UNCTAD/ITCD/TAB/10

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

POLICY ISSUES IN INTERNATIONAL TRADE AND COMMODITIES
STUDY SERIES No. 9

ANTI-DUMPING AND COUNTERVAILING PROCEDURES – USE OR ABUSE? IMPLICATIONS FOR DEVELOPING COUNTRIES

by

Inge Nora Neufeld

UNCTAD
Palais des Nations
1211 Geneva 10
Switzerland

UNITED NATIONS

New York and Geneva, 2001

NOTE

The views expressed in this study are those of the author and do not necessarily reflect the views of the United Nations.

The designations employed and the presentation of the material do not imply the expression of any opinion whatsoever on the part of the United Nations Secretariat concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Material in this publication may be freely quoted or reprinted, but acknowledgement is requested, together with a reference to the document number. A copy of the publication containing the quotation or reprint should be sent to the UNCTAD secretariat:

Chief
Trade Analysis Branch
Division on International Trade in Goods and Services, and Commodities
United Nations Conference on Trade and Development
Palais des Nations
CH – 1211 Geneva

UNCTAD/ITCD/TAB/10

UNITED NATIONS PUBLICATION
Sales No. E.01.II.D.6
ISBN 92-1-112516-2
ISSN 1607-8291

ABSTRACT

Antidumping (AD) and countervailing (CV) measures have become popular substitutes for traditional trade barriers, which are gradually being reduced in the course of regional and multilateral trade liberalization. As WTO legal, judicial instrument for private parties looking for government-enforced restrictions on competition, resort to AD and CV actions became a frequent tool to tackle problems arising in the context of free trade. Designed as a corrective mechanism, particularly antidumping has been hijacked for protectionist purposes. Gradually replacing conventional tariff-based trade barriers, the advancement of these practices jeopardizes the benefits of tariff reduction and growing economic integration.

This paper analyses distribution, duration and final outcomes of AD and CV investigations. It concludes that anti-dumping and countervailing actions have resulted in significant reductions in trade volumes and market shares. Developing countries establish their position as new players on the AD and CV field, but also continue to be a main target of those practices.

The paper also analyses the WTO Agreements themselves and finds that many of the negative effects of AD and CV measures are not adequately addressed. Loopholes and ambiguities in their provisions open doors for practices constituting abuse rather than use of those instruments. Reforms of the Agreements are urgently required. They should focus on clarifying certain provisions and on the introduction of effective substantial and differential treatment for developing countries.

ACKNOWLEDGEMENTS

I would like to thank Bijit Bora, Susan Teltscher and Xiaobing Tang for their valuable comments and suggestions. Hilary Budd and Raúl A. Torres from the WTO kindly provided me with data from WTO Rules Division Antidumping and Countervailing Measures Database. I am especially grateful to Erich Supper who encouraged me to do this study and supported me with his advice.

CONTENTS

Tables

Charts

I. INTRODUCTION

In the course of the gradual dismantling of tariffs and increased economic integration, non-tariff barriers to trade and competition have became relatively more important. Antidumping and countervailing duty actions turned into a preferred[1] means to impose restrictions on international trade, replacing existing limitations and/or creating additional obstacles. Contrary to their design as temporary means to offset unfair competition, these trade defence measures are in practice used as a long-term remedy for various economic difficulties. (Ab)used as a substitute for positive adjustment measures, AD and CV actions are also utilized to deal with structural problems.

Applied as an instrument for tackling the negative consequences of trade liberalization, anti-dumping and countervailing duty actions became a common tool to protect domestic producers from foreign competition. Faced with the need to protect sensitive domestic industries from increased imports or price slumps, countries often decide to use AD/CV duties instead of (the more "costly"[2]) safeguard measures provided for in the GATT 94.

Antidumping is, in practice, frequently utilized as a safeguard mechanism, which blurs the conceptual differences between these two instruments. The importance of this development has been demonstrated by the fact that 95 per cent of all antidumping cases are related to safeguard aspects with only 5 per cent being linked with anti-competitive practices.[3]

The economic rationale behind AD/CV action has been heavily disputed. Many economists consider the economic basis for these measures to be rather thin, stressing the fact that focusing on injury for certain sectors of the domestic industry, would neglect positive effects on national and consumer welfare.[4] In ignoring consumer benefits resulting from lower prices and the creation of more competitive market conditions, antidumping laws would protect competitors rather than competition. In fact, AD/CV legislation often reflects political rather than economic considerations. Arguments of *fair competition* are used by domestic industries to campaign against low-price imports. Antidumping action also ignores the fact that dumping might sometimes constitute a legitimate market strategy and may be necessary to meet (rather than hinder) competition.[5]

In discussing the justification of those measures, one has to keep in mind however, that the actual (ab)use of AD and CV provisions is sometimes not in tune with their genuine economic rationale. Antidumping actions are intended to (temporarily) counter unfair competition[6] arising from price discrimination between different geographical markets. They aim to remedy injury by foreign competitors to an importing country's industry from international price discrimination. Similarly, countervailing duties intend to offset unfair competition by subsidized (and therefore artificially low) export prices. Negative effects of antidumping and countervailing measures will therefore partly have to be attributed to deficiencies of the current legislation rather than the underlying concepts of the antidumping/ countervailing regimes themselves. It also has to be noticed that by serving as an "escape valve" for trade protection[7], the AD and CV regime helped international trade agreements attain a degree of acceptance they otherwise might not have enjoyed.

It should also be noted that the complete dismantling of the antidumping system might result in negative economic conse-

quences. Unrestricted price-undercutting risks driving enterprises out of their domestic market, even if they are not inefficient producers. If market segregation or product differentiation allows an exporting company to cover its fixed costs fully on the domestic market, it can export at marginal (variable) costs abroad and still improve profitability. Such competition may seriously jeopardize domestic companies in the importing country, even if they produce efficiently, as they have to recover their full costs and profit margins on their domestic market (and not just the variable costs plus any margin as the third country exporters). Similarly, marginal pricing may also prejudice competing third country exporters, which depend more heavily on the same import market. In such a case, efficiency is not enhanced: this kind of price competition does not lead to the elimination of inefficient enterprises, but simply favours companies, which pursue those types of pricing policies (and are able to do so in terms of economic conditions).[8] By preserving the ability of domestic producers to stay in business and offer domestic consumers steady sources for supply, antidumping action can in such cases ensure beneficial competition.[9]

The complete dismantling of the antidumping and countervailing systems is not necessarily in the public's interest. Therefore, reforms proposed in this paper do not campaign for the complete dismantling of the antidumping and countervailing systems but focus on their improvement and reform.

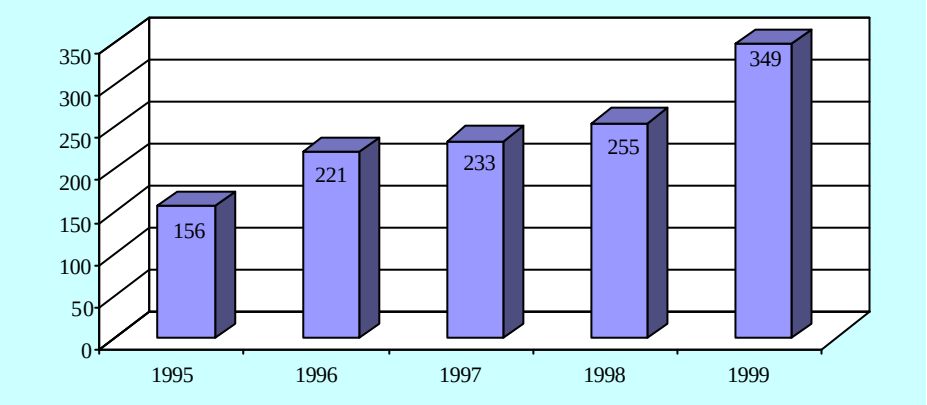
Section II of this paper will look at the use of AD and CV measures in the WTO era (which is post 1 January 1995). Distribution and duration of investigations, their final outcome, petitioners and targeted sectors will be scrutinized with a special focus on the situation of developing countries. Their particular vulnerability and the severe impact of AD and CV measures on their economies will be the subject of section III. Section IV focuses on deficiencies of the respective WTO Agreements as one of the sources of the existing problems. Proposals on how to overcome some of those shortcomings will be presented in section V.

II. THE USE OF AD AND CV PROCEDURES UNDER THE WTO AGREEMENTS

The WTO era saw a notable rise in AD and CV proceedings: antidumping investigations more than doubled and countervailing investigations increased six-fold (charts 1 and 2).[10]

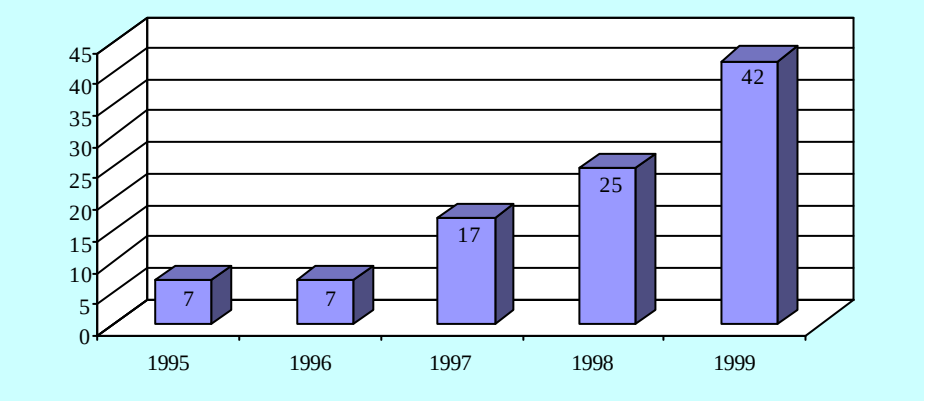
The increase in investigations was accompanied by growing active participation in AD and CV proceedings. The application of AD and CV procedures spread from few traditional[11] (developed country) to several new (often developing country) users such as Argentina, Brazil, India, the Republic of Korea, Mexico and South Africa. Many of these countries had recently undergone far-reaching trade liberalization as part of their market-oriented economic reforms.[12] Apart from trying to tackle some of the negative effects arising in the course of those reform programs, countries that appreciated their exchange rate regimes also seem to have used antidumping to limit current account deficits caused by external shocks.

Chart 1: Increase in AD investigations (1995-1999)



Source: WTO Rules Division Antidumping Measures Database.

Chart 2: Increase in CV investigations (1995-1999)



Source: WTO Rules Division Antidumping Measures Database.

A. Investigations[13]

1. Initiations

In the area of antidumping, the almost exclusive restriction of AD initiations to the *Big Four*[14] was replaced by a broadened field of applicants. Argentina, Brazil, India, Mexico and South Africa became active users, responsible for a significant number of new investigations. Together, they account for about one quarter of the AD investigations initiated since 1995. Traditional applicants like the *Big Four* continue to be responsible for a large share of investigations however, accounting for more than 40 per cent of all the antidumping investigations initiated under the new WTO Agreement.[15]

Countervailing investigations continue to be primarily launched by developed countries. The United States and the European Union initiated two thirds of all CV investigations.[16] Altogether, developed countries were behind more than 80 per cent of the overall number of CV investigations initiated in the WTO period. The domination of developed countries becomes even more apparent when compared to how many countries do not use CV procedures at all. Only 13 countries have been active users of countervailing actions, among them 7 developing countries.[17]

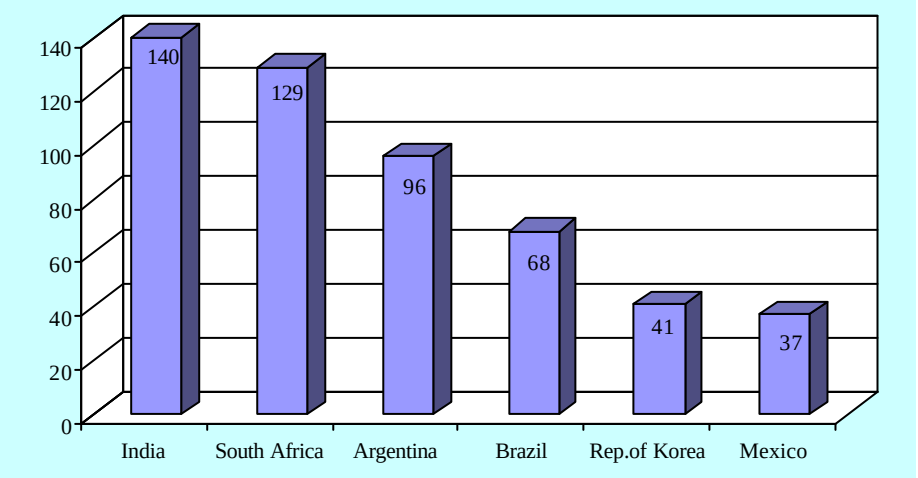
2. Targets

Developing countries are major targets of both antidumping and countervailing actions: 42 per cent of all AD and 63 per cent of all CV investigations[18] are directed against them. Compared to 5 years before the WTO Agreements came into force, the frequency for developing countries to be the target of AD/CV investigations even increased: between 1990–1994, 38 percent of all AD and 50 per cent of all CV investigations affected developing countries.

These figures also need to be interpreted against the background of almost exclusive targeting of developed countries during the 1980s. At that time, dumping and subsidy charges were predominantly made by a small group of developed countries and also addressed mainly other developed countries.[19] Less than 20 percent of all AD and only about 15 per cent of the CV investigations initiated during the 1980s were directed against developing countries. The frequency of developing countries being targeted by AD/CV actions has, therefore, increased significantly over the last decade.[20]

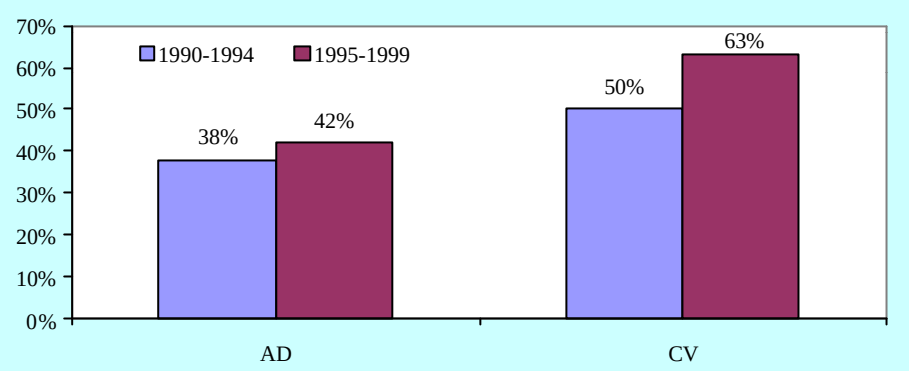
Many investigations were initiated in the wake of the financial crisis in Asia, Russia and Brazil. Low export prices due to significant currency devaluations and dropped com-

Chart 3: Number of AD investigations initiated by "New Users" (1995-1999)



Source: WTO Rules Division Antidumping Measures Database.

Chart 4: Share of investigations directed against developing countries



Source: WTO Rules Division Antidumping and Countervailing Measures Database.

modity prices led to an increase of investigations directed against exporters from those regions. Even though exports at decreased prices resulting from currency devaluations should not qualify as dumping according to the AD Agreement,[21] there has been a strong interaction between these currency movements and the rise in the investigations initiated. This development corresponds with the observation of increased use of AD/CV measures during times of economic downturn[22] and less frequent application in periods of economic prosperity.[23]

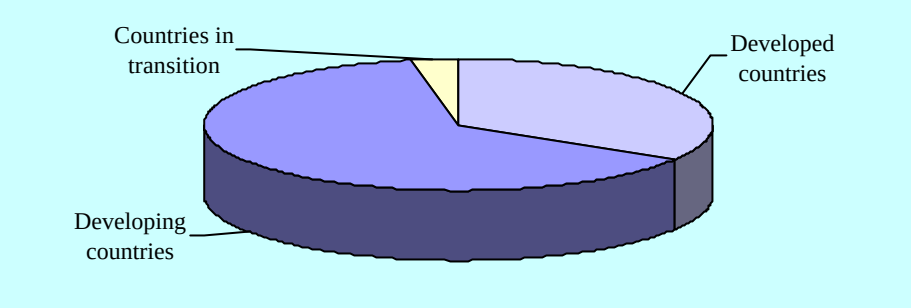
India is the country most frequently affected by both AD and CV measures. More than 15 per cent of all final measures imposed in AD and 21 per cent of all measures imposed in CV investigations were aimed at India.[24]

Countries with smaller import market shares are frequent subjects of AD investigations. This phenomenon is related to the practice of cumulation – one of the most controversial administrative practiques by which investigating authorities aggregate all like imports from every country under investigation, assessing their combined effect on the domestic industry. Legitimized by the Uruguay Round, this practice nevertheless remains questionable. Studies have shown that cumulation brings a significant affirmative-finding bias into injury determination by antidumping authorities: Studies[25] of United States investigations have revealed that cumulation changed the outcome from negative to affirmative in a large number of cases. According to an analysis done by Prusa, cumulation increased the probability of protection by about 30 per cent. An analysis of European Union cases disclosed an even stronger change in the probability of an affirmative decision as a consequence of cumulation: Tharakan, Greenaway and Tharakan (1998) showed that the practice of cumulation increases the likelihood of affirmative findings in European Union antidumping cases by 42 per cent. Without cumulation, the outcome would have changed from a positive to negative injury finding in 36.5 per cent of all cumulated cases. They also revealed that cumulation has particularly negative effects on countries with small import market shares. Enterprises with export volumes, which by themselves would not have been found sufficient to cause injury, get caught in AD investigations due to the practice of cumulation. Cumulation further contains a strong protectionist bias. Hansen and Prusa (1996) discovered that it leads to more multiple-country petitions by the domestic industry, which are particularly often directed against countries with small import market shares. All these facts are particularly relevant to developing countries, which tend to have small import market shares.

3. Final measures

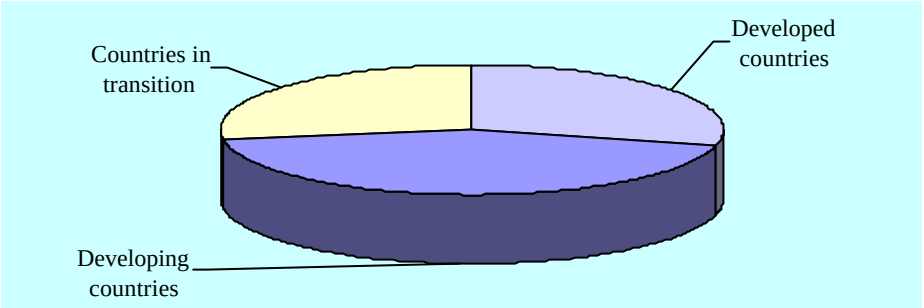
The United States and the European Union have been among the parties most frequently imposing final measures, accounting

Chart 5: Targets of countervailing investigations (1995-1999)



Source: WTO Rules Division Antidumping Measures Database.

Chart 6: Targets of antidumping investigations (1995-1999)



Source: WTO Rules Division Antidumping Measures Database.

for almost one third of all definitive measures for the reported initiations. China has been most often affected by final measures, being the target of such actions in 1/6 of all cases. Final measures have also frequently been imposed on Taiwan Province of China, the Republic of Korea, Brazil, India, the Russian Federation and Thailand (together accounting for over 25 per cent).

The domination of developed countries is even more apparent in the case of countervailing actions: 45 per cent of all final measures were imposed by the United States. Together with New Zealand (20 per cent) and the European Union (15 per cent) these three are responsible for 80 per cent of all final measures imposed in CV investigations initiated in the WTO era.

4. "Success ratio"

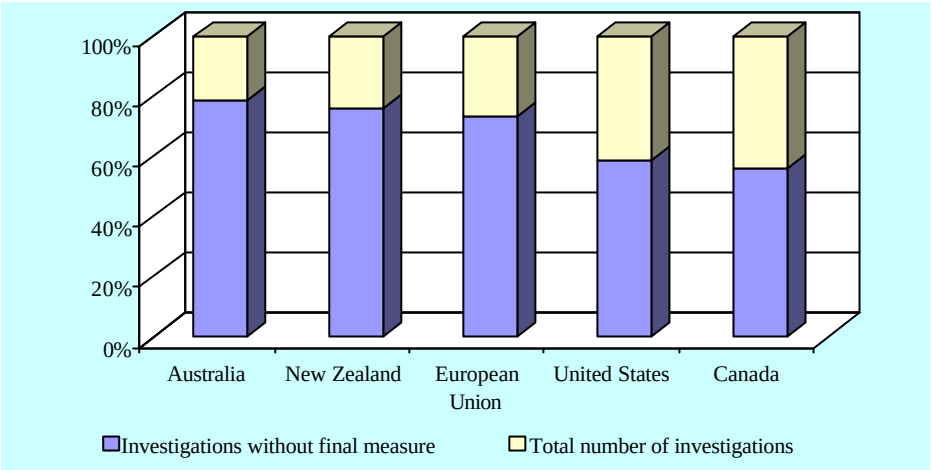
The success ratio of AD and CV investigations – defined as the composition of final measures – is a relatively small one:

Out of all antidumping investigations initiated in 1998, merely 11.6 per cent resulted in the imposition of final measures. The 1999 data shows an even lower "success-level": a final measure was only imposed in 5.4 per cent of all investigations opened during that period.[26] Approximately 36 per cent of all CV investigations initiated in 1998 and 14.3 per cent in 1999 ended with the levying of a final measure.

Broken down by country one finds that 79 per cent of all Australian and 70 per cent of New Zealand's AD investigations between 1995 and 1999[27] did not result in the imposition of a definitive duty or a price undertaking. The European Union's success ratio is higher: 37 per cent of all investigations ended without an AD measure. Some 27 per cent of all Canadian and 32 per cent of all United States investigations did not lead to an affirmative final determination.

In analysing the reasons for the large number of cases ending without a final measure one finds that lack of injury was the dominant factor in United States cases: 80 per cent

Chart 7: AD investigations terminated without imposition of a final measure



Source: WTO Rules Division Antidumping Measures Database.

of all investigations[28] with no final measure were terminated for that reason. No dumping was found in 6.6 per cent of all cases. Figures for the European Union show that no injury was determined in 22 per cent of all cases that ended without a final measure; the withdrawal of the case was responsible for terminating 26 per cent of the investigations. In 22 per cent of the cases the investigation had to be terminated due to the expiry of the deadline to impose a definitive measure.

Indication of a high number of weak[29] cases can also be found in the area of countervailing duty actions. Only 33 per cent of all Canadian, 46 percent of all European Union and 47 per cent of all United States CV investigations initiated between 1995–1999 resulted in the imposition of a final measure.

Together with the phenomenon of investigations initiated immediately after the termination of a previous one involving the same product (the so called *back-to-back investigations*),[30] the large number of unsuccessful procedures indicates that investigations are sometimes initiated even if the petitioners presume that these investigations will not lead to the imposition of a final measure.[31] It also demonstrates that access to AD and CV procedures is too easy. These actions appear to be a method of harassment, especially if there is an awareness that the mere opening of an investigation has a significant impact on the affected countries' imports.

5. Duration

Although AD and CV action is supposed to be purely temporary, it actually often turns into a long-term obstacle to trade and competition, aggravating the negative impact of these measures on developing countries. Lengthy terms cannot only be observed with regard of the average duration of investigations but especially when looking at the permanence of final measures imposed.

While most of the countries manage to complete their AD investigations within the maximum time limit[32] foreseen in the WTO Agreement, some parties (the European Union being the most prominent among them) exceed this limit to conclude their procedures. The European Union took an average of 589 days to complete their investigations[33] thereby exceeding the WTO Agreement's maximum time limit by 58 days. Some cases took up to three years to complete.[34] Some 15 per cent of all investigations initiated by the European Union had to be terminated unfinished due to expiry of the deadline to impose final measures, raising the question of these proceedings' meaning.

Table 1: United States AD – duties in force at 31.12.99

Product	Against	Date of imposition
Carbon Steel Wire Rod	Argentina	November 1984
Canned Bartlett Pears	Australia	March 1973
Elemental Sulphur	Canada	December 1973
Steel Jacks	Canada	September 1966
Barium Chloride	China	October 1984
Chloripicrin	China	March 1984
Cotton Shop Towels	China	October 1983
Grieg Polyester Cotton Print Cloth	China	September 1983
Potassium Permanganate	China	January 1984
Carbon Steel Plate	Taiwan Province of China	June 1979
Colour Television Receivers	Taiwan Province of China	April 1984
Large Power Transformers	France, Italy, Japan	June 1972
Bicycle Speedometers	Japan	November 1972
Fish Netting of Man-made Fibre	Japan	June 1972
Polychloroprene Rubber	Japan	December 1973
Steel Wire Rope	Japan	October 1973
Synthetic Methionine	Japan	July 1973
Television Receivers	Japan	March 1971
Colour Television Receivers	Republic of Korea	April 1984
Stainless Steel Plate	Sweden	June 1973

Source: Semi-annual report under Article 16.5 of the Agreement by the United States for the period 1 July–31 December 1999.

The longevity of the final AD measures imposed constitutes an even more severe problem – both in terms of frequency and negative impact. An analysis of the definitive antidumping duties in force as of 31 December 1999, shows the long average duration of these duties since their imposition:

In the United States the average duration of final AD duties amounted to more than 9 years, the oldest duty still being in force for more than 32 years, dating back to September 1966. Duties valid since the early 1970s can be found as well (see table 2). Over 90 per cent of all United States measures lasted more than five years.

Table 2: European Union AD – duties in force at 31.12.99

Product	Against	Date of first imposition
Ferro-silicon	Brazil	December 1987
Polyolefin woven sacks and bags	China	November 1990
Silicon metal	China	July 1990
Tungsten carbide and fused tungsten carbide	China	September 1990
Monosodium glutamate	Taiwan Province of China	June 1990
Synthetic textile fibres of polyester	Taiwan Province of China	December 1988
Electronic weighting scales	Japan	April 1986
Monosodium glutamate	Republic of Korea	June 1990
Television (colour)	Republic of Korea	April 1990
Polyester yarns	Turkey	December 1988
Ferro-silicon	Venezuela	February 1990

Source: Semi-annual report under Article 25.11 of the Agreement by the European Union for the period 1 July–31 December 1999 and various Official Journals.

Definitive duties remained in force for an average of 6 years in Canada with some of them being as old as 23 (or 15) years. The majority of these long duration duties were imposed on developing countries or countries in transition. About two thirds of all Canadian measures lasted longer than 5 years.

New Zealand's average duration of AD duties totals 6 years as well – the oldest duty being in force since 1988.[35] Duties of about 10 years of age can be found in various other cases as well – together they account for 27 per cent of all duties being currently in force in New Zealand. Australian duties being in force at the end of 1998 show an average duration of 4 years.

European Union duties currently in force have an average age of 3.5 years – some of them being as old as 11 or 12 years (see table 3).

The long duration is also a problem of countervailing actions. While CV investigations usually do not exceed the 18-month time limit,[36] orders finally imposed very often remain in effect for a long time. Both the United States' and the Canadian CV duties have an average life expectancy of about 10 years, followed by Australian duties with 7 years. Some of the United States duties currently in effect date from the 1970s (see table 4). Some 60 per cent of all Canadian CV orders are more than 14 years old (see table 5).[37]

The existence of these long-term orders demonstrates that the obligation to conduct 5-year reviews of AD/CV duties did not show the anticipated results. Introduced by the WTO Agreements, these "sunset provisions"[38] were expected to significantly reduce the number of duties stemming from the pre-Uruguay era. Five years later one might therefore legitimately pose the question why those reviews failed to prevent the long life of AD and DV duties. The extensive period envisaged for the completion of these reviews is one of the reasons. The fact

Table 3: United States countervailing orders in effect at 31.12.99 dating from the 1970s

Against	Product	In force since
Brazil	Castor Oil Products	16.03.76
Brazil	Cotton Yarn	15.03.77
European Union	Sugar	31.07.78
Sweden	Viscose Rayon Staple Fibre	15.05.79

Source: Semi-annual report under article 25.11 of the agreement by the United States for the period of 1 July-31 December 1999.

Table 4: Canadian countervailing duties in effect at 31.12.99 dating from the 1980s

Against	Product	In force since
Denmark	Canned Ham	07.08.84
European Union	Canned Pork Based Luncheon Meat	07.08.84
Netherlands	Canned Ham	07.08.84

Source: Semi-annual report under article 25.11 of the agreement by Canada for the period of 1 July–31 December 1999.

Table 5: Duty level of AD orders imposed by the United States

Product	Against	Duty level
Natural Bristle Paintbrushes and Brush Heads	China	352 %
Sebacid Acid	China	243* %
Carbon Steel Wire Rod	Argentina	119 %
Carbon Steel Wire Rope	Mexico	112 %

*"all others" rate. Individual duties range from 82–141 per cent in this case.

Source: US Federal Register (several issues from the 64 FR series 1999).

that reviews of transition orders[39] need not be completed until June 30, 2001 certainly contributed to the sustained life of many of the long-term orders. Other reasons for the sunset provisions falling short of expectations are related to the language of the Anti-dumping Agreement (ADA) and the GATT itself. Ambiguous definitions and gaps in their provisions led to controversial readings and disputable implementation rules at unilateral level. The room for manoeuvre opened by GATT and/or ADA regulations[40] was used by some countries to make far-reaching recourse to specific national implementation rules, which they introduced in addition to the rules of implementation set out in the ADA. The risks of extensive implementation rules at the domestic level can best be demonstrated when looking at the situation in the United States. In making use of loopholes left open by the WTO Agreement, Unites States guidelines interpreting ADA provisions created several presumptions in favour of the continuation of an order.

6. Duty level

The duty level is significant. Antidumping duties imposed in the European Union account for around 25 per cent on average; the percentage for the United States is even slightly higher with about 30–35 per cent. Individual orders often far exceed this percentage with AD duties of more than 100 (up to 350[41]) per cent (see tables 6 and 7). According to Prusa (1999) AD duties are now on average 10 to 20 times higher than the most favoured nation (MFN) level, with some of them exceeding the average MFN level more than 100 times.

Reference to constructed values is one of the main reasons for the high level of these duties. The use of pre-dumping prices against actual firm data on cost, as practiced by the United States, further contributes to this development. (In certain cases, reference has been made to prices or constructed costs calculated twenty years ago). The issue of constructed values is of particular relevance since it constitutes an often-used method to calculate normal value, leading to extremely high and severely contested dumping margins. Defined as full costs plus profits and often based on outdated information, constructed value determination frequently results in anticompetitive findings of dumping as well as in overstated dumping margins.

On the other hand, one also finds antidumping and countervailing duties of an extremely low level.[42] Duties hardly exceeding the de minimis threshold are no rarity, raising the question of the rationale behind these measures. For the United States, this development can be attributed to the policy of demanding at least three consecutive years of non-dumping as a condition for the lifting of an order. This leads to the continuation of existing measures even if the margin was determined to be at a very low or zero level.

B. Petitioners[43]

Antidumping cases are concentrated in a few industries. An analysis of the petitioners in AD investigations[44] shows that less than four industries lodged about two thirds of all cases opened in the United States and the European Union: metal industry, chemical industry, industry producing electrical equipment and (non electrical) machinery.

A look at the petitioners in antidumping cases reveals the extent to which antidumping

Table 6: Duty level of AD orders imposed by the European Union

Product	Against	Duty level
Television camera systems	Japan	200 %
Wolven polyolefin sacks	China	124 %

Source: Official Journal of the European Communities.

a few large firms are behind a high proportion of complaints. AD measures are part of their corporate strategy. An examination of the individual petitioning firms[45] within the industries where antidumping action is most frequent, reveals an even higher degree of concentration:[46] In the European Union, Hoechst AG has been a complainant in about 80 per cent of the investigations in the synthetic chemical industry. Montedison lodged complaints in about 20 per cent of the cases involving industrial chemicals. Bayer AG, ENI S.p.A., ICI Ltd. and Rhone-Poulenc have also been very frequent complainers.

Philips International and Thomson Consumer Electronics were complainants in more than two thirds of all investigations concerning television sets and radios. Arbed was involved in about one third of the steel cases.

Table 7: Final AD measures imposed, broken by HS section (01.01.95 - 31.12.99)

	HS section	Frequency (per cent of total final measures)
I.	Live animals; animal products	0.4
II.	Vegetable products	1.7
IV.	Prepared foodstuffs [a]	3.3
V	Mineral products	1.1
VI.	Products of the chemical or allied industries	9.6
VII.	Plastics and articles thereof; rubber and articles thereof	9.8
VIII.	Leather [b]	0.2
IX.	Wood [c]	2.8
X.	Pulp and paper [d]	4.1
XI.	Textiles and textile articles	5.7
XII.	Footwear [e]	1.5
XIII.	Glass and ceramics [f]	2.6
XV.	Base metals and articles of base metal	40.0
XVI.	Machinery and electrical equipment [g]	10.3
XVII.	Vehicles [h]	0.4
XVIII.	Various Instruments [i]	2.6
XX.	Miscellaneous manufactures articles	2.6
	Unclassifiable	0.4

Source: WTO Secretariat, Rules Division Antidumping Measures Database.

Notes:

[a] Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes.

[b] Raw hides and skins, leather, fur-skins and articles thereof; saddles and harnesses; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut).

[c] Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basket-ware and wickerwork.

[d] Pulp of wood or of other fibrous cellulose material; recovered (waste and scrap) paper of paperboard; paper and paperboard and articles thereof.

[e] Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of.

[f] Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware.

[g] Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, and parts and accessories of such articles.

[h] Vehicles, aircraft, vessels and associated transport equipment.

[i] Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof.

action has been captured by (private) companies. Contrary to the myth of antidumping laws defending the public interest, reality shows that

Figures for the United States are more difficult to obtain. Complaints are lodged by (ad hoc) committees[47] rather than single companies. Still, one can see that the situation is very much alike: A handful of big companies dominate a large proportion of all cases initiated. In the steel and other metal industries sector, complaints are almost exclusively lodged by enterprises including U.S Steel, Georgetown, Bethlehem Steel, Armco Steel, Atlantic Steel, or LTV Steel. The 1998/1999 major AD initiative launched by the main United States steel producers provided a recent example for this development.

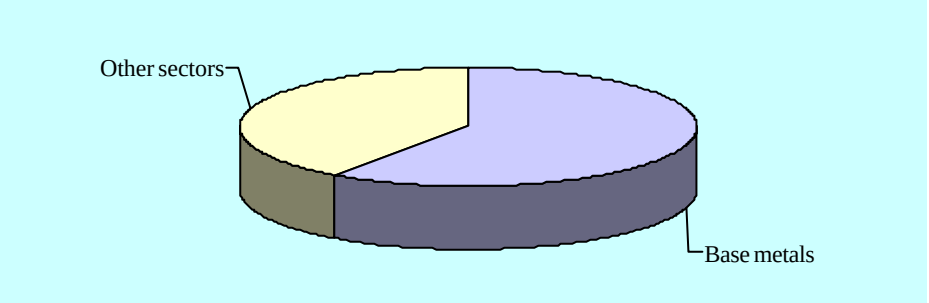
Hercules Steel Inc. and Du Pont are behind most cases in the chemical industry. Investigations may even continue if the original petitioner is disbanded due to a take-over or merger.[48]

C. Sectors

Analysis on a sectoral basis is confronted with difficulties. Problems arise from the fact that the semi-annual reports, serving as the main source[49] of information for this paper, do not indicate the tariff headings applicable to investigations. Classifications by sectors are therefore based on an allocation of AD investigations to sections in the Harmonized System (HS).[50]

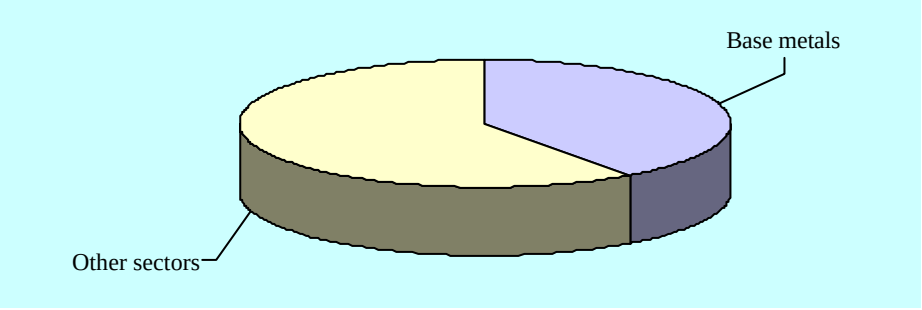
An inventory of all final measures imposed in antidumping investigations between 1995–1999 broken down by HS sections shows a high degree of concentration. Some 40 per cent of all measures targeted concern steel and other base metals. Together with chemicals, machinery and electrical equipment and plastics (each about 10 per cent) more than two thirds of all AD measures concentrate on those four sections.

Chart 8: Sectoral distribution of United States countervailing investigations (1995 - 1999)



Source: WTO Rules Division Antidumping Measures Database.

Chart 9: Sectoral distribution of European Union countervailing investigations (1995 - 1999)



Source: WTO Rules Division Antidumping Measures Database.

A breakdown of the distribution of antidumping actions by sectors and reporting countries shows an even higher degree of concentration: 50 per cent of all Canadian investigations and 57 per cent of their final measures[51] affected steel and other base metals. The sectoral distribution of investigations is equally concentrated in the United States: 49 per cent of all investigations between 1995–1998 involved steel, and other base metals – 46 per cent of the total amount of final measures affected this HS section. Steel and base metals are also the leading sector in the European Union, accounting for 30 per cent of all opened investigations and for 25 per cent of all final measures imposed from 1995–1998. The sectoral distribution of antidumping actions is highly concentrated in New Zealand as well with 35 per cent of the started investigations affecting glass and ceramics. Together with prepared foodstuffs these sections account for 86 per cent[52] of all final measures for the reported initiations. Similar data are reported from Australia with 32 per cent of all initiated investigations involving plastics.

Countervailing investigations concentrate on very few HS sections as well: 52 per cent of all cases affected base metals, 31 per cent involved prepared foodstuffs. Broken down by initiating country, the concentration is sometimes even greater (see charts 8 and 9).

One observation arising from this analysis is that AD and CV action seems to be more frequent with regard to products for which tariffs have been substantially lowered or entirely removed. Investigations involving chemicals,[53] cotton and polyester yarns[54] and steel products[55] are examples for this tendency. In the case of textiles, the phase-out of the Multifibre Arrangement (MFA)-type of quantitative restrictions[56] led to an increase of AD actions involving these products. The 1998 level of AD investigations covering textiles and clothing equated the overall amount for the three previous years.[57]

III. IMPACT ON DEVELOPING COUNTRIES

Antidumping and countervailing actions have a variety of negative implications. They can create substantial distortions with damaging effects on trade and competition.[58] The imposition (or even the mere threat) of a duty may lead exporting firms to change production and seek alternative sources of supply. The exclusive focus on certain domestic producers neglects costs imposed on consumers due to price increases.[59] Furthermore, the existence of these *trade defence measures* encourages rent-seeking behaviour by import-competing firms.[60]

Developing countries are especially hurt by these effects: apart from being most frequently affected by AD and CV measures, their enterprises are also particularly vulnerable to the adverse impact of those actions. As (frequently) infant entrants to the international market[61] and typically in an economically weak(er) situation, uncertainty and unpredictability in international trading relations have more severe effects on developing country industries than it is the case with well-established exporters. Lack of expertise, financial capacities and technical equipment makes it much more difficult for these companies to defend their interests in an AD investigation.[62] Furthermore, they are to a much lesser extent capable to absorb the economic effects caused by antidumping and countervailing actions.

The most negatively felt impact of AD and CV actions is their influence on exports. Already the process of opening an investigation can have negative effects on trade flows – regardless of whether a duty will finally be imposed.[63] The mere threat to open an investigation can induce a drop in exports.[64] Importers are scared off and seek alternative sources of supply. AD and CV procedures as currently applied can therefore result in undue losses for exporting enterprises irrespective of their final outcome. The situation is worsened by the possibility to levy duties retroactively: Article 10.8 of the WTO Agreement allows the retroactive imposition of a duty from the date of initiation of the investigation.[65]

Earlier studies have shown that imports declined significantly following the opening of an investigation: Messerlin's analysis of European Union imports revealed that import quantities had dropped by 18 per cent, one year after the initiation of an antidumping investigation.[66] Imports had (on average) dropped to 50 per cent of the pre-investigation levels five years after the opening of the investigation. A more recent work by the United States International Trade Commission (USITC) demonstrated that imports with high dumping margins suffered declines of 73 per cent following the imposition of a duty.[67] Latest surveys by Prusa (1999) on the impact of United States antidumping actions showed similar results. According to his studies, import quantities fell by an average 50-70 per cent over the first three years following the imposition of a final (affirmative) measure. Import prices were reported to have risen by more than 30 per cent during the same period. Rejected petitions were found to cause damage as well: in this case, import volumes dropped by 15–20 per cent.

A comparison of import levels for several products before and after the initiation of an AD investigation supports those results[68]. Export volumes of the country affected by an AD measure were often found to have significantly declined after the imposition of a duty. According to United States trade data,[69] Argentinean exports of Carbon Steel Wire Rod to the United States declined by more than 97

per cent following the issuance of the order.[70] Exports of the same product originating from Mexico dropped by 96 per cent, from 2,882 tons in the year preceding the imposition of the order to 112 tons the year after.[71] Another example of dramatic decline is the case of Chinese exports of Natural Bristle Paintbrushes and Brush Heads. United States imports of these products fell from 38,000,000 units in 1984 (the year before the AD petition was filed) to 1,225, 000 units) or 3.2 per cent of its pre-order levels in 1997.[72] In some cases, exports even ceased entirely after a duty had been imposed: United States imports of Chloropicrin from China, which amounted 2.45 million kilograms in the year prior to the imposition of the AD order, completely stopped one year after the duty entered into force.[73] In another case involving Aspirin from Turkey, export volumes were found to have dropped from 1.3 million pounds to 200,000 pounds in the year immediately following the imposition of the order and ceased completely after 3 years.[74] Findings of sharply declined or ceased imports can also be detected in numerous other cases such as *Steel Wire Rope from Japan*[75] and the Republic of Korea,[76] and *Roller Chain, Other Than Bicycle, from Japan.*[77]

Duties imposed on developing country exporters do not merely concern highly specialized commodities or products with small trade volumes. They are also directed against major developing country enterprises, which are often main suppliers to a region or even the world market such as Pohang Iron & Steel Corp., the world's second largest steel producer, or the Argentinean ASCOR, which turned into a primary multinational steel producer. One can observe a growing tendency of industrialized countries to turn AD and CV measures against these companies from developing countries. According to Prusa,[78] *"…it often seems that just when developing countries begin to efficiently operate and become more competitive in particular markets, industrialized countries shut down those precise markets…"*

Apart from the impact on exports, AD and CV action also have negative effects on competition. AD/CV measures are anti-competitive almost by definition since they contradict most of the very essential principles and objectives of competition. In protecting (certain) competitors rather than competition they bring benefits to some enterprises at the expense of the consumers.[79] Price increases on imports as well as on home market products following the imposition of a duty impose unnecessary costs on consumers.[80]

The argument favouring anti-dumping action as a means to prevent anti-competitive business practices, falls short when looking at the actual frequency of such scenarios. According to the OECD study mentioned above, only 5 per cent of all antidumping cases are actually related to anti-competitive practices such as predatory or strategic pricing. In reality, AD measures do not only often prevent competition from more competitive producers but certain forms of remedies actually favour the formation of international cartels. (See for example price undertakings cum quotas accepted in regard of Russian aluminium). Undertakings proved to have particular competition reducing effects. The obligation to observe a maximum export volume or the fixing of export prices of the subject merchandise at a level above the original price contradicts fundamental concepts of competition. In considering the anti-competitive effects of these measures one has to keep in mind that undertakings represent a very frequent action. Particularly the European Union is known to make extensive use of this measure to terminate AD proceedings. More than two thirds of their final antidumping decisions end with the acceptance of an undertaking.[81]

Finally, involvement in an AD/CV investigation is a very expensive undertaking.[82] Apart from significant legal costs[83] the opening of an investigation ties down exporting enterprises with uncertainty over the outcome, which can last for years. This makes it difficult for developing country exporters to equally defend their interests. Insufficient legal and financial resources do not only restrict the ca-

pacity to contest the legitimacy and legality of an AD or CV action but it also limits developing countries possibilities to become active users of these instruments themselves. This is one of the reasons why so many developing countries[84] do not actively engage in AD/CV procedures and do not even adopt their own national legislation.

These disadvantages have led to growing frustration among developing countries. AD and CV measures are perceived as *"measures (that) are being virtually used as weapons by certain developed countries to deny access to the products of developing countries."*[85] Anxiety was expressed that *"The misuse of the(se) trade remedy measures (…) by some developed countries against exporters originating from developing countries (…) has become a significant barrier to the exports of developing countries."*[86] Even developed countries[87] are *"…concerned that easy access to and increased dependence on such trade remedies will nullify the benefits of tariff reductions."*

IV. PROBLEMS ARISING FROM THE WTO AGREEMENTS

While recognizing those intrinsic problems of the AD/CV regime, it is important to note that some of the negative consequences have to be attributed to deficiencies of the current legislation rather than the underlying concepts themselves. Although the WTO Agreements are an improvement over pre-Uruguay regulations in terms of predictability and transparency,[88] many problems remain. Among the most problematical issues of the ADA are:

A. The injury concept

The ADA defines injury as that caused to certain sectors of the domestic industry, without consideration of national or consumer welfare aspects. The exclusive focus on profit-loss to some domestic producers neglects the economy-wide impact of AD action. Furthermore, the standards set out for the determination of injury are imprecise – important parameters such as changes in commercial prices, currency devaluations or rising competition from other domestic sources are not sufficiently considered.

B. Non-enterprise specific approach

The AD code does not base its determinations on an enterprise specific approach, buts allows them to be made on a countrywide basis. Discriminating against individual exporters and sometimes ignoring best information available, the ADA contradicts the fundamental concept of AD legislation to counter unfair trade practices by specific exporters.

C. Cost and constructed value determination

The ADA tolerates the use of pre-dumping prices against actual company data on cost, referring to the still tolerated *"best information available"* principle. This often leads to overstated and questionable AD duties. Defined as full costs plus profits and often based on outdated information, constructed value determination often results in artificially high dumping margins.

D. Cumulation

Legitimized under the new Agreement, this practice permits investigating administrative authorities to aggregate all like imports from every country under investigation and to assess their combined impact on the domestic industry. This leads to a significantly higher probability of affirmative injury (and following dumping) findings. Furthermore, experience has shown[89] that cumulation leads to more multiple petition filings with smaller enterprises being named most often.

E. Duration

Duration is a problem both in terms of the length of the investigations and in regard to an average duties' life expectancy. While the introduction of the 18-month limit[90] improved the situation concerning the first issue, the long life of an average AD duty continues to cause severe distortions. Despite some progress, the sunset provisions[91] failed to prevent the existence of long-term orders.

F. Discretion

The ADA leaves a large degree of discretion to the domestic authorities in charge of the implementation of the Agreement. Insufficient disciplines, and ambiguous or imprecise formulations give rise to controversial interpretations at unilateral level. The dispute over the

application of the de minimis threshold[92] is one of the most prominent examples for difficulties arising from divergent readings. Equivocal provisions further let to fault implementation at national level. Some countries did not bring their domestic laws in line with WTO rules. This has also been acknowledged by a recent panel ruling,[93] recognizing the incompatibility of the United States Antidumping Act of 1916 with WTO law.

G. Standard of review

The current standard of review as contained in Article 17 of the ADA constitutes a further capital shortcoming of the Agreement. In restricting the role of the WTO Dispute Settlement Panel to purely determine whether *"the authorities' establishment of the facts was proper and the evaluation was unbiased and objective"*[94] the Agreement establishes a standard of review that is much more restrictive than the one normally granted to the Panel in the WTO. The different and confining review standard allows antidumping authorities of importing countries to escape closer scrutiny by the WTO Panel and represents an undue restraint that limits effective reviews. Being an integral part of the WTO, it is not clear why the Antidumping Agreement should have a different standard than the one applied to disputes under all other WTO Agreements.

H. Special and differential treatment

The ADA lacks effective granting of special and differential treatment to developing countries. Their specific situation is only insufficiently recognized in its Article 15. The statement that "*…special regard must be given by developed country Members to the special situation of developing country Members when considering the application of anti-dumping measures…*" is not accompanied by any concrete criteria for the granting of benefits. The request to explore "*…constructive remedies (…) before applying anti-dumping duties where they would affect the essential interests of developing country Members*" remained a best endeavour clause which has hardly ever been applied. In practice, alternatives to the immediate application of duties against exports from developing countries have rarely been explored. On the contrary, resort to antidumping measures has even increased over the last years.[95] Article 15s well-intended provisions became practically inoperative due to lacking preciseness.

I. Ambiguities

Loopholes and ambiguities contained in the Agreement created additional problems by opening the door for abuse. Imprecise regulations and ambiguous definitions of the ADA and the Subsidies and Countervailing Measures Agreement (SCM) (which by themselves have to be considered an interpretation of the GATT 94) led to controversial readings at unilateral level. The "interpretation of the interpretation" in national regulations and administrative guidelines sometimes resulted in faulty implementation. Prominent examples for disputes arising from divergent interpretations are the question on the applicability of the de minimis threshold to review cases and the disagreement over the WTO compatibility of the Unites States Anti-Dumping Act of 1916. Other controversies arose over the interpretation of Article 7 (4) ADA's maximum duration for provisional measures.[96]

J. Access

Finally, access to AD measures has proven to be too easy. Low thresholds and insufficient disciplines allowed the initiation of a large number of unjustified cases, which never led to the imposition of a final measure. In some cases, investigations on the same product have been initiated immediately after the unsuccessful termination of a previous one. These *back-to-back investigations* rank among the practices most heavily criticized by developing countries.

Problems arising from the SCM primarily concern the categorisation of prohibited, actionable and non-actionable subsidies. By making subsidies for agriculture, development,

diversification and industry upgrading countervailable, the SCM bans exactly the type of subsidies primarily used by developing countries (while allowing subsidies preferably granted by developed countries such as subsidies granted for research, regional development or for the adoption of environmental standards). Problems further arise from the qualification for the list of countries exempted from the export subsidy prohibition.

In addition, some of the above-mentioned problems resulting from the ADA are of relevance for the SCM as well. They concern the duration of the procedures, the longevity of imposed orders, tightened review procedures and the clarification of certain procedures.[97] Despite concrete forms of special and differential treatment for developing countries, some of these provisions need to be expanded. Among the most frequently requested changes are the raising of the de minimis thresholds of Articles 11 (9) and 27 (11) and a limitation of countervailing duty level.

V. REFORMS

The following reforms could help mitigate the negative impact of antidumping and countervailing measures:

1. The limitation of unjustified investigations is one of the most pressing issues. A stricter ex-ante test of injury should examine the impact of dumping/subsidization on the domestic industry as a condition for the opening of an investigation. The likelihood of a causal link between alleged injury and alleged dumping (or subsidization) should further be assessed already at that stage. For that purpose, it should be mandatory to consider the influence of factors such as the range of price fluctuations occurring in the normal course of business, changes of exchange rates or rising competition from other domestic sources. Quality differences between similar products must also be considered. Injury should further be determined on an enterprise specific basis, considering individual company data (where available).

2. In addition, the requirements for the initiation of an investigation ought to be tightened by raising the thresholds for the determination of de minimis dumping, subsidy margins and import shares. Following the mechanism set out in the Subsidies Agreement, the ADA should provide for different margins for developing and developed countries setting the de minimis margin for developing countries twice as high as for industrialized countries. Given the frequency and amplitudes of fluctuations of commercial market prices and currencies, a significant increase of the general price threshold would further be warranted for all countries.

3. To reduce undue recourse to AD and CV procedures, access to antidumping and countervailing action could further be limited by raising the "standing" threshold of Article 5.4.[98] The overall economic wide impact of AD/CV measures could be considered by the introduction of a public interest clause.[99]

4. To reduce the number of antidumping investigations, the harmful practice of cumulation should further be prohibited. Significantly changing the probability of affirmative injury findings and leading to more multiple petition filings with smaller enterprises being named more often, cumulation proved to be particularly injurious to developing countries, which tend to have small import market shares.

5. The possibility to open new investigations on the same product right after the termination of a previous one, should be restricted. This use of back-to-back investigations turned out to be particularly damaging for developing countries, which find their exports to main trading partners disturbed by such obstructive action. To limit this restrictive practice countries should not be allowed to initiate an investigation on the same product within one year from the date a previous investigation was finalised without the imposition of a duty.

6. The introduction of a financial impediment may also be considered to reduce the frequency of AD/CV investigations. Petitioners may be required to bear the defendants legal costs in case the petition turns out to be unjustified, or to deposit a guarantee, which is not reimbursed if the investigation found no dumping or injury. An exemption for small producers with limited financial resources could prevent a restriction of their ability to initiate investigations. In addition, small and medium-sized enterprises (SMEs) from developing

countries should be reimbursed for their legal costs resulting from unjustified AD or CV investigations opened against them without their default.

7. In order to reduce the negative effects of constructed value determination, recourse to this method should be limited. An amendment to Article 2.3 of the ADA should allow the use of constructed values only when prices of third country markets are not available.

8. High dumping and countervailing duties could be reduced by limiting the discretion of national authorities to impose duties up to the full amount of the dumping margin determined. Revised Articles 9.1 ADA and 19 (4) SCM could require a duty to be below the determined margin in case of it being sufficient to eliminate injury to the domestic industry.

9. The problem of ambiguous provisions[100] could be mitigated through the elaboration of common interpretation guidelines. This would help avoid multiple, differing readings at unilateral level. In order to ensure appropriate implementation, the mandate of the Ad Hoc Group on Implementation should further be expanded. Instead of being limited to issues of purely procedural nature, the Group should be entitled to deal with substantive questions such as the consistency of the notified national legislation with the ADA.

10. To cut down the life expectancy of AD/CV orders, a general time limit of 2-3 years should lead to their (automatic) lapse once they reach that stage. A re-imposition of a duty has to be subject to a complete new investigation examining all relevant factors from the beginning.

11. Granting competence to the WTO Panel to fully review the decisions of national AD authorities in substance would further provide a necessary counterbalance to the domestic authorities' exposure to strong pressure from both national industries and policymakers.

12. Finally, to more effectively grant special and differential treatment to developing countries, Article 15 of the ADA needs to be revised and made operational. Concretising its rather vague provisions, differential treatment could take the form of higher thresholds for developing countries. As is the case with the Subsidies Agreement, different thresholds for developed and developing countries could be introduced, granting higher[101] de minimis dumping margins and de minimis import shares for the latter. The present thresholds for de minimis margins should be raised for developed countries as well. Against the background of large daily fluctuations of commodity prices ad exchange rates, which surpass thresholds set out in the Agreement, injury can hardly objectively be determined on the basis of the current 1 per cent, 2 per cent or 3 per cent limits. It should be further made clear that the de minimis threshold does not only apply to newly initiated, but also to review cases.[102] Special and differential treatment could also be granted to developing countries by not applying Article 5.8s provision to regard collective imports as above de minimis if they exceed 7 per cent.

Special and differential treatment provisions of the SCM need to be extended as well: both Article 11 (9) and Article 27 (11) de minimis thresholds should be raised. The present 1 per cent ad valorem limit of Article 11 (9) should be to doubled for developing countries.[103] Similarly, the 3 per cent threshold for the imposition of countervailing duties against developing countries should also be increased.

VI. CONCLUSIONS

Antidumping and countervailing procedures continue to be (ab)used as a protectionist tool. Resort to AD/CV measures even increased due to the strengthening of the multilateral disciplines on safeguards, the prohibition of voluntary export restraints and the phasing out of the MFA quotas under the Textiles Agreement. As a quasi-judicial mechanism that can be invoked at individual enterprise level, (particularly) AD measures risk becoming a WTO-endorsed route for legitimized unilateral protection.

Although use of AD/CV instruments is no longer restricted to developed countries, they continue to dominate these measures. AD/CV measures applied by industrialized countries are precisely focused and target key sectors of specific importance (such as steel products in the case of the United States or textiles in the case of the European Union). AD and CV action is initiated by established producers to prevent new competitors from entering the market.[104] A small number of big companies from industrialized countries are responsible for a large proportion of all proceedings. Investigations are opened even if the outcome is likely to be negative. They are lengthy and cause serious damage to developing country exporters, who are the main targets of these trade restrictive practices. Once an order is imposed, it remains in force for a long time. A high percentage of orders date from the pre-Uruguay Round era, with some of these measures being in force for more than 20 years. Reviews are not very frequent, lengthy and suffer from differing and disputable unilateral interpretation of the provisions concerning the conduct of these reviews.

Many of the continued problems are related to the WTO Agreements. Despite some improvements, WTO regulations still allow AD and CV action to be (ab)used as an instrument to harass exporters and impede trade. (Ab)use of existing loopholes has been particularly attractive in times of tariff dismantling. Gaps in the Agreements gave room for multiple interpretations and controversial readings. Imprecise[105] or ambiguous regulations and a high degree of discretion for domestic administrative authorities further led to faulty implementation. The room for manoeuvre resulting from these gaps has been used by several countries to obtain protective cover. The advance of these restrictive business practices, which more and more replace traditional trade barriers, reduces competition and endangers gains from the dismantling of tariffs and growing economic integration. Particularly developing countries fear that the benefits of trade liberalization could be neutralised by such measures.

Developing countries regard the reform of AD and CV procedures a top priority issue for future multilateral trade negotiations. Their demands need to be addressed. Seattle has shown that developing countries are not willing to see their interests disregarded. Ignorance of their demands might not only severely damage the momentum of import liberalization in developing countries but also block consensus in a future round of multilateral trade negotiations.

A reform of the WTO Agreements is also in the interest of developed countries, which increasingly experience the negative effects of AD and CV action themselves.[106] Without improvements, *use* of AD and CV measures will continue to be associated with *abuse*.

ENDNOTES

1 The number of antidumping and countervailing duty investigations has risen significantly over the last years. (See section III.) Recourse to AD/CV measures holds various attractions for the domestic industry: AD and CV actions are a remedy expressly sanctioned by the WTO and allow for the levying of sector specific tariffs without palpably violating tariff bindings. (See Prusa, 1999). They further impose significant costs on the enterprises targeted. Once in force, they have a high probability to remain in place for a long time. In some countries, this preference is of particular significance: According to a World Bank study, *"Antidumping law has become the most important of the remedies in U.S. law to restrain imports."* (Ehrenhaft, Hindley, Michalopoulos and Winters, 1997). According to Hoekman and Mavroidis antidumping *"…is already the instrument of choice for industries seeking to reduce competition from imports…"* (Hoekman and Mavroidis, 1996). See also Prusa (1999).

2 Recourse to the safeguard provisions is limited by the requirement of these measures to be applied on a non-discriminatory basis. Import duties or quantitative restrictions can therefore only be used against imports from all countries. Furthermore, the injury has to be *serious*. (Art. 2, paragraph 1 and 2 of the WTO Agreement on Safeguards).

3 OECD (1995).

4 See for example Hoekman and Mavroidis (1996), stating that *"The protectionist biases that are inherent in the application of antidumping are well known, but economists have not had much impact on weakening its political support."* According to Tharakan (1999), *"…we are approaching a situation where one of the necessary conditions which could be advanced to 'justify' the use of antidumping actions is created by the existence of the anti-dumping mechanism itself!"* See also Hindley and Messerlin (1996) and Prusa (1999).

5 In addition one might also ask why antidumping law bans international price discrimination when price discrimination takes place in various contexts at domestic level.

6 An exporter should not be allowed to restrict competition in his home market and profit from the openness of other countries' markets by selling at lower prices there. Free trade ought to be accompanied by fair trade practices.

7 AD/CV actions are used to direct pressure exercised by protectionist groups into a limited number of sectors, in order to allow for liberalization to take place in other (broader) areas.

8 Because their home market is big enough to cover the fix costs, etc..

9 One should not forget however, that there are also alternative approaches, which could allow settling such problems by means other than antidumping measures. The country concerned could, for example, attempt negotiating with the exporting country a reduction of its import barriers allowing high domestic prices; or not to tolerate any longer anti-competitive business practices on its market having equivalent effects; or to remove other barriers, which allow market segregation.

10 Unless indicated otherwise, data presented in this paper draws on information contained in the semi-annual reports on antidumping/countervailing duty actions submitted by WTO member countries.

11 Countries are considered to be "traditional" users of antidumping measures if they have been involved in the conduct of such investigations since the 1970s. Australia, Canada, the European Community, New Zealand and the United States fall under this category.

12 The phenomenon of increased antidumping activity following trade liberalization could already be observed in Latin America during the 1990s.

13 Unless indicated otherwise, all data refer to the period 1.1.95 – 31.12.99.

14 Australia, Canada, the European Union and the United States are referred to as the *"Big Four"* since they were the major users of antidumping and countervailing duty actions in the 1980s, accounting for over 90 per cent of all such measures.

15 Source: WTO Rules Division Anti-dumping Measures Database. Unless indicated otherwise, all data refer to the period from 1.1.95-31.12.99.

16 Each of the respective countries was responsible for one third of all investigations. Source: WTO, Rules Division Countervailing Measures Database.

17 WTO Rules Division Countervailing Measures Database (as of July 2000).

18 In some cases, developing countries were the almost exclusive target of CV action: 94 per cent of CV investigations were directed against developing countries.

19 More than three quarters of the AD and about 80 per cent of all CV investigations aimed at developed countries. WTO Rules Division Countervailing Measures Database.

20 This increase was accompanied by growing anxiety by developing countries noting that *"Exports of developing countries have been facing more frequent antidumping and countervailing measures"* and expressing that the *"Frequent use … against exports from developing countries by major trading countries has become a matter of serious and growing concern."* Communication of Egypt to the WTO (WTO 1999 g)

21 See Article 2.4.1 Anti-dumping Agreement (ADA).

22 This phenomenon could particularly be observed at the end of the 1970s as well as towards the late 1980s.

23 As occurred during the mid-1980s and the end 1990s. This is consistent with the material injury requirement as set out in the WTO Agreement, since it is more likely that such injury will be caused and claimed during times of regression (rather than during periods of economic growth.)

24 WTO Rules Division Antidumping Measures and Countervailing Measures Database.

25 See Prusa (1998).

26 Source: WTO Rules Division Antidumping Measures Database.

27 Like in all other cases (unless indicated otherwise) the period investigated covers 01.01.95–31.12.99.

28 This data refers to all United States investigations initiated between 1995 and 1998.

29 "Weak" in the sense of the underlying facts not justifying the imposition of a final measure.

30 The most prominent cases were the European Union AD investigations on grey cotton fabrics against China, Egypt, India, Indonesia, Turkey and Pakistan as well as the repeated EU investigations on bed linen against Egypt, India and Pakistan. See also the United States steel cases. A recent WTO dispute panel has concluded that some aspects of the European Union's antidumping measures against imports of cotton-type bed linen from India violated the WTO Anti-Dumping Agreement. See WTO (2000b).

31 The abolition of those *back-to-back investigations* was one of the main demands vocalized by developing countries. See for example India's reform proposals submitted to the WTO (WTO 1999). Similar proposals were made by Cuba, the Dominican Republic, Egypt, El Salvador, Honduras, India, Indonesia, Malaysia, Nigeria, Pakistan, Sri Lanka and Uganda. See WTO (1999b)

32 Both the Antidumping and Subsidies Agreement foresee a period of 12 months for a review to be completed, without making it a strict obligatory time limit. Article 11.4 of the ADA as well as Article 21.4 of the SCM Agreement only state that *"Any such review shall be carried out expeditiously and shall normally be concluded within twelve months of the date of initiation of the review."* In practice, the duration of reviews often exceeds 12 months. This is particularly the case in the European Union. According to Article 5.10 *"Investigations shall, except in special circumstances, be concluded within one year after their initiation, and in no case more than 18 months."*

33 This number refers to all investigations opened and completed since the WTO Agreement entered into force.

34 See for example *certain footwear (leather uppers)* from China, Indonesia and Thailand (The investigations opened on the 22nd February 1995 and were not concluded until the 28th February 1998), *certain magnetic disks (3.5" microdisks)* from Canada, Macao and Thailand (06.04.95–04.03.98) or *glyphosate from China* (13.10.95–18.02.98).

35 It was imposed on 31.5.88.

36 Investigations are concluded after an average of 332 (European Union), 272 (United States), 202 (Canada), 179 (New Zealand) or 156 days (Australia).

37 It should be noted that the European Union makes it particularly difficult to reveal the actual duration of their duties in force. Unlike most other parties, stating the date of the original (first) imposition of the duty the European Union only refers to date and number of a certain edition of its Official Journal, thereby creating the misleading impression of that date corresponding with the day of (first) imposition of the duty. An examination of the mentioned Official Journal (going through numerous reviews and provisional measures) often reveals the fact that the actual date of imposition dates back much longer. Differences of up to 9 years can be found frequently.

38 Article 11.3 of the ADA states that *"any definitive antidumping duty shall be terminated on a date not later than five years from its imposition..."* unless an (obligatory) review finds that the expiry of the duty would be likely to lead to continued or recurred dumping.

[39] Transition orders are the antidumping and countervailing duties (and suspended investigations) in effect on January 1, 1995.

[40] Article 11.3 of the ADA is particularly troublesome since it leaves the possibility for countries to restrict the application of various provisions of the ADA to reviews of measures taken under the new Agreement.

[41] 64 FR 25011, May 10, 1999.

[42] See for example the 2.72 per cent duty imposed on Sonar Cotton Mills in *Cotton Shop Towels From Bangladesh*, the 2.90 per cent "all others" order in *Sorbitol From France*, or the 2.6 per cent duty imposed on two Indonesian companies in *Certain footwear with uppers of leather or plastics originating in the People's Republic of China.*

[43] Due to the very time-intensive undertaking of a petitioner analysis, the examination is restricted to antidumping procedures.

[44] The analysis covers all investigations, which led to the imposition of a duty currently still in force.

[45] The names of the companies quoted in this paper are the ones in force by the time those enterprises lodged the complaint. For reasons of consistency and comparability changes in names (caused by mergers, restructuring etc.) were not considered.

[46] Notes of initiations of AD investigations published in the Official Journal and the Federal Register.

[47] Such as the Ad Hoc Committee of Domestic Nitrogen Producers *(Urea from the German Democratic Republic)*, the Committee on Pipe and Tube Imports (*Certain Welded Carbon Steel Pipes and Tubes from Spain)*, the Committee of Domestic Steel Wire Rope and Specialty Cable Manufactures *(Carbon Steel Wire Rope from Mexico)* or the World Trade Committee, Parts Division, Electronic Industries Association *(Television receivers from Japan)*.

[48] See for example *Elemental Sulphur From Canada*, were the original petitioner Duval was later taken over by Freeport-McMoRan Sulphur Inc.

[49] Information provided by the WTO Rules Division Antidumping Measures Database is also based on these reports.

[50] Due to the inability to classify about 1 per cent of the total number of investigations, all following calculations should be regarded as approximations.

[51] "Final measure" means that the final determination has been affirmative. The number refers to the reported initiation for this period.

[52] Each section accounts for 43 per cent.

[53] Such as the United States AD investigation on persulfates against China, on polyvinyl alcohol against China, The Taiwan Province of China, Japan and the Republic of Korea, sodium azide against Japan or the European Union investigations on monosodium glutamate against Brazil and Viet Nam, furfuryl alcohol against China, the United States and Thailand, on Glyphospate against China, thiourea dioxide against China or polysulphide polymers against the United States.

[54] Like the European Union investigations on unbleached cotton fabrics against China, India, Indonesia, Pakistan and Turkey, on bed linen (cotton type) from Egypt, India and Pakistan, on polyester textured filament yarn from India and the Republic of Korea, on synthetic fibre ropes from India and the Republic of Korea, on polyester yarns from Malaysia or the United States investigations on spun rayon singles yarn from Austria.

[55] Some of the numerous examples in this sector are the United States investigations on stainless steel plate in coils from Belgium, Canada, Taiwan Province of China, Italy, the Republic of Korea and South Africa, on steel wire rod from Canada, Germany, Trinidad & Tobago and Venezuela, on Hot-Rolled flat-rolled carbon quality steel products from Brazil and the Russian Federation, stainless steel round wire from Canada, Taiwan Province of China, India, Japan, the Republic of Korea and Spain, on cut-to-length-carbon steel plate from China, Russian Federation, South Africa and Ukraine, on stainless steel wire rod from Taiwan Province of China, Germany, Italy, Japan, the Republic of Korea, Spain and Sweden. The European Union initiated investigations on steel wire ropes from China, India, the Republic of Korea, South Africa and Ukraine, on certain sections of iron or non- alloy steel from the Czech Republic and Hungary, stainless steel bright bars from India, stainless steel big wire from India and the Republic of Korea, narrow steel strips from the Russian Federation and stainless steel heavy plates from Slovenia and South Africa.

[56] This is provided for under Art. 2 of the WTO Agreement on Textiles and Clothing.

[57] WTO Rules Division Antidumping Measures Database.

[58] In the case of antidumping, its harmful effects was even officially recognized by the United States stating that *"antidumping laws sometimes reduce competition and raise prices."* U.S. Government Printing Office (1994).

[59] See also the findings of an OECD study stating that AD measures applied to non-monopolizing dumping (constituting the majority of the cases) has the effect of protecting suppliers at the expense of consumers and competition. See OECD (1996).

60 See Hoekman and Mavroidis (1996).

61 Their links with importers and consumers are particularly fragile. Subsidies granted to these enterprises often serve as one method to compensate for special exogenous factors.

62 AD and CV investigations often demand the presentation of data not readily available in developing countries. Also - contrary to industrialized countries - developing countries receive only very little backing from their Governments.

63 See Prusa (1999) and Messerlin (1988).

64 According to a study done by Messerlin, EU import quantities declined by 5 per cent (on average) between the year before the initiation and the year after. See Messerlin (1988).

65 *"No duties shall be levied retroactively pursuant to paragraph 6, on products entered for consumption prior to the date of initiation of the investigation."*

66 Messerlin (1988).

67 USITC (1995). This study also showed that unit values increased by 32.7 per cent at the same time.

68 All of the following cases led to the imposition of a final measure.

69 U.S. Census Bureau IM146 Reports. See 64 FR 28975, May 28, 1999.

70 Export volumes dropped from 68,335 net tonnes in 1983, the year after the imposition of the duty, to 2,756 net tonnes in 1997.

71 U.S. Census Bureau trade statistics; 64 FR 42905, August 6, 1999.

72 U.S. Census Bureau trade statistics; 64 FR 25011, May 10, 1999.

73 Source: US IM 46 reports. See also 64 FR 11440, March 9, 1999.

74 U.S. Census Bureau IM146 Reports; 64 FR 36328, July 6, 1999.

75 64 FR 35626, July 1, 1999.

76 64 FR 43166, August 9, 1999.

77 64 FR 43166, August 9, 1999.

78 Prusa (1999).

79 It should be noted however, that in the case of non-predatory pricing, maximizing consumer welfare might not always maximize overall welfare - depending on whether the initial resource is distorted.

80 It has to be said however, that the imposition of a duty does not always mean that domestic producers and exporters raise their prices by the full amount of the duty. Trade diversion effects might keep domestic producers from raising their prices by the full amount of the dumping duty imposed.

81 According to Tharakan, 72 per cent of all decisions in favour of the petitioner take the form of undertakings. See Tharakan (1995).

82 The exporter's obligation to participate not only in the initial investigation but also in administrative reviews has been considered to be a "hidden tax". See Ehrenhaft, Hindley, Michalopoulos and Winters (1997).

83 Overall investigation costs of $ 1 million are no rarity in the United States.

84 Among the 137 WTO members, only 31 ever initiated a AD, and only 13 a CV investigation. About one half of all members are without domestic AD/CV legislation. Source: WTO Rules Division Database and the reports of the committees on antidumping and on subsidies and countervailing measures WTO (1999d, 1999e).

85 Communication of India to the WTO. WTO (1999f).

86 Communication of Egypt to the WTO. WTO (1999g).

87 Such as Japan. See WTO (1999h)

88 Important improvements in the area of antidumping concern new methods of margin calculations, tightened investigation procedures and the introduction of the "sunset clause". A better distinction between actionable and non-actionable subsidies was a progress achieved in the field of subsidies.

89 See Hansen and Prusa (1996).

90 See article 5.10 ADA.

91 Article 11.1 ADA.

92 The United States insisted on the restricted application of the lower 2 per cent de minimis threshold to newly initiated cases, while the Republic of Korea wanted Art. 5.8 to be applied also to review cases. The panel decided in favour of the United States (WTO 1999c).

93 The incompatibility of the US Antidumping Act of 1916 with WTO law has been recognized by a panel ruling in March 2000. See WTO (2000a).

94 Article 17.6 (i) ADA.

95 From 1995 to 1999, the number of AD investigations more than doubled. See also section III. Another indicator for the unwillingness of look for alternative remedies is the high number of provisional measures.

96 Mexico claimed that an extension beyond 6 months could be interpreted as being in conformity with "*the spirit of Article VI of the GATT 94.*" See the panel report on the Mexico Antidumping Investigation on High Fructose Corn Syrup from the United States (WTO 2000b).

97 Such as Article 27 (3) or Annex 1.

98 Or at least make sure that the current threshold is not weakened. Article 4.1 (i) states that producers related to exporters and importers are to be kept out of the process to determine the standing of the complainants, with the result that actual thresholds are often lower than foreseen in Article 5.4.

99 No duty could therefore be imposed without the finding that this measure would be in the public interest. Such a clause can already be found in Canada and the European Union. It has to be noted however, that experiences with such a public interest clause have only partly been successful. Nevertheless, an obligatory assessment of the economy-wide impact of AD/CV measures would help reduce their protectionist bias.

100 Such as the provisions concerning the de minimis threshold of dumping margins.

101 One could consider doubling the de minimis thresholds for developing countries.

102 The ambiguous/imprecise wording of the ADA allowed the United States to restrict the 2 per cent threshold to cases which had been initiated after the Agreement went into force. For details see the Panel Report WTO (1999b).

103 A subsidy investigation would therefore be immediately terminated when the subsidy given by a developing country does not exceed 2 per cent ad valorem.

104 Prominent cases in this respect are salmon case (United States versus Chile) or General Motors and Ford v. Hyundai.

105 The consequences of this inpreciseness becomes apparent when looking at some of the disputes brought in front of the WTO Dispute Settlement Panels (and the difficulties of Panels to find guidelines for their decisions unequivocally based on the Agreement's provisions).

106 Particularly the emergence of the new users in the area of antidumping made traditional players fear that those new users might employ this instrument the way they did. See for example the statement of the United States Trade Representative noting that future trade negotiations maintain *"antidumping laws as affective remedies against unfair trade practices"* while also "*prevent misuse of other countries' antidumping laws against U.S. exporters.*" (Inside U.S. Trade 1993)

REFERENCES

Bhala Raj (1995). "Rethinking antidumping", *George Washington Journal of International Law and Economics*, 29 (1) 1995, 1-144.

Bian, Jiang and Gaudet, Gérard (1997). "Antidumping Laws and Oligopolistic Trade", *Journal of Economic Integration*, 12(1), 62-86.

Bronckers, Marco C.E.J. (1996). "Rehabilitating antidumping and other trade remedies through cost-benefit analyses", *Journal of World Trade*, 30 (2), April, 5-37.

Ehrenhaft, Peter D., Hindley, Brian V., Michalopulos, C., and Winters, A., (1997). *Policies on Imports from Economies in Transition,* the World Bank.

Federal Register, *Notices of the Department of Commerce and the International Trade Commission on the initiation of antidumping and countervailing duty investigations, on preliminary and final results of such investigations and on preliminary and final results of sunset and administrative reviews;* various issues from 1966 – 1999.

Guasch, J. L., and Rajapatirana, S. (1998). *Antidumping and Competition Policies in Latin America and Caribbean: Total Strangers or Soul Mates,* World Bank Working Paper.

Gupta, R.K. (1996). *Anti-dumping and Countervailing Measures: The Complete Reference*, New Delhi, Thousand Oaks, California.

Hansen, W. L., and Prusa, T. J. (1996). "Cumulation and ITC Decision-Making: The sum of the parts is greater than the whole", *Economic Inquiry* 34 (4).

Hindley, Brian, and Messerlin, Patrick A. (1996). "Legalised Protectionism in the WTO: Antidumping and What to Do About It", *American Enterprise Institute*, Washington.

Hoekman, Bernard M., and Mavroidis, Petros C. (1996). "Dumping, antidumping and antitrust", *Journal of World Trade*, 30 (1), February, 27-52.

Horlick, Gary N. (1993). "How the GATT became protectionist: an analysis of the Uruguay Round draft final antidumping code", *Journal of World Trade*, 27 (5), Oct., 5-17.

Horlick, Gary N., and Shea, Eleanor C. (1995). "The World Trade Organization Antidumping Agreement", *Journal of World Trade*, 29 (1) Feb., 5-31.

Inside U.S. Trade (1993). *Letter from U.S Trade Representative Michael Kantor to Senator Ernest Hollings, 29 June 1993* (reprint), 2 July.

Kufour, Kofi Oteng (1998). "*The developing countries and the shaping of GATT/WTO antidumping law", Journal of World Trade*, 32 (6) Dec. 1998, 167-196.

Messerlin, P. A. (1988). "Antidumping Laws and Developing Countries", *PPR Working Paper*, The World Bank, 1988.

Messerlin, P.A. (1989). "The EC Antidumping Regulations: A First Economic Appraisal 1980–1985", *Weltwirtschaftliches Archiv*, 125(3), 563-587.

Miranda, Jorge (1996). "Should antidumping laws be dumped?, *Law and Policy in International Business,* 28 (1) Fall, 255-288.

Miranda, Jorge, Torres, Raùl A., Ruiz, Mario (1998). "The international use of antidumping: 1987-1997", *Journal of World Trade*, 32 (5), Oct., 5-71.

OECD, (1995), Committee on Competition Law and Policy, *Competition Policy and Antidumping,* DAFFE/CLP/WP1(95) 9.

Official Journal of the European Communities, *Commission and Council Regulations imposing or re-imposing provisional and definitive antidumping and countervailing duties;* various issues from 1986 – 1999.

Palmeter, David (1996). "A Commentary on the WTO Anti-dumping Code", *Journal of World Trade*, 30 (4), 43-69.

Pangratis, Angelos, and Vermulst, Edwin (1994). "Injury in anti-dumping proceedings: the need to look beyond the Uruguay Round results", *Journal of World Trade*, 28 (5), Oct., 61-96.

Prusa, Thomas J. (1998). "Cumulation and Anti-dumping: A Challenge to Competition", *Blackwell Publishers Ltd*, 1021-1033.

Prusa, Thomas J. (1999). "On the Spread and Impact of Antidumping", *NBER Working Paper Series*, Working Paper 7404, 1999.

Raafat, Feraidoon, and Salehizadeh, Mehdi (1995). "Dumping: The Influence of Currency Movements", *Journal of World Trade*, 29 (2), 181-194.

Steele, Keith (Editor) (1996). *Anti-dumping Under the WTO: A Comparative Review,* International Bar Association series.

Tharakan, P.K.M. (1999). "Is Anti-Dumping here to stay?, *Blackwell Publishers Ltd*, Oxford, (22), 179-206.

Tharakan, P.K.M. (1995). "Political economy and contingent protection", *Economic Journal*, vol. 105, 1550 - 1564.

Tharakan, P.K.M., Greenaway, David, and Tharakan, Joe (1998). "Cumulation and injury determination of the European Community in antidumping cases", *Weltwirtschaftliches Archiv*, Vol. 134 (2), 320-339.

United States Census Bureau trade statistics, various issues.

U.S. Government Printing Office (1994). *Economic Report of the President,* Washington, D.C.

USITC (1995). *The Economic Effects of Antidumping and Countervailing Duty Orders and Suspension Agreements,* Publication 2900, Washington DC: US International Trade Commission.

Vermulst, Edwin, and Waer, Paul, (1995), "The post-Uruguay Round EC anti-dumping regulation: after a pit stop, back in the race", *Journal of World Trade*, 29 (2), 53-76.

Waer, Paul, and Vermulst, Edwin (1994). "EC anti-dumping law and practice after the Uruguay

Round: a new lease of life?", *Journal of World Trade*, 28 (2) Apr., 5-21.

World Trade Organization, *Agreement on the Implementation of Article VI of the General Agreement of Tariffs and Trade 1994.*

World Trade Organization (1995). *Overview Of Developments in the International Trading Environment,* WTO, WT/TPR/OV/5.

World Trade Organization, Committee on Anti-Dumping Practices, *Semi-Annual Reports under Article 16.4 of the Agreement* from Australia, Canada, the European Communities, New Zealand and the United States; various issues from 1995 – 1999.

World Trade Organization, Committee on Subsidies and Countervailing Measures, *Semi-Annual Reports under Article 25.11 of the Agreement* from Australia, Canada, the European Communities, New Zealand and the United States; various issues from 1995 – 1999.

World Trade Organization (1999a). *General Council – Preparations for the 1999 Ministerial Conference* – Proposals Regarding the Anti-Dumping Agreement in terms of Paragraph 9(a)(i) of the Geneva Ministerial Declaration – Communication from India, June.

World Trade Organization (1999b). *General Council – Preparations for the 1999 Ministerial Conference* – Proposals Regarding the Anti-Dumping Agreement in terms of Paragraph 9(a)(i) of the Geneva Ministerial Declaration – Communication from Cuba, the Dominican Republic, Egypt, El Salvador, Honduras, India, Indonesia, Malaysia, Nigeria, Pakistan, Sri Lanka and Uganda.

World Trade Organization (1999c). *United States – Anti-dumping Duty on Dynamic Random Access Memory Semiconductors (DRAMS) of one Megabit or above from the Republic of Korea;* WT/DS99/R, 29 January.

World Trade Organization (1999d). *Report of the Committee on Subsidies and Countervailing Measures,* Geneva.

World Trade Organization (1999e). *Report of the Committee on Antidumping Measures,* Geneva.

World Trade Organization (1999f). *Preparations for the 1999 Ministerial Conference, Communication from India,* Geneva.

World Trade Organization (1999g). *Preparations for the 1999 Ministerial Conference, Communication from Egypt,* Geneva.

World Trade Organization (1999h). *Preparations for the 1999 Ministerial Conference, Communication from Japan,* Geneva.

World Trade Organization (2000a). United States – Anti-Dumping Act of 1916**,** Report of the Panel, WT/DS162/R, 29 May.

World Trade Organization (2000b). European Communities - Anti-dumping measures on imports of cotton-type bed-linen from India, Report of the Panel, WT/DS141/R, October.

UNCTAD Study Series on

POLICY ISSUES IN INTERNATIONAL TRADE AND COMMODITIES

No. 1 Erich Supper, **Is there effectively a level playing field for developing country exports?**, 2001.

No. 2 Arvind Pangariya, **E-commerce, WTO and developing countries**, 2000.

No. 3 Joseph Francois, **Assessing the results of general equilibrium studies of multilateral trade negotiations**, 2000.

No. 4 John Whalley, **What can the developing countries infer from the Uruguay Round models for future negotiations?**, 2000.

No. 5 Susan Teltscher, **Tariffs, taxes and electronic commerce: Revenue implications for developing countries**, 2000.

No. 6 Bijit Bora, Peter J. Lloyd, Mari Pangestu, **Industrial policy and the WTO**, 2000.

No. 7 Emilio J. Medina-Smith, **Is the export-led growth hypothesis valid for developing countries? A case study of Costa Rica,** 2001.

No. 8 Christopher Findlay, **Service sector reform and development strategies: Issues and research priorities,** 2001.

No. 9 Inge Nora Neufeld, **Anti-dumping and countervailing procedures – Use or abuse? Implications for developing countries**, 2001.