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Working Paper — Digitized Version

The world trading system: Recent trends

Kiel Working Paper, No. 646

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Suggested Citation: Funke, Norbert (1994) : The world trading system: Recent trends, Kiel Working Paper, No. 646, Kiel Institute of World Economics (IfW), Kiel

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Kiel Working Papers

Kiel Working Paper No. 646

The World Trading System: Recent Trends

by

Norbert Funke

August 1994



Institut für Weltwirtschaft an der Universität Kiel
The Kiel Institute of World Economics

ISSN 0342 - 0787

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Abstract

Tariffs no longer represent the most serious impediment to international trade. As the importance of tariffs in restricting free trade has been declining, non-tariff barriers are becoming increasingly important. The use of selected non-tariff barriers is analyzed, focusing on anti-dumping measures, voluntary export restraints, trade related investment measures, and trade related intellectual property rights. Coming multilateral negotiations will have to concentrate on non-tariff barriers. A first prerequisite for successful negotiations is to increase transparency of these instruments. Only if transparency is ensured, improved enforcement mechanisms can be implemented.

I. INTRODUCTION*

Many industrialized countries as well as an increasing number of developing countries have made substantial progress towards fostering allocative efficiency through sound domestic and foreign trade politics. Privatization and deregulation during the 1980s and the gradual reduction of tariffs in eight GATT rounds starting in 1947 aimed at gradually liberalizing the world economy. These measures, however, may only contribute to the development of a more liberalized environment, if new distortions are not increased at the same time. In this respect, concern has been expressed that the decreasing importance of tariffs has been accompanied by an increasing variety and number of non-tariff barriers (NTBs), especially those which are imposed if specific preconditions are met.¹ The achievements of multilateral negotiations and agreements might be offset by country-specific or industry-specific trade-restricting measures. The protection of some sectors might have been even increased despite the reduction in tariffs. If the rising importance of NTBs were in part triggered at circumventing GATT obligations, the current process of multilateral negotiations would have to be reviewed critically.

The purpose of this paper is to identify recent trends of protectionism in order to gain some insights for future trade policy negotiations. Following this introduction, Section 2 presents some stylized facts regarding world trade flows and the recent development of trade restrictions at a global level. The focus is on the developments of tariffs and NTBs, distinguishing between industrialized and developing countries. In Section 3, we look at the use of selected NTBs, concentrating on anti-dumping measures, voluntary export restraints, trade related investment measures, and trade related intellectual property rights.² In Section 4 the main findings are summarized and policy conclusions are drawn.

II. WORLD TRADE FLOWS, TARIFFS AND NON-TARIFF BARRIERS: A STYLIZED VIEW

During the last decades the volume of trade increased on average substantially faster than world production. At the same time, the share of exports and imports of total world trade

* This paper is part of a research project on "The Social Market Economy: Challenges and Conceptual Response". Financial support by the Bertelsmann Foundation, Heinz Nixdorf Foundation and the Ludwig Erhard Foundation is gratefully acknowledged. I thank Rolf J. Langhammer and Peter Nunnenkamp for helpful discussions.

¹ Recently, the term, "contingent protection" has become popular to describe the new developments in trade restricting practices [e.g. Rollo, Smith, 1993].

² See for a classification of NTBs e.g. Walter [1972] and for an analysis of barriers to trade in services e.g. Peat Marwick & Co. [1986].

flows from industrial countries and developing countries remained relatively stable since the 1960s. Within the group of developing countries the share of Asian countries increased, while the share of trade flows from African countries and the Western Hemisphere decreased (see Table 1).³

While trade flows have generally increased, a diverging pattern emerges with respect to trade regimes. The gradual reduction in tariffs in industrialized countries was on the one hand accompanied by more drastic unilateral liberalization of trade regimes in a number of developing countries. On the other hand, NTBs developed much less uniformly. This will be further substantiated in the following section.

In major industrialized countries tariffs have been gradually reduced and are now at historically low levels. Already before the conclusion of the Uruguay Round average tariffs in most sectors were relatively low (Table 2), e.g., the weighted average tariff amounted to 5.6 percent in the EC, to 5.4 percent in the US and 3.9 percent in Japan. These already low levels of tariff protection will be further reduced by approximately 40 percent in five steps within four years after the implementation of the World Trade Organisation (WTO) resulting in an unweighted average tariff rate of 3.6 percent in the EC and the US and 1.7 percent in Japan [Presse- und Informationsamt 1994, p. 52]. Behind the average rates regional disparities prevail. US import tariffs against the EU are supposed to fall by 50 percent; Japanese import tariffs even by 60 percent. The EU will reduce its tariff rates by approximately 33 percent, against the US by 50 percent. An above average reduction of tariffs is to be expected in those areas, where low tariff rates exist already [Langhammer, 1994].

A different trend in protection may be identified in developing countries. The gradual reduction in tariffs in industrialized countries within the framework of GATT is opposed to more ad hoc dismantling of tariffs in some developing countries during the last decade. A number of developing countries with tight or significant trade and capital controls liberalized their economies rather impressively within a short period of time. This holds for reductions in tariffs as well as reductions in quantitative restrictions (Table 3). However, these liberalization efforts are not binding as those within the framework of GATT. Some countries, having had tight controls before liberalizing, may now be classified as open, such as Argentina, Bolivia, and Ghana. Dramatic liberalization measures were also undertaken in former socialist economies. In Poland and former Czechoslovakia, foreign trade was largely liberalized in the beginning of the reform programs, starting in 1990 and 1991 respectively.

³ For a more detailed overview for the European Community, Japan, and the US see Appendix Ia-c. A slightly different pattern might emerge, if only non-fuel trade were analyzed because trade in fuels has been overproportionately regulated in many countries.

Table 1 - World Trade Flows: 1960-1992^a

	1960	1970	1980	1985	1988	1989	1990	1991	1992
	In Billions of US\$								
EXPORTS									
Total	129.9	282.1	1.875.7	1.812.7	2.690.1	2.909.3	3.329.8	3.448.7	3.687.0
Industrial Countries	79.9	213.0	1.303.3	1.278.2	1.953.5	2.112.8	2.437.8	2.474.0	2.594.5
Developing Countries	38.4	68.2	535.9	496.4	684.0	738.0	840.8	938.9	1.058.4
Africa	7.0	12.7	74.6	52.5	64.3	64.5	75.0	75.7	81.4
Asia	11.7	21.7	157.7	201.3	341.1	379.4	433.2	499.0	565.7
Asian NIE'S	2.6	8.8	68.2	94.6	190.8	213.4	245.4	290.4	323.3
Western Hemisphere	9.2	17.3	120.7	81.2	103.7	114.2	130.2	148.8	175.8
IMPORTS									
Total	139.1	297.0	1.928.1	1.890.4	2.771.6	3.001.3	3.436.4	3.570.8	3.846.1
Industrial Countries	88.3	229.2	1.272.2	1.307.1	2.010.8	2.155.8	2.483.2	2.557.9	2.732.7
Developing Countries	40.7	70.5	633.6	576.5	738.1	824.9	933.3	987.5	1.079.7
Africa	6.7	13.2	90.3	70.1	65.9	74.3	87.3	84.2	84.4
Asia	11.0	17.9	146.2	208.1	361.6	402.0	453.4	524.3	601.0
Asian NIE'S	1.2	5.6	48.5	100.3	196.6	209.1	225.4	255.6	283.8
Western Hemisphere	10.8	18.4	110.8	114.4	129.8	144.7	156.5	158.5	167.2
	In Percent of Total								
EXPORTS									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industrial Countries	61.5	75.5	69.5	70.5	72.6	72.6	73.2	71.7	70.4
Developing Countries	29.6	24.2	28.6	27.4	25.4	25.4	25.2	27.2	28.7
Africa	5.4	4.5	4.0	2.9	2.4	2.2	2.3	2.2	2.2
Asia	9.0	7.7	8.4	11.1	12.7	13.0	13.0	14.5	15.3
Asian NIE'S	2.0	3.1	3.6	5.2	7.1	7.3	7.4	8.4	8.8
Western Hemisphere	7.1	6.1	6.4	4.5	3.9	3.9	3.9	4.3	4.8
IMPORTS									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industrial Countries	63.4	77.2	66.0	69.1	72.6	71.8	72.3	71.6	71.1
Developing Countries	29.3	23.7	32.9	30.5	26.6	27.5	27.2	27.7	28.1
Africa	4.8	4.4	4.7	3.7	2.4	2.5	2.5	2.4	2.2
Asia	7.9	6.0	7.6	11.0	13.0	13.4	13.2	14.7	15.6
Asian NIE'S	0.9	1.9	2.5	5.3	7.1	7.0	6.6	7.2	7.4
Western Hemisphere	7.7	6.2	5.7	6.1	4.7	4.8	4.6	4.4	4.3

^aIndustrial countries and developing countries exports and imports do not add up to world total as a few countries, summarized in a category "country/area not specified", are not considered. The definition of the different groups of countries has been adjusted according to the 1992 definition.

Source: IMF, var. iss. - Own calculations.

Table 2 - Tariff Protection: Selected Sectors, 1988 (percent)

Tariff Study Category	EC			USA			Japan ^a	
	Average tariffs		Tariff range	Average tariffs		Tariff range	Average tariffs	Tariff range
	Simple	Weighted		Simple	Weighted		Simple	
Raw hides and skins, leather and furskins	3.1	2.5	0-10.0	3.9	5.5	0-14.0	13.9	0-60.0
Rubber	3.1	4.0	0-10.0				1.9	0-4.6
Wood and cork	4.4	2.0	0-10.0	3.6	4.1	0-20.0	4.1	0-20.0
Pulp, paper and paperboard	7.4	2.7	0-12.5	2.0	1.3	0-17.0	2.5	0-9.6
Textiles and clothing	10.0	7.6	0-17.0	12.5	16.9	0-42.4	9.0	0-20.0
Ores and metals	5.1	2.6	0-17.0	4.4	4.2	0-23.6	3.5	0-10.2
Coal and natural gas (excl. 09.03)	2.2	4.0	0-16.0	0.7	0.4	0-14.7	2.2	0-20.0
Chemicals	7.3	6.7	0-17.6	7.4	5.3	0-27.1	4.2	0-58.0
Non-electric machinery	4.1	4.4	0-12.0*	3.0	3.2	0-11.0	1.8	0-3.8
Electrical machines and apparatus	5.8	8.3	0-15.0*	3.8	3.6	0-25.0	0.8	n.a.
Transport equipment	7.0	7.3	0-22.0	4.6	3.7	0-25.0	1.6	n.a.
Professionals, scientific and controlling instruments; photographic app.; clocks and watches	5.4	6.5	0-11.0*	5.6	4.7	0-151.2	1.6	0-6.4
Footwear and travel goods	10.4	11.1	4.6-20.0	18.6	11.9	0-61.8	26.9	3.2-63.9
Photographic and cinematographic supplies	6.0	6.4	0-7.6	3.0	3.9	0-8.5		
Furniture	5.4	5.5	0-7.0	4.7	3.6	0-14.5	3.4	0-4.6
Musical instruments, sound recording or reproduction app.	5.7	7.3	0-14.0	3.9	4.1	0-13.0	1.5	n.a.
Toys	6.7	6.8	0-10.5	5.3	5.7	0-12.0	3.2	0-4.6
Works of art and collectors' pieces	0	0	0	0	0	0	0	0
Firearms, ammunition, tanks, other armored fighting vehicles	5.0	5.7	0-6.7	4.2	4.1	0-8.4	9.4	0-12.8
Office and stationery supplies	5.7	6.0	3.8-7.2	6.4	6.2	0-22.3	3.6	0-6.6
Manufactured articles, nes	6.4	6.4	0-11.0	6.6	5.5	0-57.6	4.2	0-39.6
Foodstuffs	14.5	9.8	0-30.0	8.7	4.5	0-338.0		
Oilseeds, fats and oils and their products	6.9	0.3	0-18.0	4.7	3.6	0-22.7	4.3	0-35.0
Cut flowers, plants, vegetable materials	8.4	4.4	0-24.0	2.5	3.6	0-11.4	2.9	0-27.5
Beverages and spirits	21.5	14.3	0-24.0	11.0	2.7	0-97.7	23.7	0-70.3
Fish, shellfish and products	12.2	10.3	0-30.0	3.2	0.9	0-35.0	7.7	0-15.0
Tobacco	26.4	9.4	26.0-117.0	96.0	13.8	0-1775.0	5.2	0-35.0

* Zero rates on certain products destined for use in civil aircraft. - ^aWeighted average not available.

Note: Weighted average tariffs were calculated using as weights the 1988 imports (under ad valorem tariffs) from m.f.n.-treated countries. Tariff ranges refer to the range of conventional tariffs.

Table 3 - Changes in Trade Regimes in Twelve Developing Countries

Country	Year ^a	Tariffs and surcharges ^b		Quantitative restrictions ^c	
		Statutory tariff (range in percent)	Charges	Main measure	Coverage (in percent)
Before liberalization					
<i>Tight control</i>					
Argentina	1986	0-100	0-14	Non-automatic licensing	60
Bolivia	1984	0-60	0-2	Non-automatic licensing	90
Ghana	1985	0-100	10-40	Non-automatic licensing	100
Morocco	1982	0-45	10-45	Non-automatic licensing	> 90
Nigeria	1985	5-100	0-5	FX allocation	92 ^e
Pakistan	1988	10-225	6-11	Non-automatic licensing	80 ^e
<i>Significant control</i>					
Brazil	1985	81 ^b	..	Non-automatic licensing	34 ^c
Indonesia	1984	0-60	0-40	Non-automatic licensing	32
Mexico	1984	0-100	3-19	Non-automatic licensing	38
<i>Relatively open</i>					
Korea	1984	26 ^b	..		15 ^e
Thailand	1981	0-100	..		6
<i>Open</i>					
Chile	1984	0-35	5-15		0
Current structure					
<i>Tight control</i>					
None of the twelve					
<i>Significant control</i>					
Morocco	1989	0-45	0-13	Non-automatic licensing	22 ^d
Nigeria	1989	0-200	7	Prohibitions	21 ^d
Pakistan	1991	0-95	0-15	Prohibitions	21 ^c
<i>Relatively open</i>					
Brazil	1991	0-65	..		1 ^d
Indonesia	1990	0-40	0-40		15 ^d
Thailand	1990	0-100	..		8 ^f
<i>Open</i>					
Argentina	1991	0-22	0-4		4
Bolivia	1988	5-10	1-2		2
Chile	1988	15 ^g	5-20		0
Ghana	1988	0-25	0-23		0
Korea	1990	1-50	..		4
Mexico	1988	0-20	..		2

^aWhen available, a range of tariffs was used. If not available, the unweighted average of statutory rates or an average effective rate was used. Very high rates that applied to only one or two items were disregarded. Charges were disregarded if they applied equally to domestic and imported goods. - ^bQRs include value limitations on imports through foreign exchange allocation or through the requirement that importers provide their own exchange. - ^cPercent of total imports covered by all QRs unless otherwise specified. - ^dIn percent of total tariff code items. - ^eIn percent of total tariff code items; the restricted list covers 283 tariff lines and the banned list 818 of a total of 5355. Reductions were undertaken in both categories after April 1991. - ^fIn percent of total tariff code items; refers to 1989. - ^gUnified tariff.

Source: OECD [1992, p. 36].

In 1990 the average tariff rate amounted to 3-4 percent in Poland, in former Czechoslovakia the average tariff rate amounted to 5.7 percent in 1992.⁴

The extent of protection by NTBs is much more difficult to measure, because of lack of transparency. Two alternative procedures have been developed: the incidence approach and the inventory approach [Langhammer, 1993]. The first approach tries to assess the effects of NTBs, distinguishing between sectoral and global as well as domestic and foreign effects. In the ideal case, a checklist, similar to the one presented by the OECD [1993], would serve as a reference framework. Although this procedure would theoretically allow for the identification of the main distortions arising from a NTB, it remains virtually impossible to quantify the effects. Beside the missing transparency of the measure itself, uncertainties about the spill-over effects render this task almost unmanageable.⁵

The inventory approach focuses on the frequency of NTBs. Besides an analysis of the development of the number of NTBs over time, the share of trade covered by those measures is sometimes used as an indicator for the trend in protection [see e.g. Laird, Yeats, 1990; Clark, 1990, 1992]. To assess the development of NTBs over time, the OECD has calculated an index of trade-coverage ratios (Table 4). The analysis reveals that NTBs have either persisted or have even increased. During the last decade, levels of NTB-protection remained roughly constant in Austria, Switzerland and Japan.⁶ In contrast, an increase of protection as measured by the share of trade covered by NTBs is in particular visible in Canada and the EC. Focusing on core NTBs, such as surcharges, variable levies and quantitative restrictions, the trade coverage ratios of NTBs increased in the EC, the US, and Finland. Looking at the major industrialized countries⁷ the import coverage ratio amounted to 18.2 percent percent for all NTBs in 1990, and to 18.5 percent for all items, excluding fuels [OECD, 1992, p. 40]. These results, however, may only be interpreted as first evidence with respect to the incidence of protection by NTBs. In particular, two problems remain: On the one hand the number of NTBs are not recorded officially, and on the other hand the indicator does not reveal whether these measures are binding. Despite these limitations, the analysis supports the view that NTBs have become increasingly important in terms of trade coverage and frequency. In some cases this is only true in relative terms, in other cases protection with NTBs even increased in absolute terms.

⁴ See for a further discussion Falk, Funke [1993].

⁵ See for a detailed analysis of conceptual problems related to the incidence approach Deardorff, Stern [1985].

⁶ One exception is New Zealand, where protection with the help of NTBs decreased significantly.

⁷ The United States, Japan, Canada, Australia, Austria, Finland, New Zealand, Norway, Sweden, Switzerland and the EC (twelve).

Table 4 - Trade Coverage Ratios^a of Selected Non-tariff Measures (NTMs)^b Applied by Selected OECD Countries^c in the Period 1981-90 (Index numbers: 1981 = 100)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
All sectors (SITC 0-9) all selected NTMs										
Austria	100.0	100.0	100.0	100.0	100.0	99.7	99.7	99.7	99.7	99.7
Canada	100.0	113.3	114.4	117.1	119.8	194.2	197.3	150.7	135.6	133.6
EC	100.0	104.7	109.9	111.0	114.5	114.2	116.8	114.9	113.9	113.4
Finland	100.0	101.9	101.8	101.8	101.6	101.6	101.7	101.7	101.7	101.7
Japan	100.0	100.0	100.1	100.1	100.1	97.9	97.9	98.1	98.2	98.0
New Zealand	100.0	100.0	100.1	100.1	72.0	70.8	64.7	47.9	32.4	25.1
Norway	100.0	101.0	100.3	96.0	95.7	95.4	95.4	95.3	95.3	88.1
Switzerland	100.0	100.5	100.5	101.3	101.3	101.3	101.3	101.3	101.3	101.3
United States	100.0	100.5	99.6	55.5	57.6	61.1	67.1	66.7	80.6	79.9
Total	100.0	102.1	103.4	83.5	85.5	88.0	91.7	90.0	95.7	95.1
Non-fuel trade, core measures										
Austria	100.0	100.0	100.0	100.0	100.0	99.6	99.6	99.6	99.6	99.6
Canada	100.0	114.6	114.6	114.6	107.6	107.6	110.1	80.2	68.1	68.1
EC	100.0	106.2	114.2	111.7	110.0	108.9	108.4	108.6	108.5	109.0
Finland	100.0	100.0	106.0	106.0	106.0	105.5	105.5	105.5	105.5	105.5
Japan	100.0	100.0	100.1	100.1	100.1	97.2	97.2	96.8	96.7	96.7
New Zealand	100.0	100.0	100.0	100.1	69.2	66.0	39.8	39.8	25.8	19.6
Norway	100.0	101.0	100.3	99.1	98.9	98.6	98.6	98.4	98.4	90.9
Switzerland	100.0	100.1	100.3	100.8	100.8	100.8	100.8	100.8	100.8	100.8
United States	100.0	96.3	88.5	97.7	100.0	100.1	106.5	110.7	110.4	106.0
Total	100.0	101.6	101.7	104.1	103.8	103.3	104.7	105.3	104.6	103.0

^aRatios have been computed using 1988 trade weights (except for the United States and the EC, for which 1989 trade weights were used). - ^bThe group "all selected non-tariff measures" includes certain para-tariff measures, surcharges, variable levies, anti-dumping and countervailing actions, quantitative restrictions (including prohibitions, quotas, non-automatic licensing, state monopolies, "voluntary" export restraints and restraints under MFA and similar textile arrangements), import surveillance, automatic licensing and price control measures. The group of "core" NTMs excludes from the group defined above, para-tariff measures, anti-dumping and countervailing actions, automatic licensing and important surveillance measures. - ^cThe United States, Japan, Canada, Austria, Finland, New Zealand, Norway, Switzerland and the EC (twelve).

Source: UNCTAD Data Base on Trade Control Measures, see OECD [1992, p. 38].

The stylized overview has shed some light on the contrasting trends in protection in the area of tariffs and NTBs. In the following, we will look at the development of selected NTBs, concentrating on anti-dumping measures, voluntary export self-restraints agreements (VERs), trade related investment measures, as well as trade related intellectual property rights. Special attention will be given to the EC policy.

III. RECENT DEVELOPMENTS OF SELECTED NON-TARIFF BARRIERS

III.1 Anti-dumping and countervailing actions

In principle, anti-dumping measures (ADM) and countervailing duties (CVD)⁸ are GATT consistent. According to Article VI of the GATT "the contracting parties recompose that dumping, by which products of one country are introduced into the commerce of another country at less than the normal value of the products, is to be condemned if it causes or threatens material injury to an established industry in the territory of a contracting party or materially retards the establishment of a domestic industry". On the size of the duty the same article stipulates "in order to offset or prevent dumping, a contracting party may levy on any dumped product an anti-dumping duty not greater in amount than the margin of dumping in respect of such countries".

In this section we will start with a brief overview of global developments and we will then focus on the two most prominent initiators: the European Community and the US. By looking at the product profile as well as the country profile of ADM, we will be able to identify the main targets of this measure.

Available data indicate a substantial increase of AD investigations since the mid-1980s of those 26 parties participating in the Anti-Dumping and Subsidies Agreement. Since the mid-1980s 1148 initiations of investigations have been reported. Compared to the 1985-86 period the total number of investigations increased by roughly one third from 178 to 237 in the 1991-92 period. The United States (300), Australia (282), and the European Communities (242) were the most active initiators of AD measures from the mid-1980s until 1992. A number of parties for which no initiations were reported in the mid-1980s were in 1992 also among the initiators of AD measures, including Mexico (25), New Zealand (13), India (5), Austria (4), Japan (3) and Brazil (9) [GATT, 1993b, p. 35].

While exporters of the European Community, Japan, and the United States were most frequently subject to initiations of AD-investigations, a number of developing countries and economies in transition were also involved considerably. AD measures are thus not limited to

⁸ In contrast to ADM triggered against "below-cost pricing" practices of companies, CVD are used against export subsidization policies of countries. In the following, the expression ADM includes CVD.

influence trade relations between industrial countries, but are becoming increasingly important in affecting trade flows between large industrial countries and developing countries (see Table 5). As the EC and the US are among the most active initiators of AD investigations, their country and product profile will be analyzed in greater depth.

Table 5 - Exporters Subject to Two or More Initiations of Anti-Dumping Investigations, 1985-92

	Total		Total
European Communities or its Member States	209	Venezuela	14
Japan	105	Hungary	12
United States	100	Malaysia	12
Korea, Rep.	78	Austria	11
China	69	Indonesia	9
Chinese Taipei	68	Israel	8
Brazil	54	Norway	6
Yugoslavia (former)	31	South Africa	6
Canada	25	Colombia	5
Poland	24	Philippines	5
Czech and Slovak Fed. Rep.	23	Saudi Arabia	5
Romania	23	Bulgaria	4
Hong Kong	22	Finland	4
Mexico	22	New Zealand	4
Turkey	22	Bangladesh	3
Thailand	19	Egypt	3
German Dem. Rep. (former)	18	Chile	3
Singapore	18	Australia	2
Argentina	17	Kazakhstan	2
India	17	Russian Federation	2
USSR (former)	16	Trinidad und Tobago	2
Sweden	15	Ukraine	2

Notes:

1. The reporting period covers 1 July 1985 to 30 June 1992.
2. Initiations concerning exporters of the European Communities and its member States are reported as notified. Mexico notified investigations for 1988-89 on certain products imported from the European Communities, while subsequent notifications refer to the member State of origin of the exporting firms subject to the investigation.
3. Countries subject to one initiation are Albania, Algeria, Armenia, Azerbaijan, Belarus, Costa Rica, Ecuador, El Salvador, Georgia, Iceland, Islamic Rep. of Iran, Kenya, Kuwait, Kyrgyzstan, Libyan Arab Jamahariya, Macau, Moldova, Pakistan, Papua New Guinea, Peru, Qatar, Switzerland, Tajikistan, Tunisia, Turkmenistan, Uruguay, Uzbekistan, Zimbabwe.

Source: GATT [1993b, p. 36].

Approximately one fifth of all AD initiations since 1985 originated in the EC. Although the number of new investigations has recently declined from 43 to 13 in 1992 the Community

continues to make frequent use of AD measures. The recent decline does not necessarily indicate a new trend towards a less restrictive policy, as the number of measures already fluctuated substantially during the 1980s (Table 6). The regional focus was on Asia - in particular with 20 and 19 measures in force towards China and Japan, respectively - as well as on Eastern and Central Europe. Most actions were taken in the area of chemicals, fertilizers, base metals, metal semi-conductors as well as textiles (Table 7). Thus, besides Japan, developing countries and economies in transition are the main targets of the EC AD-policy.

Table 6 - Anti-Dumping Actions by the EC, January 1985 to June 1992

	1985	1986	1987	1988	1989	1990	1991	1992
Complaints	62	46	75	67	38	n.a.	n.a.	n.a.
Initiations	36	24	39	40	27	43	20	13
Measures taken	12	29	16	18	15	27	22	11
def. duties	8	4	8	18	10	18	19	10
price undert.	4	25	8	0	5	9	3	1
Findings of no dumping	2	4	4	0	0	0	1	1
Findings of no injury	15	7	4	5	5	13	6	5
Measures in force	191	207	188	152	140	139	142	144

Source: GATT [1993d, Vol. I, p. 76].

Table 7 - Country and Product Profile of Anti-dumping Measures: EC

Country Profile	March 1992	Product Profile	March 1992
Eastern and Central Europe	44	Chemicals, fertilizers	59
EFTA	8	Base metals, metal semi-conductors	23
Other Europe	7	Machinery (mechanical, electrical, electronics)	13
North America	3	Textiles	24
Central and South America	12	Consumer electronics and accessories	12
Japan	19	Glass and stone	1
China	20	Others	12
Other Asia, Pacific	29		
Other regions	2		
Total	144	Total	144

Source: GATT [1993d, Vol. I, p. 77].

Similar to the EC, the use of AD procedures varied in the US during the 1980s but remained on a fairly high level. The number of newly initiated AD investigations increased from 13 in the beginning of the 1980s to 65 in the 1985/1986 period. After a two-year decline the number of investigations amounted again to 62 in the 1988/1989 and 1990/1991 period (Table 8).

Table 8 - Anti-dumping Actions Taken by the United States, July 1980 - June 1991

Period (July - June)	Investigations initiated	Definitive duties	Suspension agreements ^a	Outstanding orders ^b
7.80-6.81	13	4	1	
7.81-6.82	25	3	1	
7.82-6.83	38	7	1	
7.83-6.84	44	22	0	
7.84-6.85	61	13	0	
7.85-6.86	65	25	0	
7.86-6.87	40	30	2	
7.87-6.88	33	22	1	
7.88-6.89	62	27	0	
7.89-6.90	27	17	0	
7.90-6.91	62	19	0	204
Total 7.80-5.91	465	189	6	

^aInvestigations are suspended when exporters agree to eliminate injurious effects of antidumping practices, or when other conditions under the law are met. ^bOutstanding orders at the end of the period.

Source: GATT [1992b, Vol. 1, p. 95].

Trading partners that were heavily affected by US investigations again belong to both, the group of industrial countries as well as the group of developing countries. Exporters from Japan, Germany, and Canada are the most frequent targets from industrial countries, while China, Taiwan, the Republic of Korea, and Brazil are the main targets among developing countries. In Eastern Europe, exports from Romania and Poland were most heavily affected (Table 9). Considerable similarities are also observable with respect to the product profile. Chemicals, textiles, machinery, and electronic products were mostly subject by recent US-AD investigations [GATT, 1992b, p. 96].

So far, the analysis has revealed that AD investigations are not only concentrated among industrial countries but are frequently used against exports from developing countries as well as Central and Eastern European producers. When looking at the mere number of cases one has, however, to bear in mind that the number of cases reflects neither the restrictiveness of the measure nor the social welfare effects. In analyzing the general impact of AD one would have to distinguish between short-run and long-run effects. In the short run, consumers of the importing country of the dumped product usually benefit from lower import prices of the dumped product. In contrast, prices, profits, production and employment levels as well as the market share of the domestic industry may be adversely affected if factor mobility is relatively low. The long-run effects of dumping in the importing country depend on the medium and long-term development of the domestic competitiveness.⁹ Damaging effects may occur if scale economies or learning effects are important or necessary R&D are not undertaken in the domestic economy due to the adverse short-run effects [Ernst and Young, 1993].

⁹ Nicolaidis [1990] analyzes the effects of dumping on competition in the importing country in more detail.

Table 9 - Anti-dumping Actions Taken by the United States by Country of Export, July 1980 - June 1991 (Number)

	Investigations		Definitive duties		Suspension agreements	
	July 1980 -June 1991	July 1989- June 1991	July 1980 -June 1991	July 1989- June 1991	July 1980 -June 1991	July 1989- June 1991
Japan	59	(8)	37	(8)	2	(0)
China	32	(16)	19	(8)	0	(0)
Germany, Fed. Rep.	28	(6)	9	(0)	0	(0)
Taiwan	28	(4)	13	(4)	1	(0)
Korea, Rep. of	26	(3)	15	(5)	0	(0)
Brazil	25	(3)	11	(1)	0	(0)
Canada	25	(2)	9	(2)	1	(0)
Italy	23	(1)	9	(0)	0	(0)
United Kingdom	19	(4)	4	(1)	0	(0)
France	18	(2)	8	(0)	0	(0)
Spain	12	(1)	3	(0)	0	(0)
Romania	11	(0)	3	(0)	1	(0)
Mexico	10	(3)	4	(2)	0	(0)
Venezuela	11	(1)	2	(1)	1	(0)
Belgium	7	(1)	1	(0)	0	(0)
Poland	7	(1)	0	(0)	0	(0)
Germany, Dem. Rep.	6	(0)	2	(0)	0	(0)
Others	116	(26)	40	(4)	0	(0)
Total	463	(82)	189	(36)	6	(0)

Source: GATT [1992b, Vol. I, p. 96].

A fundamental source of inefficiencies of ADM stems from substantial discretionary elements in the procedure of initiations and evaluation of dumping actions [e.g. Finger, 1992; Waer, Vernulst, 1994]. The determination of representative prices, the definition of costs, and the lack of transparency of AD procedures contribute to the discretionary elements of the AD mechanism and represent the main elements of "contingent" protection [e.g. Van Bael, 1990]. As a consequence the discretionary elements may be misused for discriminatory protectionist purposes. This may be particularly relevant for developing countries and post-socialist economies. Some of their low-priced products compete with the declining industries in industrialized countries. However, developing countries are often lacking the adequate equipment to defend their interests in AD proceedings [Tharakan, 1993a].

To sum up, disputes regarding AD actions have grown substantially during the last few years. The documented initiation of these measures is mostly confined to OECD countries. More recently, a growing number of initiations by other countries has occurred. The initiations are directed at industrialized as well as developing countries. Such actions are not always consistent with GATT obligations. They may be used as an instrument of industrial policy

rather than as measures that exclusively try to offset international distortions. The generally low share of trade affected by definitive AD duties underestimates the impact of these policy measures because cascading or downstream effects may become important [Hoekman, Leidy, 1992]. Besides the neglect of consumer interests, a number of other direct effects are among the trade disrupting effects, e.g., on importers of intermediate goods, effects on other exporters via possible exchange rate effects, the increasing uncertainty associated with discretionary policy actions as well as increasing incentives for rent-seeking activities.

III.2 Export restraint agreements

In the last two decades voluntary restraints on exports have become another important impediment to free trade. Three broad types of export restraint agreements (ERAs) may be distinguished, ranging from heavy involvement of the governments of exporting or importing countries to little or no involvement of the governments [OECD, 1993]. Orderly Marketing Agreements (OMA), as a first category, restrict the volume of exports via formal agreements between governments. In contrast, the second category and third category of agreements are arrangements among exporting firms to limit exports. While arrangements under the second category are sponsored by governments, the third category of agreements implies no government involvement. Furthermore, so-called "grey measures", such as "export forecasts", "consultation arrangements", "prudent marketing arrangements" also tend to restrict international competition. The presence of these informal arrangements may signal exporters the political threat of the imposition of more formal measures to reduce the intensity of competition, if exports increase above the implicit target [Kostecki, 1987].

In the following part, we will look at the development of VERs in greater depth. Data mainly refer to the end of the last decade, as the GATT secretariat has not compiled comprehensive data since then.

At the end of the last decade 289 VERs (excluding the MFA) were reported world wide, of which the EC as an importer accounted for 60 percent. Out of the 173 VERs affecting imports to the EC, 96 VERs were national agreements, while 77 were EC-wide agreements (Table 10).

Roughly half of the EC VERs were targeted at industrialized countries, more than one third at developing countries and 12 percent at East European countries (Table 11). Within the group of industrial countries and developing countries, the bulk of VERs imposed by the EC restricted trade with Japan and Korea, respectively. One third of all VER agreements restricted trade with Japan. Nearly half of the EC-Japanese VERs affected two sectors: transport equipment and electronic products. Most VERs that were targeted at developing countries aimed at protecting textiles and clothing, agricultural and food products, electronic products as well as footwear. Two thirds of the VERs in the sector of electronic products and

footwear restrained trade with Korea. From the 12 percent of VERs that were targeted at Eastern Europe, six VERs affected trade in the agricultural and textiles sector and five VERs affected trade in the steel sector.

Table 10 - EC: Voluntary Export Restraint Agreements, March 1989

Major Known VERs (Excl. the MFA)	World- wide	EC Total	EC- wide	National ^a	
Total	289	173	77	96	Benelux (13); Denmark (2); France (17); Greece (1); Germany (2); Ireland (2); Italy (17); Portugal (9); Spain (7); United Kingdom (26)
Steel	50	14	13	1	United Kingdom
Agricultural and food products	51	36	31	5	France (1); Ireland (1); Italy (2); Spain (1)
Automobiles and transport equipment	20	17	2	15	Belgium (1); France (2); Italy (3); Portugal (4); Spain (1); United Kingdom (4)
Textiles and clothing	66	27	24	3	Italy (1); Portugal (1); United Kingdom (1)
Electronic products	28	25	2	23	France (5); Germany (1); Italy (4); Portugal (1); Spain (1); United Kingdom (11)
Footwear	18	15	1 ^b	14	Benelux (3); France (3); Ireland (1); Italy (3); United Kingdom (4)
Machine tools	14	4	1	3	France (1); Spain (1); United Kingdom (1)
Other	42	35	3	32	Benelux (9); Denmark (2); France (5); Greece (1); Germany (1); Italy (4); Portugal (3); Spain (3); United Kingdom (4)

^a The September 1988 - February 1989 GATT report on developments in the trading system indicates that 96 national VERs were in force as of March 1989, most of which are industry-to-industry arrangements. Of these, 26 VERs were reported for the United Kingdom. However, the UK authorities have indicated that they are aware of only eight such arrangements, which apply to imports of automobiles, transport equipment, and machine tools from Japan, as well as footwear from Czechoslovakia, Poland, and Romania. They have also indicated that two of these arrangements (forklift trucks and machine tools from Japan) were no longer justified and would be allowed to lapse. - ^b Industry-to-industry arrangement.

Source: Xafa et al. [1992, p. 59].

Table 11 - EC: Voluntary Export Restraint Arrangements with non-EC Members, March 1989

	Industrial countries		Developing countries		Eastern Europe
	Total	of which Japan	Total	of which Korea	
Total	85	63	63	21	21
<u>By Sector</u>					
Steel	6	1	2	1	5
Agricultural and Food Products	16	2	13	2	6
Automobiles and Transport Equipment	15	15	0	0	0
Textiles and Clothing	2	2	19	0	6
Electronic Products	12	12	9	6	3
Footwear	4	4	8	5	3
Machine Tools	4	4	0	0	0
Other	26	23	8	7	1

Source: Xafa et al. [1992, p. 59].

Until recently, more VERs had been applied at the national rather than the EC level. Within a fully integrated market, however, such national measures are no longer sustainable.¹⁰ In mid-1992, the EC and Japan reached a consensus on exports of cars and light commercial vehicles from Japan. The former system with a variety of existing national restrictions was replaced to EC-wide monitoring arrangements. The EC formally abolished all national import restrictions, starting in January 1993. Japan promised to monitor the growth of exports to the EC. In general, the market share of Japanese imports should not increase above 12.5 percent, while lower levels were agreed upon for five restricted national markets: France, Italy, Spain, Portugal, and the United Kingdom [GATT, 1993d, p. 71, p. 170].

According to the Community, the only two other recent examples of voluntary restraints concern steep meet and textiles. Many of the arrangements in the area of machinery and electrical and electronic household equipment were terminated on 31 December 1992 [GATT, 1993d, p. 73 ff.].

¹⁰ See for a theoretical analysis of the implications of replacing national import restrictions by Community-wide restrictions for a similar case of quotas Gros [1992].

GATT mechanisms related to VERs have been largely ineffective so far. Formal arrangements are often not challenged by competition authorities. Informal arrangements are difficult to detect and lack transparency [OECD, 1993]. Despite the well-known costs of VERs¹¹ it may thus be difficult to phase them out completely. National competition authorities should focus their attention on "privately" negotiated VERs and on "industry-to-industry" arrangements. By attacking these informal agreements and changing them into formal agreements on a governmental basis, greater transparency and juridicality could be achieved. Transparency is a necessary prerequisite for further multilateral agreements.

VERs may be (partly) circumvented through foreign direct investment (FDI), as long as foreign production in the domestic economy is not counted in the VER. This suggests that it also remains important to ensure an undistorted flow of investment capital. Trade related investment measures have, however, become another more recent impediment to unrestricted investment flows.

III.3 Trade related investment measures

Trade related investment measures (TRIMs) are regulations and incentives adopted by governments to influence the operations of foreign firms in their territories [e.g. Puri, Bondad, 1990]. They encompass a wide variety of measures. One possible classification of TRIMs is to distinguish between input and output TRIMs.¹² Table 12 lists and briefly describes the most common TRIMs.

Local content requirements are the oldest and most important type of TRIMs, originating from the Latin American automobile industry [Ebenroth, Grashoff, 1994].¹³ They were intended to avoid a degradation of the locations to mere assembly shops. Besides local content requirements, stipulations concerning employment of local nationals to managerial positions as well as limitations on equity ownership by foreign firms are among the most frequent TRIMs [Balasubramanyam, 1991].

¹¹ See for example Gandolfo [1987].

¹² An alternative classification is based on the distinction between commodity based and factor based TRIMs [e.g. Guisinger, 1986].

¹³ Minimum local content requirements still exist e.g. in Mexico in the car industry, amounting to 36 percent of the final value added in the production of small cars and to 40 percent in the production of trucks and buses [GATT, 1993c]. In Brazil, local content requirements refer in particular to government procurement of a 60 percent level [GATT, 1993a].

Table 12 - Selected Trade Related Investment Measures^a

Input TRIMs	
Local Content Requirements (LCRs)	Usually require foreign firms to purchase a specific proportion of their inputs from local sources rather than foreign sources.
Laws of Similars (LSs)	Require foreign investors to use local substitutes for imported inputs if a "similar" component is manufactured locally.
Manufacturing Requirements (MFs)	Determines e.g. the production of a specific good or prohibits the production of selected goods.
Technology Transfer Requirements (TTRs)	Requires the implementation and use of a specified production technology. It is intended to encourage research and developments activities.
Trade Balancing Requirements (TBRs)	Requires that the import volume of the foreign investor is tight to the export performance.
Foreign Exchange Restrictions (FERS)	Directed at constraining an investor in terms of the amount of intermediate inputs which can be imported. Limits the foreign exchange available to the foreign investor. Often the investor may not use more foreign exchange to buy foreign inputs than he received from his exports.
Maximum Import Limitations (MILs)	Directly limits the import of specified products.
Local Equity Requirements (LERs)	Regulates the share of equity that foreign firms are allowed to own. Sometimes these regulations are tied to the market orientation of foreign firms.
Local Labor Requirements (LLRs), National Participation in Management (NPM)	Regulates the participation of local employees and managers in the foreign firm.
Output-TRIMs	
Export Performance Requirements (EPRs)	Requires a specified export performance by e.g. fixing a minimum share of production that has to be exported or by fixing a minimum value of exports.
Product Marketing Requirements (PMRs)	Regulates the relation between the host firm and the foreign mother company. Exclusive sale rights are fixed for the host firm to selected regions or world-wide.
Export Controls (ECs) and Market Reserve Policies (MRPs)	Controls or prohibits exports of specific products to improve trade opportunities for local companies producing close substitutes.
Domestic Sales Requirements (DSRs)	Requires the investor to sell a specified amount of his production domestically. DSRs thus are complements to EPRs.
Remittance Restrictions (RRs)	Restrict the repatriation of foreign firms profits and the salaries of foreign employees.
Licensing Requirements (LRs)	Licences may be required in the area of production, exports, etc.
^a See for a more detailed description e.g. Greenaway [1990], Maskus, Eby [1990]; Ebenroth, Grashoff [1994].	

In contrast to AD laws and ERAs, not all TRIMs affect the value of trade flows and the pattern of trade directly. Local content requirements, for example, may induce a number of substitution processes in the production of goods. Employment regulations for local managerial positions may lead to a substitution from labor intensive to a more capital intensive production. By changing the production technology different inputs may be needed, which in turn stipulates imports of the appropriate equipment and components. Furthermore, all domestic regulations and incentives may alter relative prices and thus influence the value and pattern of trade. Even if not all TRIMs have a direct impact on trade flows, they still have an indirect impact. They thus belong to the group of trade policy instruments, although in some cases it may not be obvious at first glance.

Welfare implications of TRIMs are more difficult to assess.¹⁴ The aim of many developing countries is to obtain maximum gains from the operations of foreign firms. Whether TRIMs are suited to achieve this objective remains debated. It is sometimes argued that existing impediments to free trade in industrial countries render TRIMs in DCs necessary [Balasubramanyam, 1991]. This reasoning, however, may not appear very convincing. Obviously, in a world free of other distortions and restrictions to trade, TRIMs itself would distort trade and hence might contribute to a reduction in welfare. But even if one takes account of the existing trade impediments, TRIMs are open to criticism. Theoretically, TRIMs might be tailored in such a way that they offset existing distortions but it is highly unlikely that this is the case in reality. Identification and measurement problems of existing distortions render this task nearly impossible.

Notwithstanding the difficulties in assessing the incidence of TRIMs, some evidence has been uncovered so far [see Greenaway, 1990; Moran, 1992]:

- The incidence of TRIMs is concentrated in developing countries. Brazil, Mexico, India, and Nigeria most heavily rely on TRIMs in the group of developing countries, while Canada, Australia and Spain stand out in the group of developed market economies.
- The sectors mostly affected are mining and manufactures. In the latter sector, TRIMs are most heavily concentrated in manufacture of cars, other high tech machinery, and petrochemicals.

The importance and potential distorting effects of TRIMs have already been recognized for a long time. The inclusion of TRIMs into the GATT framework was already discussed in 1981. Massive opposition from a few developing countries led to a postponement of the issue until the beginning of the Uruguay Round in 1986. The participating parties did not manage to

¹⁴ See for an analysis of their effects [Funke, 1994].

formulate a draft treaty until the Brussels conference in December 1990, which was originally intended to end the Uruguay Round. The final agreement on TRIMs remained behind expectations [Langhammer, 1994]. It applies only to goods. In an appendix those measures are mentioned which have to comply with Art. III ("national treatment") as well as Art. XI of the GATT (quantitative restrictions). The enumeration in the appendix is, however, far from comprehensive. The contracting parties are required to announce all those measures that are not compatible with the two articles. These measures have to be phased out within two years (industrial countries), five years (development countries) and eleven years (less developed countries). Developing countries may, however, still continue to use TRIMs to promote economic development (according to Art. XVIII, GATT). Besides the missing comprehensiveness of the agreement, discretionary elements continue to exist. TRIMs will have to remain high on the agenda of trade policy agreements [Nunnenkamp, 1993]

III.4 Trade related aspects of intellectual property

Patents, trademarks and copyrights are among the most common intellectual property rights (IPR). The information supplied in inventions, ideas, and new products/processes has some public good characteristics, which may thus require some sort of protection in order to induce production of such a good. The protection of intellectual property allows creative agents to get a return on investment for making available new products and new technology. The ideal protection would ensure that innovative firms and persons may internalize the positive external effects of their new information provided.

Despite the importance of IPRs, the desirability of protection was debated in the political process. While many industrial countries tended to protect the creators of intellectual properties, a number of developing countries opposed tighter protection for a long time [Deardorff, 1990]. At first glance, the differing attitudes may be explained by the opposing market positions. While industrial countries are typically considered as supplier of new information with commercial and artificial usefulness, many developing countries are primarily consumers of these goods/services. Stronger protection might thus decrease the welfare in developing countries as the access to improved technologies would be rendered more difficult. Some doubts exist, however, whether this static view holds in a more dynamic perspective.

When analyzing the overall effects of extending adequate intellectual property protection, the potential dynamic effects of such a policy have to be taken into account, including the effects on international trade, the innovation process, implications for technology transfers, effects on foreign and domestic investments, as well as dynamic competition effects [OECD, 1989; see also Subramanian, 1990].

Extending the national IP protection to foreign countries is supposed to lead to higher profits for firms owing patent rights because foreign competition by imitation is initially reduced. As potential profits for innovations rise, the overall incentive for innovative activities is expected to increase. This is not only the case for already existing firms but also for new entrants. In the first place the increased dynamism will take place in industrial countries, but in the medium term innovation could also be stimulated in developing countries, in particular in those that are more advanced. Even if all additional creative activity would be concentrated in a small number of industrial countries, the availability of new products could still improve the situation in developing countries. As long as these benefits are higher than the costs associated with the establishment of better IP protection that requires the implementation of appropriate laws as well as mechanisms to ensure compliance, protecting IPRs internationally appears superior compared to national laws. If the long-run costs for a number of less developed countries are higher than the long-run benefits, compensation schemes may be called for.

Theoretically, a number of options existed to improve the enforcement of IPR (see Table 13). Until recently the "World Intellectual Property Organization" (WIPO) was the main organization responsible for IPR [e.g. Butler, 1990]. Several treaties are administered by WIPO including the two major agreements on IPR, the Paris and Berne Unions. The first deals with industrial property (including patents) and the latter focuses on copyrights. This system had several severe drawbacks. Not all countries were signatories to all of these unions and treaties, thus leading to a large variety of different individual cases [Langhammer, 1994].

Further progress has recently been achieved by including the protection of IP into the GATT.¹⁵ An important achievement was that developing countries could be convinced that they would also benefit from the integration of this issue in the GATT. In particular, an equal treatment of domestic and foreign supply as well as the most favoured nation principle was fixed. Furthermore, protection for six different types of intellectual property was added, such as copyrights, goods and services trademarks, geographical trademarks, industrial design and layout design. In addition, nearly all patents will be protected for at least 20 years, implying that developing countries will have to adjust their national legal system to standards of industrial countries. Developing countries and economies in transition are granted a transition period of 5 years, and even 11 years for the least developed countries. These steps seem to point in the right direction, although still a number of issues will have to be tackled in coming negotiations. High priority will have to be given to ensure compliance. Although the current

¹⁵ See for a more detailed discussion of the different interests during the negotiations Oppermann, Baumann [1993].

Table 13 - Options in TRIPs Enforcement for Industrial Countries^a

Unilateral Enforcement	
Approach	Evaluation
Protect IP from violators in the home market by enacting appropriate laws and by implementing appropriate enforcement mechanisms (e.g. empower administrative bodies, court system).	No protection in the foreign market, positive externalities remain, foreign countries remain free riders, competition for the best system in industrial countries remains.
Prevent the spread of intellectual property abroad by imposing restrictions on the exports of technology, capital goods, etc.	High administrative costs to enforce the system, vicious circle of circumventing restrictions and increasing restrictions may develop. If restrictions are effective, foreign countries do not gain from new inventions. <i>Catching-up is further hindered.</i>
Restrict imports of TRIPs-violating goods by import controls.	Similar to first option, high evaluation costs, easy to circumvent.
International Negotiations	
Bilateral agreements with foreign governments to enact and enforce stricter laws	Prevents production of TRIPs violating goods, but only in the negotiating countries. Tends to increase transaction costs and the undesired development towards more bilateralism.
Multilateral agreement on the IP issues.	Should help increase allocative efficiency and reduce transaction costs. The desired level of protection as well as appropriate enforcements mechanisms remain open to debate.
^a See VanGrasstek Communications [1990, p. 125], own evaluations.	

agreement already requires national governments to implement appeal procedures, it remains to be seen whether missing mechanisms to cope with free-riders do not violate the existence of the whole system [Dhanjee, Boisson de Chazournes, 1990].

IV. CONCLUSIONS

The world economy has changed substantially during the last years. Unilateral trade liberalizations in many developing countries, the completion of the internal market program of the EC, as well as the ongoing system transformations in Central and Eastern Europe have created new chances for a more integrated world economy and new growth opportunities. Whether these potential gains can be realized, not only depends on sound domestic policies but also on future external policies of the main economic actors in the world.

Tariffs no longer represent the most serious impediment to international trade. As the importance of tariffs in restricting free trade has been declining, non-tariff barriers are becoming increasingly important. Several conclusions emerge:

Measures for selective trade protection seem to be high on the political agenda. The main protectionist instruments are not new, but they seem to play an increasing role in influencing international trade flows.

Similar to conventional tariffs, selective trade restricting instruments reduce competition and give wrong incentive signals. Due to their selectivity, however, trade may be distorted significantly even if the share of trade covered by those measures is relatively small.

The dominant players use their selective trade measures on the one hand against each other, but on the other hand against those economies that have revealed the best export performance during the last years. Instead of viewing the most dynamic economies as a threat, their dynamism should be used as a potential for profit opportunities and own potential gains in prosperity.

The increasing importance of a number of non-tariff-barriers may be partly seen as a direct response to the restrictions imposed by the GATT on the use of traditional trade distorting instruments. Even if many NTBs are inconsistent under the GATT obligations in the narrow sense, it remains difficult to constrain their use. Many restrictions are informal and do not involve a visible participation of governments. Even if government-to-government agreements are made, complaints by one of the parties involved remain very unlikely at least as long agreements are voluntary. These agreements are protected because those parties that are affected most negatively, e.g. consumers, cannot complain to the GATT.

Anti-dumping investigations have been frequently initiated against exports from developing countries as well as against producers from Central and Eastern Europe. Inefficiencies stem from substantial discretionary elements in the procedure of initiations and evaluations of dumping actions. Developing countries and economies in transition often lack the adequate equipment to defend their interests in anti-dumping proceedings.

Voluntary export constraints are concentrated in a few sectors, including steel products, automobiles and other transport equipment, textiles and clothing with countries that are outside the MFA, as well as electronic products. Japanese and more recently South Korean exporters and the EC have most frequently agreed to various export restraining arrangements.

Trade related investment measures will become more relevant in the future because FDI represents one way to circumvent traditional trade barriers. TRIMs may be seen as one typical example of the vicious circle of regulations, circumventions, and new

regulations. Quantitative restrictions such as VERs encouraged international companies to circumvent them by directly investing in the foreign country. As a consequence, governments may either try to regulate FDI by various TRIMs or include the domestic production by foreign companies in quantitative restrictions. The agreement on TRIMs may only be seen as a first step in the right direction. Escape clauses for developing countries as well as the consideration of only a few selected types of TRIMs represent the major weaknesses of the agreement.

- The agreement on TRIPs is a major step forward, as developing countries could have been convinced that protection of IP is also beneficial for them. It remains to be seen, whether compliance can be ensured.

Coming multilateral negotiations will have thus to focus increasingly on non-tariff barriers. A first prerequisite for successful negotiations is to increase transparency of these instruments. Only if transparency is guaranteed, improved enforcement mechanisms can be implemented.

Appendix Table 1a - European Community: Level and Direction of Trade^a

	1960	1970	1980	1985	1988	1989	1990	1991	1992
	In Billions of US\$								
EXPORTS									
Total	29.7	112.6	665.9	649.6	1,064.6	1,135.5	1,366.4	1,371.2	1,457.5
Intra-EC	10.2	56.4	356.5	353.2	633.1	678.1	828.2	846.7	895.3
To third countries	16.3	52.2	297.2	296.5	431.5	457.4	538.1	523.6	562.2
of which:									
EFTA	4.2	13.4	71.5	64.8	113.4	118.3	140.3	133.9	138.4
United States	2.2	9.3	37.0	65.4	84.6	85.7	96.5	87.7	95.3
Japan	0.2	1.4	6.4	8.0	19.9	23.2	28.7	27.3	26.5
Developing Countries	8.3	22.2	149.1	123.9	165.7	178.6	214.9	224.7	251.0
Africa	3.0	6.7	39.9	28.1	34.3	35.8	41.9	40.0	42.6
Asia	1.4	3.8	20.5	27.5	47.2	52.0	61.3	63.6	71.8
Asian NIE'S	0.2	1.1	6.7	10.2	21.8	24.2	29.2	31.6	34.6
Western Hemisphere	1.7	4.3	19.4	13.9	20.1	21.5	25.3	28.4	32.4
IMPORTS									
Total	29.7	116.5	729.1	664.0	1,082.8	1,167.2	1,413.5	1,458.6	1,524.1
Intra-EC	10.2	56.9	352.2	349.6	624.5	667.2	817.6	840.4	887.6
From third countries	17.0	57.3	359.7	314.4	458.3	500.1	595.9	618.2	636.4
of which:									
EFTA	2.8	10.3	64.3	62.8	107.1	113.0	138.1	137.9	144.3
United States	3.8	12.3	60.8	52.9	79.4	91.2	105.0	112.5	110.9
Japan	0.2	1.6	18.6	22.7	50.2	52.5	60.8	65.7	68.8
Developing Countries	8.6	26.1	183.4	144.2	177.4	197.0	239.2	253.6	261.8
Africa	2.8	7.5	40.7	39.2	35.3	38.3	47.2	45.9	44.9
Asia	1.2	3.2	24.8	25.7	58.2	62.7	75.9	90.1	98.5
Asian NIE'S	0.1	0.9	10.0	11.6	59.5	62.5	71.1	76.6	76.0
Western Hemisphere	1.9	4.9	22.3	24.9	28.3	30.5	34.5	35.1	33.9

Appendix Table 1a continued

	1960	1970	1980	1985	1988	1989	1990	1991	1992
	In Percent of Total								
EXPORTS									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intra-EC	34.5	50.1	53.5	54.4	59.5	59.7	60.6	61.7	61.4
To third countries	54.8	46.3	44.6	45.6	40.5	40.3	39.4	38.2	38.6
of which:									
EFTA	14.2	11.9	10.7	10.0	10.6	10.4	10.3	9.8	9.5
United States	7.5	8.2	5.6	10.1	7.9	7.5	7.1	6.4	6.5
Japan	0.7	1.2	1.0	1.2	1.9	2.0	2.1	2.0	1.8
Developing Countries	27.8	19.7	22.4	19.1	15.6	15.7	15.7	16.4	17.2
Africa	10.0	6.0	6.0	4.3	3.2	3.2	3.1	2.9	2.9
Asia	4.8	3.4	3.1	4.2	4.4	4.6	4.5	4.6	4.9
Asian NIE'S	0.7	1.0	1.0	1.6	2.0	2.1	2.1	2.3	2.4
Western Hemisphere	5.7	3.8	2.9	2.1	1.9	1.9	1.8	2.1	2.2
IMPORTS									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Intra-EC	34.2	48.8	48.3	52.7	57.7	57.2	57.8	57.6	58.2
From third countries	57.3	49.2	49.3	47.3	42.3	42.8	42.2	42.4	41.8
of which:									
EFTA	9.4	8.8	8.8	9.5	9.9	9.7	9.8	9.5	9.5
United States	12.9	10.6	8.3	8.0	7.3	7.8	7.4	7.7	7.3
Japan	0.5	1.4	2.5	3.4	4.6	4.5	4.3	4.5	4.5
Developing Countries	29.0	22.4	25.1	21.7	16.4	16.9	16.9	17.4	17.2
Africa	9.6	6.4	5.6	5.9	3.3	3.3	3.3	3.2	2.9
Asia	3.9	2.8	3.4	3.9	5.4	5.4	5.4	6.2	6.5
Asian NIE'S	0.2	0.8	1.4	1.7	5.5	5.4	5.0	5.3	5.0
Western Hemisphere	6.5	4.2	3.1	3.7	2.6	2.6	2.4	2.4	2.2

^aIndustrial countries and developing countries exports and imports do not add up to world total as a few countries summarized in a category "country/area not specified" are not considered. The definition of the different groups of countries has been adjusted according to the 1992 definition. The EC comprises Belgium, Luxembourg, France, Germany, Italy, and the Netherlands (EC6) in 1960, EC6 and Denmark, Ireland, UK (EC9) in 1970, EC9 plus Greece in 1980 and all 12 member countries thereafter.

Source: IMF [var. iss.], own calculations.

Appendix Table 1b - Japan: Level and Direction of Trade^a

	1960	1970	1980	1985	1988	1989	1990	1991	1992
	In Billions of US\$								
EXPORTS									
Total	4.1	19.3	130.4	177.2	265.0	274.6	287.7	314.9	340.0
Industrial Countries	1.9	10.1	59.9	102.8	160.1	165.8	168.5	175.3	183.4
Developing Countries	2.1	7.5	60.9	70.2	101.1	105.2	116.3	137.1	155.1
Africa	0.3	0.8	5.3	2.9	4.7	4.4	4.7	5.0	5.7
Asia	1.3	5.6	31.5	46.8	77.4	82.6	90.1	105.9	117.6
Asian NIE'S	0.4	2.6	14.1	22.7	49.8	52.5	56.8	66.9	72.7
Western Hemisphere	0.3	1.1	8.3	7.5	8.6	8.8	9.7	12.2	15.1
IMPORTS									
Total	4.5	18.9	141.3	130.5	187.5	209.6	235.3	236.6	232.9
Industrial Countries	2.5	10.1	47.6	51.7	92.7	104.8	118.1	115.1	112.2
Developing Countries	1.9	7.8	89.1	77.0	91.3	101.2	113.3	117.7	117.8
Africa	0.1	1.0	4.0	3.0	3.9	4.1	3.7	3.6	3.4
Asia	1.0	3.4	34.7	37.5	58.9	65.0	68.1	74.5	76.1
Asian NIE'S	0.1	0.7	5.1	9.9	25.0	27.0	26.0	27.4	26.2
Western Hemisphere	0.3	1.3	5.5	6.1	8.1	8.5	9.4	9.3	8.2
	In Percent of Total								
EXPORTS									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industrial Countries	45.8	52.5	46.0	58.0	60.4	60.4	58.6	55.7	53.9
Developing Countries	52.5	39.1	46.7	39.6	38.1	38.3	40.4	43.5	45.6
Africa	8.1	4.1	4.0	1.7	1.8	1.6	1.6	1.6	1.7
Asia	32.8	28.8	24.2	26.4	29.2	30.1	31.3	33.6	34.6
Asian NIE'S	11.0	13.7	10.8	12.8	18.8	19.1	19.7	21.3	21.4
Western Hemisphere	7.2	5.6	6.4	4.2	3.2	3.2	3.4	3.9	4.4
IMPORTS									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industrial Countries	56.2	53.5	33.7	39.6	49.5	50.0	50.2	48.7	48.2
Developing Countries	41.5	41.3	63.0	59.0	48.7	48.3	48.2	49.7	50.6
Africa	3.3	5.5	2.8	2.3	2.1	1.9	1.6	1.5	1.5
Asia	21.7	18.1	24.6	28.7	31.4	31.0	28.9	31.5	32.7
Asian NIE'S	2.7	3.5	3.6	7.6	13.3	12.9	11.1	11.6	11.2
Western Hemisphere	6.5	6.7	3.9	4.7	4.3	4.1	4.0	3.9	3.5

^aIndustrial countries and developing countries exports and imports do not add up to world total as a few countries, summarized in a category "country/area not specified" are not considered. The definition of the different groups of countries has been adjusted according to the 1992 definition. The EC comprises Belgium, Luxembourg, France, Germany, Italy, and the Netherlands (EC6) in 1960, EC6 and Denmark, Ireland, UK (EC9) in 1970, EC9 plus Greece in 1980 and all 12 member countries thereafter.

Source: IMF [var. iss.], own calculations.

Appendix Table 1c - USA: Level and Direction of Trade^a

	1960	1970	1980	1985	1988	1989	1990	1991	1992
	In Billions of US\$								
EXPORTS									
Total	20.6	43.2	220.8	213.1	319.4	363.8	393.1	421.8	447.4
Industrial Countries	11.7	28.8	127.2	130.8	200.0	230.1	251.2	258.3	261.8
Developing Countries	7.0	14.1	86.9	79.3	116.1	128.8	137.8	159.2	181.4
Africa	0.6	1.4	6.5	4.8	5.1	5.1	5.7	6.1	6.8
Asia	1.8	4.1	23.3	28.6	51.1	57.4	60.8	67.6	74.1
Asian NIE'S	0.4	1.8	10.4	16.9	34.7	38.5	40.8	45.7	48.5
Western Hemisphere	3.5	6.5	38.7	31.0	43.6	49.1	54.0	63.5	75.7
IMPORTS									
Total	15.1	42.5	257.0	361.6	459.8	493.3	517.0	509.3	552.6
Industrial Countries	8.7	30.6	126.9	228.8	282.7	296.0	304.1	298.6	318.7
Developing Countries	6.0	11.6	122.1	132.3	176.2	196.4	211.4	209.7	232.9
Africa	0.6	1.1	26.3	12.4	11.4	14.7	16.5	14.9	14.7
Asia	1.3	3.7	25.8	61.2	94.7	101.4	104.2	108.6	126.1
Asian NIE'S	0.2	2.1	11.4	41.9	66.4	65.6	63.3	61.9	65.0
Western Hemisphere	3.6	6.2	38.9	49.1	53.7	60.1	67.2	65.8	71.9
	In Percent of Total								
EXPORTS									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industrial Countries	56.7	66.7	57.6	61.4	62.6	63.2	63.9	61.3	58.5
Developing Countries	34.0	32.6	39.4	37.2	36.4	35.4	35.1	37.8	40.6
Africa	2.7	3.2	3.0	2.2	1.6	1.4	1.4	1.4	1.5
Asia	8.9	9.5	10.6	13.4	16.0	15.8	15.5	16.0	16.6
Asian NIE'S	2.1	4.2	4.7	7.9	10.9	10.6	10.4	10.8	10.8
Western Hemisphere	17.2	15.1	17.5	14.6	13.6	13.5	13.7	15.0	16.9
IMPORTS									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industrial Countries	57.6	72.1	49.4	63.3	61.5	60.0	58.8	58.6	57.7
Developing Countries	39.7	27.3	47.5	36.6	38.3	39.8	40.9	41.2	42.1
Africa	3.9	2.6	10.2	3.4	2.5	3.0	3.2	2.9	2.7
Asia	8.4	8.6	10.1	16.9	20.6	20.5	20.2	21.3	22.8
Asian NIE'S	1.2	4.9	4.5	11.6	14.4	13.3	12.2	12.2	11.8
Western Hemisphere	24.2	14.6	15.1	13.6	11.7	12.2	13.0	12.9	13.0

^aIndustrial countries and developing countries exports and imports do not add up to world total as a few countries summarized in a category "country/area not specified" are not considered. The definition of the different groups of countries has been adjusted according to the 1992 definition. The EC comprises Belgium, Luxembourg, France, Germany, Italy, and the Netherlands (EC6) in 1960, EC6 and Denmark, Ireland, UK (EC9) in 1970, EC9 plus Greece in 1980 and all 12 member countries thereafter.

Source: IMF [var. iss.], own calculations.

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