*, Vol. 9, No. 2, pp. 149–64.
- Prusa, Thomas J. (1992), 'Why Are So Many Anti-dumping Petitions Withdrawn?' *Journal of International Economics*, Vol. 33, Nos. 1–2, pp. 1–20.
- Prusa, Thomas J. (1998), 'Cumulation and Anti-dumping: A Challenge to Competition', *World Economy*, Vol. 21, No. 8, pp. 1021–33.
- Reinhardt, E. (2001), 'Adjudication without Enforcement in GATT Disputes', *Journal of Conflict Resolution*, Vol. 45, No. 2, pp. 174–95.

Shin, H. J. (1998), 'Possible Instances of Predatory Pricing in Recent U.S. Anti-dumping Cases', in R. Z. Lawrence (ed.), *Brookings Trade Forum 1998*, Washington, D.C.: Brookings Institution, pp. 81–97.

Staiger, Robert W. and Frank A. Wolak (1994), 'Measuring Industry Specific Protection Anti-dumping in the United States', *Brookings Papers*, Washington, D.C., pp. 51–118.

Staiger, Robert W. and Frank A. Wolak (1989), 'Strategic Use of Anti-dumping Law to Enforce Tacit International Collusion', Working Paper No. 3016, National Bureau of Economic Research, Washington, D.C.

Tharakan, P. K. M. (ed.) (1991), *Policy Implication of Anti-dumping Measures*, Amsterdam, Oxford, Tokyo: North Holland.

—— (1994), 'Anti-dumping Policy and Practice of the European Union: An Overview', *Economisch en Sociaal Tijdschrift*, Vol. 44, No. 4, pp. 557–75.

—— (1995), 'Political Economy and Contingent Protection', *Economic Journal*, Vol. 105, No. 433, pp. 1550–64.

—— (1999), 'Is Anti-dumping Here to Stay?' *World Economy*, Vol. 22, No. 2, pp. 179–206.

—— (2000), 'Predatory Pricing and Anti-dumping', in G. Norman and J. F. Thisse (eds), *Market Structure and Competition Policy*, London: Cambridge University Press, pp. 71–95.

Tharakan, P. K. M., David Greenaway and Joe Tharakan (1998), 'Cumulation and Injury Determination of the European Community in Anti-dumping Cases', *Weltwirtschaftliches Archiv*, Vol. 134, No. 2, pp. 320–39.

Tharakan, P. K. M., and J. Waelbroeck (1994), 'Determinants of Anti-dumping and Countervailing Duty Decisions in the European Communities', in Mathias Dewatripont and Victor Ginsburgh (eds), *European Economic Integration: A Challenge in the Changing World*, Amsterdam, London, and Tokyo: North Holland, pp. 181–99.

Vermulst, E. (1997), 'Adopting and Implementing Anti-dumping Laws: Some Suggestions for Developing Countries', *Journal of World Trade*, Vol. 31, No. 2, pp. 5–24.

Vermulst, E. and P. Waer (1991), 'The calculation of injury margins in EC anti-dumping proceedings', *Journal of World Trade*, Vol. 25, No. 6, pp. 5–42.

Whalley, John (1999), 'Special and Differential Treatment in the Millennium Round', Working Paper No. 30/99, entre for the Study on Globalisation and Regionalisation, University of Warwick, May.

