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OVERVIEW OF DEVELOPMENTS IN THE INTERNATIONAL TRADING ENVIRONMENT

Annual Report by the Director-General

1. INTRODUCTION

1. Real global output is expected to grow by an average of 4.3% in 2005-2006, well above its trend rate, albeit down from 5.1% in 2004.[1] At the same time, the volume of world trade in goods and services is expected to grow by an average of some 7% over the same period, down from 10.3% in 2004. World-wide inflows of foreign direct investment (FDI), after falling for three consecutive years from their peak of some US$1.4 trillion in 2001, rebounded by 2% in 2004, to US$648 billion, and with favourable prospects for 2005 and 2006.[2]

2. However, growth rates in output, trade, and FDI across regions vary widely. Whereas advanced economies are expected to have grown by 2.6% in 2005, other emerging markets and developing countries are expected at 6.4%. The expansion has continued to be led by the United States and China, where expected growth rates of 3.6% and over 9%, respectively, have significantly exceeded expectations.[3] With the important exception of Japan, growth projections in almost all other regions have been marked downward, with weakness in the euro area of particular concern. Whereas advanced economies' imports and exports are expected to have grown by 5.1% and 4.6%, respectively, in 2005, in other emerging markets and developing countries imports and exports are expected to have grown more than twice as much, at 12.9% and 10.1%, respectively. The rebound in global FDI inflows in 2004 was led by developing countries, whose inflows surged by 40% to US$233 billion, while developed countries as a group experienced a 14% drop. Asia led the upswing, attracting inflows 72% higher than in 2003, mainly due to greenfield investments in China and India. The United States retained its position as the number one recipient of FDI, followed by the United Kingdom and China.

3. The improvement in growth prospects in many of the world's poorest countries has been an especially welcome development over the past few years. Beyond the continued robust expansions in China and India, which account for over half of the world's poor, GDP growth in Highly Indebted Poor Countries (HIPCs) – while still slow – has also risen to an average rate of 5% in 2001-05, despite the adverse effects of the global slowdown and – in many cases – falling commodity prices during this period. Moreover, there is renewed commitment in the international community to provide additional resources, reflected in the G-8 agreement at Gleneagles in July 2005 to raise official development assistance by US$50 billion and aid to Africa by US$25 billion, to the UN target of 0.7% of GNP by 2015; and in proposals to cancel HIPCs' multilateral debt.

[1] International Monetary Fund, 2005, *World Economic Outlook*, September, Chapter 1.

[2] UNCTAD, 2005, *World Investment Report*, September.

[3] According to the GDP adjustment announced by the Chinese authorities in December 2005, as a result of the First National Economic Census, China's GDP has been growing faster than originally estimated. Initial forecasts suggest that GDP grew by 9.8% in 2005. Moreover, GDP in 2004 was 16.8% higher than the previous official estimate, which means that China's economy was the sixth largest in the world.

4. An element of downside risk to the global economic outlook is the rise in oil prices during the past year. For example, a sustained increase of US$10 in the oil price is believed to reduce growth by one half of a percentage point in the first year of higher prices.[4] Higher oil prices could also contribute to inflationary pressures. Some central banks, notably the United States Federal Reserve and, more recently, the European Central Bank, have been tightening monetary policy by raising interest rates in order to contain such pressures. Indeed, global headline inflation has picked up slightly, although it remains at moderate levels. As a consequence, the Bank of Japan has kept its rate on hold. Nevertheless, long-term interest rates, while volatile, continue to be unusually low worldwide; real interest rates remain well below historical averages, reflecting low and well-anchored inflationary expectations.

5. An additional element of downside risk are the global financial imbalances, especially those manifested in countries' current accounts, which are the counterparts of gaps between their domestic investment and national saving, including fiscal deficits.[5] Imbalances have increased during the past year. In particular, the U.S. current account deficit was some 6% of GDP in 2005, driven by both higher oil prices and continued strong domestic demand. On the surplus side, the key counterparts to the U.S. current account deficit are Japan, China, the Middle East Oil exporters and the Commonwealth of Independent States. Even so, capital inflows to the United States have remained strong, aided by robust private and official flows. A reversal of such capital flows could be detrimental to the global economy. An orderly rebalancing of current accounts may require concerted action by deficit and surplus countries alike, with those running large deficits increasing national saving, by *inter alia* removing disincentives to save and reducing fiscal deficits, and those running large surpluses reducing their over-dependence on external demand (that is, exports) to generate growth and instead relying more on domestic demand (that is, quality investment and consumption). Whereas governments' ability to influence the private component of the gap between national saving and domestic investment is rather limited, as they can only do so indirectly, the magnitude of the government component is the outcome of fiscal policy, which is largely under governments' direct control and can therefore be changed more easily and effectively. Such action would help fend off protectionist sentiment in countries with large current account deficits directed at those with large surpluses.

6. Greater exchange rate flexibility could also contribute to alleviating global imbalances. Notwithstanding the widening U.S. current account deficit, the U.S. dollar appreciated in trade weighted terms during the first half of 2005. The bulk of this appreciation took place against industrial countries' currencies, particularly the euro. In emerging markets, bilateral exchange rate movements against the U.S. dollar varied widely, with substantial trade weighted appreciations in Latin America and emerging economies in Asia, accompanied by depreciations in central and eastern Europe – which move closely with the euro – and the ASEAN-4. The 2.1% revaluation of the Chinese currency in July 2005, accompanied by the adoption of an unspecified reference basket of currencies, and a 0.3% daily fluctuation range against the U.S. dollar, has so far had a moderate effect.[6]

[4] International Energy Agency, 2004, "Analysis of the Impact of High Oil Prices on the Global Economy," May, p. 13.

[5] Fiscal deficits have risen in both the euro area and Japan since 2004 and are expected to decline only modestly over the medium term, with rising debt in Japan, Italy and Germany of particular concern (IMF. 2005, p. 16). The fiscal deficit in the United States, although still high, has decreased owing to a rebound in revenues.

[6] Subsequently, in September 2005, in a largely technical move, China slightly widened its currency's trading band against non-dollar currencies, such as the euro and the yen, to plus or minus 3 per cent, a step in the direction of a floating exchange rate. In the latest move towards a more flexible currency, the PBC launched over-the-counter trading for the yuan in January 2006.

7. In the face of global current account imbalances and growing fears of emerging market competition, protectionist sentiment does appear to be on the rise. In the United States, Members of Congress have renewed calls for across-the-board tariffs of 27.5% on Chinese goods. The lifting of quotas on textiles and clothing in accordance the WTO agreement has also triggered concerns in importing countries, resulting in safeguard actions in some countries, if not "voluntary" export restraints.

8. From a multilateral perspective, a successful outcome to the Doha Round remains critical to securing global growth over the medium term and thus contributing to poverty reduction. At the sixth WTO ministerial meeting in Hong Kong, China in December 2005 Ministers renewed their resolve to complete the Doha Work Programme and the current round of negotiations in 2006. In this regard, it was agreed to continue the work that had been started, including in the areas of agriculture, non-agricultural market access, services, rules, TRIPS, environment and trade facilitation.

9. With regard to developing and least-developed countries (LDCs), the provisions for special and differential (S&D) treatment were again recognized as being integral to the WTO Agreements and Ministers called for the current review of outstanding Agreement specific proposals on S&D treatment to be completed, with recommendations for a decision to be made by the end of 2006. Ministers also reaffirmed their commitment to effectively and meaningfully integrate LDCs into the multilateral trading system; in this context they took a number of decisions in favour of LDCs, including for; waivers of obligations under the GATT 1994; market access to developed and developing-country markets, particularly that developed-country Members, and developing-country Members declaring themselves in position to do so, shall provide duty-free and quota-free market access for at least 97% of products originating from LDCs by 2008 or no later than the start of the DDA implementation period; LDC's commitments and concessions that should be consistent with their individual development, financial or trade needs or their administrative and institutional capacities; measures that deviate from LDC's TRIMs obligations that can be maintained on a temporary basis, provided they are notified to the Council for Trade in Goods.[7]

10. In the subsequent sections of this overview, recent developments are highlighted in these and several other key areas of interest to Members with developments in some areas viewed in the longer time-frame following the establishment of the WTO in 1995.

2. Tariffs – Still Much Unfinished Business

11. The further opening of markets to international trade since the establishment of the WTO in 1995 has fostered trade and economic growth worldwide. Particularly important in this regard have been multilaterally negotiated reductions in tariff rates and the binding of such reductions during the Uruguay Round (UR). For example, with the implementation of the UR, in developed countries, where applied and bound rates are much the same, the average applied MFN rate will be not higher than 3.8% for industrial products. In the case of agricultural products, the UR made existing protection more transparent through "tariffication" of some non-tariff border measures and the binding of the resulting tariffs. Nonetheless, tariff protection for agricultural products remains much higher than for industrial products.

12. Notwithstanding these positive developments, tariffs continue to be a major instrument of trade policy, especially in many developing countries, where bindings are often far from complete. Even in developed Members, where the average tariff on industrial products is low, some products, notably textiles and clothing, are subject to relatively high rates (tariff "peaks"). Moreover, many Members' agricultural products are subject to considerably higher tariff rates than those applied to industrial products. Such tariff peaks tend to be concealed by specific duties. Also, tariff quotas and escalation remain prominent features of developed and developing Members' tariffs. It follows that

[7] Annex F of WTO document WT/MIN(05)/DEC, 22 December 2005.

there is a great deal of scope for further tariff liberalization in the current negotiations. Some progress has been made in this respect. At the Ministerial Meeting in Hong Kong, China, in December 2005, Ministers agreed to adopt a Swiss Formula for reductions in non-agricultural tariffs, to reduce (or eliminate, if appropriate) tariff peaks, high tariffs and tariff escalation, especially on products of export interest to developing countries, and to take into account the special needs and interests of developing countries. Developing and least-developed countries will be given flexibility, including through less than full reciprocity in reduction commitments.

13. In the following discussion on tariffs, particular attention is focused on the so-called "Quad" group of major industrialized traders (namely the United States (U.S.), the European Communities (EC), Japan and Canada) as these Members' tariffs can have serious repercussions for their trading partners, especially developing and least developed countries (LDCs). This is also becoming increasingly true, albeit perhaps to a lesser extent, of tariffs applied by four major developing countries, notably Brazil, China[8], India, and South Africa. The use of tariffs by the Quad and these four developing countries can lead to welfare losses on a global scale as well as domestically, not least because they can hamper developing countries' exports, and hence growth.

14. Some simple summary indicators capturing the level and structure of tariffs in the Quad are reported in Table 1 for 1998 and for the latest year available.[9] They are also reported under full implementation of the UR (and the ITA); the latter indicators are of interest because they provide a benchmark for the current WTO negotiations on tariffs. The same indicators for China, India, Brazil and South Africa are found in Table 2, insofar as data were available. Tariff indicators for those Members whose Trade Policy Reviews were recently conducted, namely: *least developed countries* – Guinea, Sierra Leone; *Americas* – Bolivia, Ecuador, Paraguay, Trinidad and Tobago; *Asia and Pacific* – Mongolia, the Philippines; and *Europe/Africa* – Qatar, Romania, Egypt, Tunisia and Nigeria are found in Annex Table 1.

Bound MFN tariffs

15. Bindings are a key element of trade liberalization as they reduce the uncertainty concerning Members' trade regimes. As a result of the UR, the percentage of tariff lines subject to bindings increased significantly. In addition to achieving higher levels of bindings on industrial products, all Members bound virtually all their tariff lines on agricultural items as a result of the WTO Agreement on Agriculture. The Quad have bound close to 100% of all their tariff lines. Overall bound averages range from 4.6% in the U.S. to 8.4% in Canada (see Table 1), with averages for agricultural products being 2 to 5 times higher than averages for industrial goods. As regards industrial products, bound rates are among the highest for textiles and clothing, with post-UR averages ranging from 6.7% in Japan to 12.2% in Canada.[10] For the Quad, full implementation of the UR was achieved in 2004.[11]

16. Whereas Brazil, China and South Africa also bound most, if not all, of their tariff lines, India has bound around three quarters. For these four major developing countries, the average bound tariff for agricultural products is also higher than the average bound tariff for industrial goods. Final average bound rates (once the U.R. commitments are fully implemented) range from nearly 10% in China to nearly 50% in India (Table 2). For LDCs the bound tariff structure can be very different

[8] Since acceding to the WTO in 2001, China has overtaken Canada and Japan to become the world's third largest trader.

[9] The methodology used to construct these tariff indicators is outlined in Daly, Michael, and Hiroaki Kuwahara, 1998, "The Impact of the Uruguay Round on Tariff and Non-Tariff Trade Barriers in the Quad", *The World Economy* 21(1), pp. 207-234.

[10] Other high bound averages exist for leather, rubber, footwear and travel goods, in Japan, Canada and the United States, with an average of, respectively, 17.2%, 8.7% and 7.7% and for fish and fishery products in the EC with an average bound rate of 12.1%.

[11] For Japan, tariff reduction commitments are yet to be met for one remaining industrial product, expected by April 2009.

from one country to another. Whereas Sierra Leone has fully bound its tariff, Guinea has bound 40.8%. Bound rates are, in general, high for LDCs, with averages being just over 20% for Guinea and 47.5% for Sierra Leone (Annex Table 1).

Table 1
Structure of MFN tariffs in the "Quad"
(Per cent)

		United States[a]		European Communities		Japan[b]		Canada	
		1998	2005	1998	2005	FY98/99	FY04/05	1998	2005
	Bound tariff[c]								
1	Bound tariff lines (% of all tariff lines)	100.0[d]	100.0[d]	..	100.0	98.9	98.9	..	99.7
2	Simple average bound rate	6.0	4.6	..	6.5	8.4	6.4	..	8.4
	Agricultural products (HS01-24)	10.5	8.1	..	16.7	25.3	16.8	..	23.1
	Industrial products (HS25-97)	5.1	4.0	..	3.7	4.3	3.9	..	5.8
	WTO agricultural products	10.7	8.3	..	16.6	27.2	18.4	..	24.4
	WTO non-agricultural products	5.1	4.0	..	4.1	4.3	3.7	..	5.7
	Textiles and clothing	10.9	9.0	..	8.0	8.5	6.7	..	12.2
3	Tariff quotas (% of all tariff lines)	1.9	1.9	..	3.3	1.6	1.6	..	2.2
4	Duty free tariff lines (% of all tariff lines)	18.1	37.6	..	26.8	34.0	40.9	..	29.7
5	Non-*ad valorem* tariffs (% of all tariff lines)	14.2	10.8	..	9.9	6.5	6.3	..	5.1
6	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	0.6	0.2	..	2.7	1.8	1.5	..	0.2
7	Nuisance bound rates (% of all tariff lines)[e]	17.7	6.7	..	6.8	4.0	1.0	..	1.1
	Applied tariff								
8	Simple average applied rate	5.9	4.9	7.6	6.5	6.9	6.3	7.8	6.6
	Agricultural products (HS01-24)	10.3	9.5	18.7	16.6	18.1	16.1	23.5	21.2
	Industrial products (HS25-97)	5.0	4.0	4.6	3.7	4.2	3.8	4.9	4.0
	WTO agricultural products	10.6	9.7	19.0	16.5	19.3	17.7	24.7	22.3
	WTO non-agricultural products	5.0	4.0	5.0	4.1	4.3	3.7	4.8	3.9
	Textiles and clothing	10.9	9.0	9.2	8.0	8.2	6.7	11.7	8.9
9	Domestic tariff "peaks" (% of all tariff lines)[f]	4.9	6.8	4.3	5.8	5.7	6.4	1.7	1.8
10	International tariff "peaks" (% of all tariff lines)[g]	7.7	5.2	8.8	8.6	8.1	7.4	10.9	6.6
11	Overall standard deviation of tariff rates	12.9	12.6	13.0	11.5	25.4	23.2	27.5	24.6
12	Coefficient of variation of tariff rates	2.2	2.6	1.7	1.8	3.7	3.7	3.5	3.7
13	Tariff quotas (% of all tariff lines)	1.9	1.9	3.3	3.3	1.6	1.6	2.2	2.2
14	Duty free tariff lines (% of all tariff lines)	18.6	37.7	13.0	27.0	36.2	41.6	45.2	51.0
15	Non-*ad valorem* tariffs (% of all tariff lines)	14.0	10.6	10.0	9.9	6.9	6.6	4.0	3.9
16	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	0.6	0.0	3.1	2.7	1.8	1.4	2.2	0.5
17	Nuisance applied rates (% of all tariff lines)[e]	18.3	7.1	9.5	6.9	3.3	1.1	1.3	0.9

.. Not available.

a The United States levies *ad valorem* duties on the f.o.b price, thereby excluding the costs of insurance and freight. By contrast, most other WTO Members, including the EC, Japan and Canada, levy *ad valorem* import duties on the c.i.f. price, which includes these costs. Therefore, a tariff levied on the f.o.b. price affords less protection than one levied at the same rate on the c.i.f. price.
b Based on fiscal years (1 April to 31 March).
c Calculations are only based on bound tariff lines. For the Quad, the implementation of the UR was reached in 2004 (for Japan, one industrial product to be implemented in 2009 only).
d Two lines, applying to crude petroleum, are not bound.
e Nuisance rates are those greater than zero, but less than or equal to 2%.
f Domestic tariff peaks are defined as those exceeding three times the overall simple average applied rate (indicator 8).
g International tariff peaks are defined as those exceeding 15%

Note: All calculations exclude in-quota rates. AVEs have been used where available; where they are not available, the *ad valorem* part of compound and alternate rates is used. For the United States, the EC, Japan and Canada, 2004, 2002, 2003 and 2000 AVEs have been used, respectively.

Source: WTO Secretariat calculations, based on data provided by the Members.

Table 2
Structure of MFN tariffs in selected developing countries
(Per cent)

		China			Brazil			India[a]			South Africa		
		1997	2005	F.B.[b]	1997	2004	F.B.[c]	FY97/98	FY05/06	F.B.[d]	1997	2002	F.B.[e]
	Bound tariff[f]												
1	Bound tariff lines (% of all tariff lines)	n.a.	100.0	100.0	100.0	100.0	100.0	..	74.0	74.0	96.3	96.2	96.3
2	Simple average bound rate	..	10.0	9.9	..	30.2	30.2	..	48.5	48.5	..	..	20.9
	Agricultural products (HS01-24)	..	14.7	14.6	..	35.8	35.8	..	115.4	115.4	..	..	46.8
	Industrial products (HS25-97)	..	9.1	9.1	..	29.5	29.5	..	35.7	35.7	..	..	18.1
	WTO agricultural products	..	15.3	15.2	..	35.3	35.3	..	114.5	114.5	..	..	43.5
	WTO non-agricultural products	..	9.1	9.0	..	29.6	29.6	..	34.2	34.2	..	..	18.1
	Textiles and clothing	..	11.5	11.5	..	34.7	34.7	..	29.6	29.6	..	..	26.8
3	Tariff quotas (% of all tariff lines)	..	0.7	0.7	..	0.0	0.0	..	..	..	..	..	3.9
4	Duty free tariff lines (% of all tariff lines)	..	7.7	7.7	..	0.7	0.7	..	2.3	2.3	..	..	10.2
5	Non-*ad valorem* tariffs (% of all tariff lines)	..	0.0	0.0	..	0.0	0.0	..	5.3	5.3	..	..	0.0
6	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	..	0.0	0.0	..	0.0	0.0	..	5.3	5.3	..	..	0.0
7	Nuisance bound rates (% of all tariff lines)[g]	..	2.6	2.6	..	0.0*	0.0*	..	0.0	0.0	..	..	0.0
	Applied tariff												
8	Simple average applied rate	17.6	9.7	..	14.7	10.4	..	35.3	18.8	..	15.0	11.4	..
	Agricultural products (HS01-24)	24.3	14.6	..	12.9	10.4	..	33.8	42.8	..	11.3	11.5	..
	Industrial products (HS25-97)	16.5	8.9	..	14.9	10.4	..	35.6	15.4	..	15.4	11.4	..
	WTO agricultural products	23.7	15.3	..	12.6	10.2	..	35.2	41.7	..	9.4	9.6	..
	WTO non-agricultural products	16.6	8.8	..	14.9	10.5	..	35.4	15.5	..	15.7	11.6	..
	Textiles and clothing	27.0	11.5	..	20.3	17.2	..	43.7	15.0	..	35.1	24.4	..
9	Domestic tariff "peaks" (% of all tariff lines)[h]	1.5	2.6	..	0.5	0.6	..	0.2	2.7	..	4.0	3.9	..
10	International tariff "peaks" (% of all tariff lines)[i]	44.2	15.6	..	59.8	26.8	..	90.5	18.3	..	39.4	34.9	..
11	Overall standard deviation of tariff rates	13.0	7.55	..	7.7	7.0	..	14.5	16.4	..	17.8	12.6	..
12	Coefficient of variation of tariff rates	0.7	0.8	..	0.5	0.7	..	0.4	0.9	..	1.2	1.1	..
13	Tariff quotas (% of all tariff lines)	..	0.7	..	0.0	0.0	..	..	..	..	4.2	3.8	..
14	Duty free tariff lines (% of all tariff lines)	2.1	8.6	..	1.4	10.4	..	1.4	2.5	..	42.4	43.4	..
15	Non-*ad valorem* tariffs (% of all tariff lines)	0.6	0.7	..	0.0	0.0	..	0.2	6.2	..	25.6	25	..
16	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	0.6	0.7	..	0.0	0.0	..	0.2	6.2	..	25.6	25.0	..
17	Nuisance applied rates (% of all tariff lines)[g]	1.2	2.6	..	0.0	15.1	..	0.0	0.0	..	0.2	0.0*	..

.. Not available.
n.a. Not applicable.
* Negligible.
F.B. Final bound.

a Based on fiscal years (1 April to 31 March).
b Based on 2005 tariff schedule.
c Based on 2004 tariff schedule.
d Based on 2001/02 tariff schedule.
e Based on 2001 tariff schedule.
f Calculations are only based on bound tariff lines. Including fully bound and partially bound rates.
g Nuisance rates are those greater than zero, but less than or equal to 2%.
h Domestic tariff peaks are defined as those exceeding three times the overall simple average applied rate (indicator 8).
i International tariff peaks are defined as those exceeding 15%.

Note: Excluding in-quota rates. Calculations exclude specific rates and include the ad valorem part for compound and alternate rates.

Source: WTO Secretariat calculations, based on data provided by the Members.

Applied MFN tariffs

17. Applied MFN tariffs in the Quad are generally at, or close to, bound rates. The average for all products ranged from 4.9% in the United States to 6.6% in Canada; the average for the Quad was 6.1%.[12] However, these low average applied tariff levels disguise the fact that WTO (that is, the WTO definition of) agricultural products and textiles and clothing, respectively, are subject to much higher average rates of 16.5% and 8.2% (Table 1). These applied (as well as bound) MFN averages tend to underestimate the overall level of nominal tariff protection. In particular, they do not include certain specific duties for which *ad valorem* equivalents (AVEs) are not available; such duties tend to conceal tariff "peaks". In the EC and Japan, for example, AVEs were not available for around a quarter of tariff lines subject to non-*ad valorem* duties.

18. Since 1998 the overall average applied MFN tariff for the Quad has declined by 1.0 percentage point. With the exception of the United States, the decrease is more pronounced in WTO agricultural products than for WTO non-agricultural products. The average applied MFN tariff for WTO agricultural products fell by 2.4, percentage points, for both the EC and Canada, and by 1.6 percentage points for Japan.[13] In the United States averages decreased by 0.9 and 1 percentage points, respectively for WTO agricultural and non-agricultural products. Even though tariff averages have decreased, some product items have experienced an increase in their tariff rates. This is the consequence of non-*ad valorem* rates whose AVEs have risen from one period to another.

19. Applied MFN tariffs tend to be higher in developing than developed countries; the average applied MFN tariff rate for China (2005) was 9.7%, albeit roughly half the level in 1997 (Table 2). India's overall tariff average has also declined considerably; coming down to 18.8% in FY2005 (1 April to 31 March) from 35.3% in FY1997.[14] The average applied MFN tariff rates in Brazil (2004) and South Africa (2002), respectively, were 10.4% and 11.4%. Whereas in China and India, imports of agricultural products face tariffs that are, on average, considerably higher than those applied to non-agricultural products, in Brazil and South Africa, agricultural products are subject to roughly the same or even lower tariffs than those applied to non-agricultural products. China, Brazil and South Africa, unlike India, also levy relatively higher tariffs on textiles, clothing and footwear.

20. One possibly important reason for such high applied MFN tariff rates in several developing-country Members is the fact that tariffs are also a major source of tax revenue. It follows that tariff reform can have important revenue implications in such countries and reductions in average applied tariffs depend heavily on tax reforms aimed at reducing reliance on border taxes for revenues.[15] However, the possible fall in the revenues resulting from across-the-board cuts in applied tariff rates can be mitigated by the elimination of exemptions and other concessions in Members' tariffs; moreover, to the extent that broad cuts in applied tariffs are reflected in lower domestic prices for imported products, the amount of revenue collected (from the tariff and internal indirect taxes) could rise insofar as demand for such products is sufficiently responsive. A broad-based VAT would, in most cases, be a far less distorting source of tax revenue than tariffs, provided the administrative obstacles to such a tax can be overcome.[16]

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[12] Average is based on the 2005 tariff schedule in the United States, the European Communities and Canada; and FY2004-2005 tariff schedule in Japan.

[13] For WTO non-agricultural products, the decrease equals 0.9 percentage points for EC, 0.6 percentage points for both Japan and Canada.

[14] The simple average MFN rates do not include any exemptions or concessions that are also offered on an MFN basis and will lower the effective tariff rate. A rough calculation including some of those exemptions provides an overall average of 17.3% for FY2005.

[15] WTO negotiations concerning cuts in tariffs involve bound MFN rates only; such cuts would affect tariff revenues only insofar as they lead to reductions in applied rates.

[16] Erbil, Can, "Trade Taxes are Expensive" (August 2004).

21. Applied MFN tariffs are often well below bound rates in developing countries, including India, Brazil and South Africa (but not China), thus providing considerable scope for applied tariffs to be raised and thereby imparting a degree of unpredictability to the tariff. This gap is the result of two factors: the negotiation of ceiling bindings and unilateral reductions in applied tariffs. For LDCs, the gap between applied and bound MFN rates is even more pronounced.

22. The number of duty-free tariff lines has increased in most countries. As an average for the Quad, duty free tariffs have risen by 11 percentage points since 1998.[17] In Canada (2005), over half of total tariff lines bear a zero rate. The United States as well as the European Communities more than doubled their percentage of duty-free lines, respectively, from 18.6% and 13% in 1998 to 37.7% and 27.0% in 2005, whereas in Japan, zero rates increased by 5.4 percentage points from FY1998 to FY2004 (Table 1). Developing countries also show, in general, an increase in their duty free rates. China's duty free lines increased from 2.1% in 1997 to 8.6% of the tariff and Brazil for the same period increased its zero rates from 1.4% to 10.4%. South Africa has zero rates for over 40% of total lines in contrast to India, which has only 2.5% of tariff lines bearing duty free rates (Table 2). In LDCs, duty-free rates are scarce.

23. So-called "nuisance" tariffs (whose applied rates exceed zero, but are no more than 2%)[18] involve as many as 7.1% of all tariff lines in the United States and 6.9% in the EC, but only 1.1% and 0.9%, respectively, in Japan and Canada. In Brazil, they cover 15.1% of all tariff lines. By contrast, in China, such tariffs cover only 2.6% of all tariff lines and are negligible in India and South Africa. Since 1998, the numbers of "nuisance" tariff rates have declined for the United States, the EC and Japan and have increased for Canada, China and Brazil. For Brazil, "nuisance" rates were virtually non-existent in 1997, but represented 15.1% of total lines in 2004. Like duty-free rates, "nuisance" tariffs are not commonly used in LDCs (Annex Table 1).

Tariff dispersion and "peaks"

24. The efficiency losses associated with tariffs depend not just on average applied MFN levels, but also on the dispersion in rates across products. For any given average tariff, the greater the dispersion in rates, the larger the distorting effects of tariffs. Tariff peaks and the standard deviation are two indicators of the degree of dispersion. The higher the standard deviation, the more tariffs differ from the average applied tariff and the greater the dispersion. The United States and the European Community, with a standard deviation of, respectively, 12.6% and 11.5%, seem to have a more uniform tariff than Japan and Canada whose standard deviations are, respectively, 23.3% and 24.6%. Among these countries, applied MFN tariff rates that are three or more times the national average (domestic "peaks") continue in certain sectors. These "peaks" cover from 1.8% of tariff lines in Canada to 5.8% in the EC, 6.4% in Japan and 6.8% in the United States. By and large, tariff "peaks" are concentrated in agriculture and food products, partly due to "tariffication", as well as textiles and clothing, footwear and headgear, which tend to be labour intensive (Chart 1). Even though tariff averages have decreased since 1998, domestic tariff peaks have shown an upward trend for the United States, EC and Japan, emphasizing the continuing efforts by these Member to protect certain domestic products. Many of these products are of major export interest to developing and least developed countries; indeed, LDCs' exports are disproportionately affected by tariff "peaks" in the Quad.[19] Appropriately, the problem of tariff "peaks" features prominently in the DDA.

[17] The increase is partly due to the implementation of ITAs.

[18] There is no agreed WTO definition of "nuisance" tariffs.

[19] The value of Quad imports subject to international tariff "peaks" (that is, rates exceeding 15%) was nearly US$93 billion in 1999, roughly 60% of which originated in developing countries. This represents about 5% of developing countries' total exports to the Quad. LDCs exports to the Quad subject to "peaks" accounted for 15% to 30% of LDC's total exports to the United States, EC and Canada. Up to US$22 billion of tariff revenue may be collected by Quad Members on those imports subject to such "peaks"; half of this amount is contributed by developing country exporters, and LDC exporters may pay up to US$200 million in tariff

25. In most developing (and least developed) countries, domestic tariff "peaks" tend to be less pervasive, largely due to these countries' higher overall levels of tariff protection. In China such "peaks" cover 2.6% of tariff lines. In South Africa and India, the proportion is 3.9% and 2.7%, respectively, while they are negligible in Brazil (0.6%). Although "peaks" in these countries do arise in agriculture and food products as well as textiles and clothing, they are less pronounced than in the Quad (Chart 2). It is as well noticeable that standard deviations of developing countries tariffs tend to be lower than in the Quad, reflecting a less widely dispersed tariff structure.

26. In general, a movement towards lower and more uniform tariffs in developed and developing Members alike would tend to improve resource allocation and thereby raise economic welfare.[20] High and disparate tariffs foster inefficiency by penalizing efficient activities, including exports; by promoting a high-cost economy, they impair the competitiveness of exporters. Border taxes levied on imports are, in effect, shifted onto exports. Reducing tariff dispersion will tend to reduce these adverse effects.

27. It is estimated that if Quad Members were to accord LDCs duty-free access to products subject to tariff "peaks", LDCs' exports to these major markets would rise by between 30-60%, or by as much as US$2.5 billion; the latter is equivalent to an 11% increase in LDCs' total exports.[21] Part of this increase in LDCs' exports would be at the expense of other developing countries.

Non-ad valorem *tariff rates*

28. Tariff "peaks" are often concealed by non-*ad valorem* rates[22], an important feature of the Quad Members' tariff schedules.[23] This is particularly true for agricultural products, especially in the United States and the EC, where non-*ad valorem* rates account for 10.6% and 9.9% of tariff lines, respectively.[24] This is partly the consequence of the "tariffication" of agricultural NTBs, which were often converted into specific or mixed[25] and compound[26] duties, rather than into *ad valorem* tariffs, and often combined with quotas. On average, over 90% of the top 100 tariff rates entail non-*ad valorem* rates for the Quad. Non-*ad valorem* rates are also an important feature of the tariffs of India and especially South Africa, accounting, respectively, for 6.9% and 25% of tariff lines. By contrast, the tariffs of China and Brazil appear to be relatively transparent in this regard, with only 0.7% of all tariff lines subject to non-*ad valorem* rates in China and none in Brazil. In LDCs, non-*ad valorem* rates are very rare.

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revenue notwithstanding their tariff preferences (See Francis Ng and Marcelo Olarreaga, 2002, "Tariff Peaks and Preferences" in B. Hoekman, A. Mattoo and P. English (editors), *Development, Trade and WTO* (The World Bank)). This situation may well have changed somewhat owing to unilateral preferences accorded by the United States and the EC, respectively, under AGOA and EBA.

[20] Strictly speaking, a uniform, non-zero nominal tariff minimizes the net welfare cost of such protection only if import demand elasticities are uniform across commodities and cross-price effects are negligible. Tariff uniformity may be desirable on administrative simplicity and political grounds, however. Chile and Mongolia provide examples of Members with low and quasi-uniform tariffs.

[21] Hoekman, Bernard, Francis Ng and Marcelo Olarreaga, 2002 "Reducing Agriculture Tariffs Versus Domestic Support: What's More Important to Developing Countries?", CEPR Discussion Paper No. 3576.

[22] The simple average of *ad valorem* equivalents (AVEs) for specific duties is 2½ to 20 times the simple average of *ad valorem* duties in the Quad.

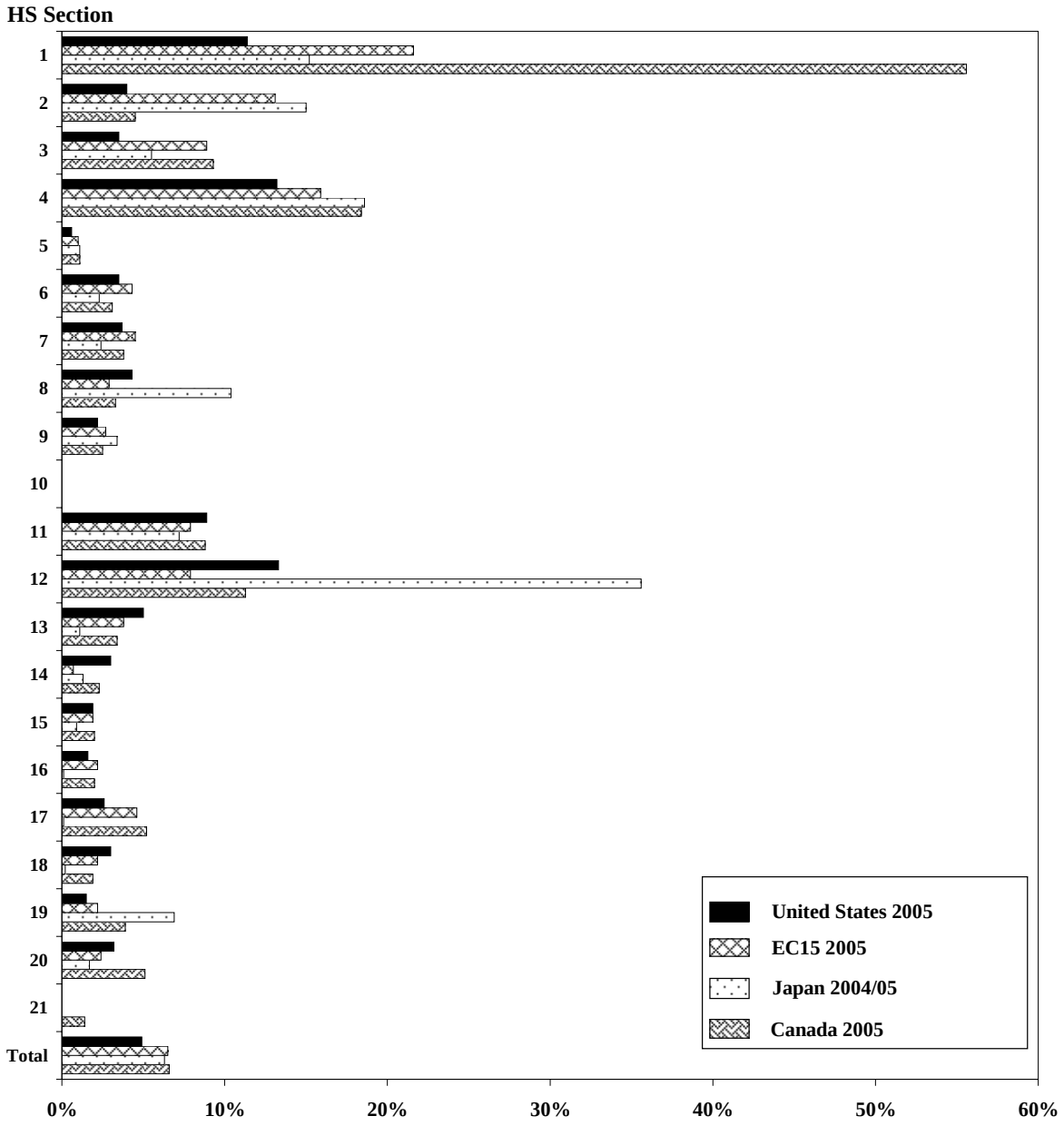
[23] Norway and particularly Switzerland also rely heavily on specific duties; indeed, all Switzerland's duties are specific.

[24] To the extent that specific rates do conceal tariff "peaks" and estimates of their AVEs are not available, as in the EC, Japan, Canada, China, India and South Africa, the indicators of both the levels of tariff protection and the dispersion in rates are underestimated.

[25] Mixed (or alternative) tariff rates ensure a minimum (or maximum) level of protection through a choice between an *ad valorem* rate and a specific rate, e.g., 15% or US$5/kilo, whichever is greatest (or least).

[26] Compound tariff rates combine both an *ad valorem* rate plus (in rare cases minus) a specific rate, e.g., 15% + $5/kilo.

Chart 1
Simple average MFN tariff rates for the "Quad", by HS Section

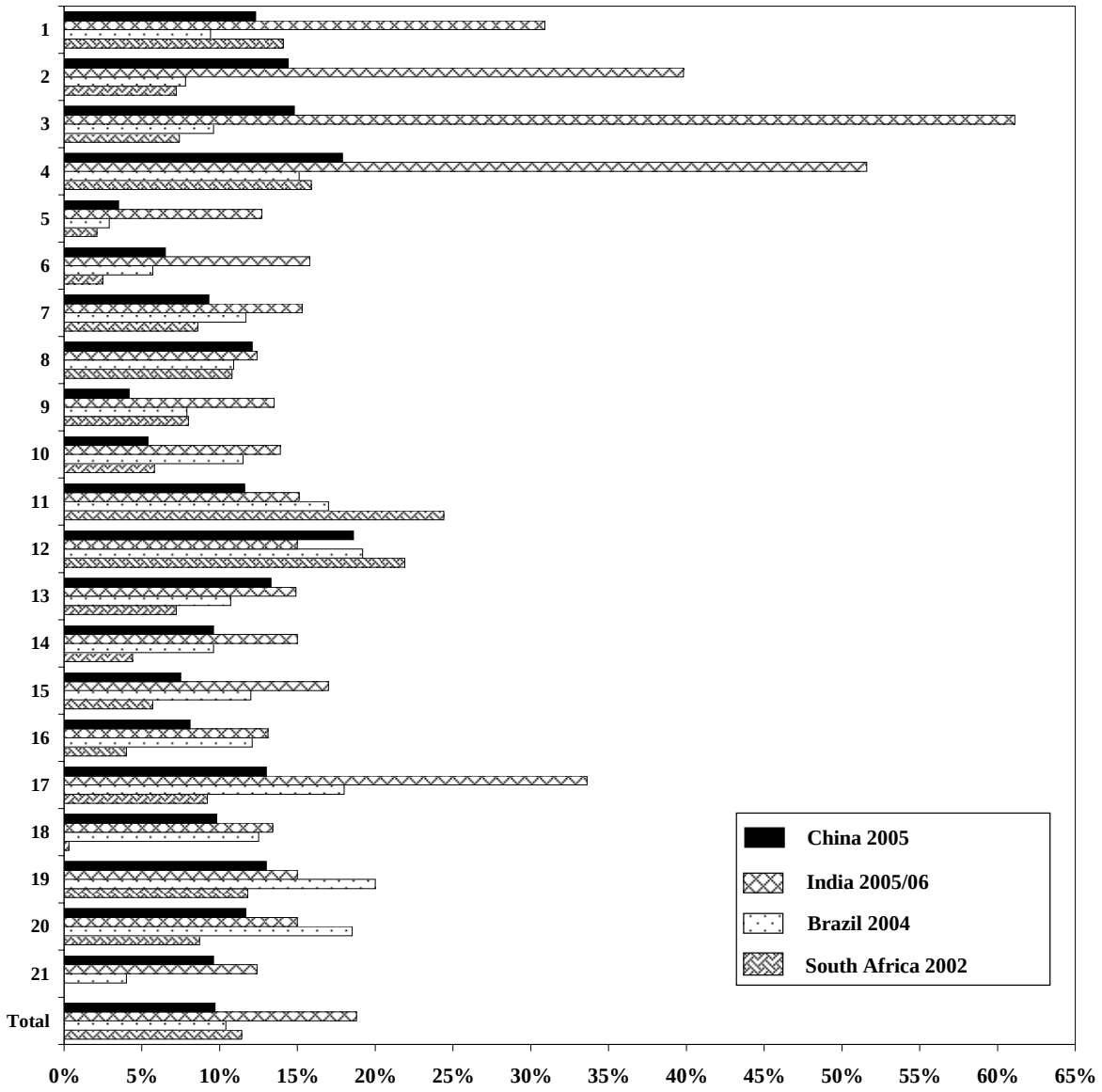


01 Live animals and prods	07 Plastic and rubber	13 Articles of stones	19 Arms and ammunition
02 Vegetable products	08 Hides and skins	14 Precious stones, etc.	20 Miscellaneous manufs
03 Fats and oils	09 Wood and articles	15 Base metals and prods	21 Works of art, etc.
04 Prepared food, etc.	10 Pulp, paper, etc.	16 Machinery, etc.	
05 Mineral products	11 Textiles and articles	17 Transport equipment	
06 Chemicals and prods	12 Footwear, headgear, etc.	18 Precision instruments	

Note: **Calculations include AVEs where available; where they are not available, the *ad valorem* part is used for alternate and compound rates. Excluding in-quota rates.**

***Source*:** **WTO Secretariat calculations, based on information provided by Members.**

Chart 2
Simple average MFN tariff rates for selected developing countries, by HS section



01 Live animals and prods	07 Plastic and rubber	13 Articles of stones	19 Arms and ammunition
02 Vegetable products	08 Hides and skins	14 Precious stones, etc.	20 Miscellaneous manufs
03 Fats and oils	09 Wood and articles	15 Base metals and prods	21 Works of art, etc.
04 Prepared food, etc.	10 Pulp, paper, etc.	16 Machinery, etc.	
05 Mineral products	11 Textiles and articles	17 Transport equipment	
06 Chemicals and prods	12 Footwear, headgear, etc.	18 Precision instruments	

Note: **Calculations exclude specific duties and include the *ad valorem* part for alternate and compound rates. Excluding in-quota rates.**

***Source*:** **WTO Secretariat calculations, based on information provided by the Members.**

29. It is interesting to see how AVEs influence the applied MFN tariff. On average, 7.8% of total lines are subject to non-a*d valorem* rates in the Quad. For agricultural products, this figure is 32.9%,

ranging from 17.2% in Japan to 46.3% in the EC. Excluding AVEs[27], the average MFN tariff of the Quad is 4.3%, 1.8 percentage points less than the average including AVEs, with a range from 3.9% in Canada to 4.5% in the EC.[28] The use of AVEs is more striking when only considering agricultural products. The average tariff on WTO agricultural products for the Quad is 16.4%; excluding AVEs the average is 7.5%.[29] The use of AVEs in agricultural products does not have the same impact for all Quad countries. Despite the fairly high percentage of non-*ad valorem* rates in the United States, excluding or including AVEs changes the average tariff on WTO agricultural products by only 1.6 percentage points. In Canada, the percentage of non-ad valorem rates is lower, but the difference in tariff averages is much more important, with an average for agricultural products including AVEs at 22.3% and excluding AVEs at 4.3%. The general aspects of non-*ad valorem* rates, especially specific duties, are summarized in Box 1.

Box 1: Specific duties

The use of specific (as well as alternate and compound) duties are problematic for several reasons. First, they are less transparent than *ad valorem* tariffs, tending to conceal relatively high *ad valorem* equivalents. Second, specific duties tend to distort domestic production patterns more than *ad valorem* tariffs, providing disparate levels of assistance for similar goods by taxing imports of cheaper products more heavily; this encourages domestic firms to produce cheaper goods that have higher protection from imports. To the extent that developing countries are exporters of relatively cheap products falling within the same national tariff line, such duties tend to impose a heavier burden on their exports; specific duties thus tend to afford higher levels of tariff protection (in *ad valorem* terms) against imports from developing countries than from industrialized countries. Third, specific duties may also be more regressive than *ad valorem* duties because they impose a heavier burden on cheaper products within the same tariff line. Fourth, as AVEs are inversely related to import prices, specific duties progressively cushion domestic producers against competition from lower-priced imports, thereby counteracting cuts in specific rates. Consequently, they counteract the relative price effects of exchange rate changes on countries' trade balances. Indeed, the use of specific duties can lead to an increase in real tariff protection as the prices of traded goods decline (and to a fall in real protection as prices increase). On the other hand, specific duties in domestic currency are eroded by inflation, which has the effect of autonomous trade liberalization, and they are less prone to the problem of under-invoicing, which is a common issue in developing countries. Members have agreed in the framework of current negotiations concerning non-agricultural market access that duties on non-agricultural products shall be "bound in *ad valorem* terms".

Source: WTO Secretariat.

Tariff quotas

30. The UR negotiations on agriculture involved the establishment of tariff quotas to preserve market access ("current access") and enhance market access ("minimum access").[30] As a result, tariff rate quotas as a proportion of all tariffs increased considerably in the United States, Japan and Canada; they were already significant in the EC prior to the UR. Tariff quotas in the current applied tariff account for between 1.6% of tariff lines in Japan to 3.3% in the EC. By contrast, the tariffs of China and Brazil contain few, if any, tariff quotas. "Out-of-quota" rates (and even "in-quota" rates) in the Quad, often entail potentially prohibitive tariff "peaks" and most of them are based on non-*ad valorem* tariffs with the average of out-of quota rates being 4.2 to nearly 25 times higher than the

[27] Averages excluding AVEs are only based on *ad valorem* rates.

[28] Averages of *ad valorem* rates and AVEs are respectively, 4.2% and 10.7% in the United States, 4.5% and 29.5% in the EC, 4.4% and 39.2% in Japan, and 3.9% and 81.8% in Canada.

[29] WTO agriculture averages of *ad valorem* rates and AVEs, are respectively, 8.1% and 11.8% in the United States, 7.7% and 30.4% in the EC, 9.8% and 65.6% in Japan, and 4.3% and 85.1% in Canada.

[30] In 2004, 45 WTO Members have a total of 1,430 tariff quota commitments in their Schedules (see TN/AG/20). For the Quad the number of tariff quota commitments ranges from 20 for Japan, to 91 for the European Communities, representing around 12% (Canada), 15% (Japan) and 27% (U.S. and EC) of tariff quotas applied in their current tariff schedules.

corresponding in-quota average.[31] For the Quad, tariff quotas as a percentage of total tariff lines has remained unchanged since 1998. WTO Members have considerable discretion in administering tariff quotas, which, despite the decreased in-quota tariffs, may explain why in many cases tariff quotas have not been filled, hence reducing the benefits of "tariffication".[32]

Tariff escalation

31. A non-uniform tariff is often used to provide an "escalating" degree of tariff protection to encourage downstream processing. This may be attempted by levying relatively low duties on raw materials with progressively higher tariffs applied to more processed goods. The outcome is that the level of effective (as opposed to nominal) protection increases as goods undergo further processing.[33] Indeed, what may be mild escalation in nominal tariff terms can provide very high effective (net) assistance to downstream activities. Tariff escalation (often reflecting tariff "peaks") is a feature of industrial-product tariffs in the Quad (Table 3). Such escalation is present in the same sectors as those that are affected by "peaks", most notably textiles, clothing and leather, and food, beverages and tobacco. Other groups of products that are subject to escalation are non-metallic mineral products and base metals. Among the Quad, Japan shows a less consistent escalation pattern. For textile and leather products the average is highest in the first stage of processing and in many product groups the averages for semi-processed goods are higher than for fully processed products. Tariff escalation is also a feature of the tariffs of China, Brazil, South Africa and, to a lesser extent, India, especially in the case of textiles and leather, and wood and wood products (Table 4). Not only is tariff escalation a potential impediment to the efficient allocation of resources in the importing country, it also constitutes an obstacle to local processing of domestically-produced primary products as well as of semi-finished goods in the exporting country. Consequently, it can impede the industrialization of developing countries and LDCs seeking to export products with higher value-added, if not mitigated by GSP or other preferences.[34] Since 1998, no strong decline in escalation is apparent in the Quad.[35]

[31] The average of in-quota and out-of quota rates is respectively 9.0% and 48.9% in the United States, 8.8% and 37.1% in the EC, 18.9% and 90.8% in Japan, 3.2% and 80.7% in Canada.

[32] Information regarding tariff rate quota (TRQ) "utilization rates" and "administration" systems may be found in WTO documents TN/AG/S/2, TN/AG/S/5, TN/AG/S/6, TN/AG/S/9 and TN/AG/S/20.

[33] The effective rate of protection (ERP) measures the protection provided by the entire structure of tariffs, taking into account those levied on inputs as well as those on final products. It is defined as ERP = $(V_D - V_W)/V_W$, where V_D is the value-added in the given sector at domestic prices, which includes tariffs, and V_W is value added at world prices. If the nominal tariff on the final product is t, the share of each imported input i in the total value of the final product is a_i, and the nominal tariff on each imported input is t_i, then the effective rate of protection can be written as: ERP = $(t - \Sigma a_i t_i)/(1 - \Sigma a_i)$. Thus, if t = 10%, t_i = 5% for all inputs and Σa_i = 0.6, the ERP is nearly 20%. For a full discussion of this concept, see Corden, W.M., 1971, *The Theory of Protection*, London: Oxford University Press.

[34] In principle, LDCs will not face any tariff escalation once they are granted "duty-free and quota-free access" to the markets of developed countries, provided they can comply with associated preferential rules of origin.

[35] As a result of missing AVEs, it is difficult to compare escalation across years. For Japan, the first stage of processing for product group "food, beverages and tobacco" has an average of 23.7% in FY1998/99 and 12.6% in FY2004/05. The HS item 0171339227 belonging to this group has an AVE of 1,012% in FY98/99; for the same item, no AVE is provided in FY2004/05.

Table 3
Tariff escalation in the "Quad" by 2-digit ISIC industry
(Per cent)

		United States 2005	EC15 2005	Japan 2004/05	Canada 2005
Food, beverages and tobacco	First stage of processing	2.9	14.7	12.6	9.5
	Semi-processed	7.1	19.4	21.4	6.8
	Fully processed	12.4	19.4	20.2	34.1
Textiles and leather	First stage of processing	2.4	0.8	24.3	1.0
	Semi-processed	8.5	6.2	6.5	6.1
	Fully processed	9.5	9.4	11.4	12.7
Wood and furniture	First stage of processing	0.0	0.0	0.0	0.0
	Semi-processed	2.1	3.1	4.3	2.1
	Fully processed	2.2	2.1	2.1	5.2
Paper, printing and publishing	First stage of processing	0.0	0.0	0.0	0.0
	Semi-processed	0.1	0.9	0.3	0.1
	Fully processed	0.0	0.0	0.0	0.0
Chemicals	First stage of processing	1.8	1.5	2.4	1.5
	Semi-processed	3.8	4.7	2.8	2.7
	Fully processed	3.9	3.9	2.0	4.5
Non-metallic mineral products	First stage of processing	0.0	0.0	0.0	0.0
	Semi-processed	2.1	2.9	1.5	0.6
	Fully processed	5.5	4.1	1.1	3.8
Basic metal	First stage of processing	0.6	0.0	0.0	0.0
	Semi-processed	1.2	1.3	0.8	0.6
Fabricated metal products and machinery	Semi-processed	2.5	1.6	1.5	1.3
	Fully processed	2.2	2.5	0.3	2.6
Other	First stage of processing	1.6	1.2	0.2	1.2
	Semi-processed	0.0	0.0	0.0	0.0
	Fully processed	3.6	2.7	2.5	4.8
Total industry	First stage of processing	2.2	8.9	10.5	4.1
	Semi-processed	4.3	4.7	4.7	3.5
	Fully processed	5.4	7.0	7.2	8.8
Overall escalation	First stage of processing	3.7	8.5	7.5	4.9
	Semi-processed	4.3	4.7	4.7	3.5
	Fully processed	5.4	7.0	7.2	8.8

Note: For countries with non-*ad valorem* rates AVEs have been used as available. In case of unavailability, the *ad valorem* part is used for compound and alternate rates. Excluding in-quota rates.

Source: WTO Secretariat calculations, based on data provided by the Members.

Table 4
Tariff escalation in China, Brazil, India and South Africa, by 2-digit ISIC industry
(Per cent)

		China	India	Brazil	South Africa
		2005	2005/06	2004	2002
Food, beverages and tobacco	First stage of processing	12.7	38.1	8.1	10.8
	Semi-processed	23.2	35.3	11.2	10.3
	Fully processed	16.7	51.0	13.5	15.5
Textiles and leather	First stage of processing	11.9	17.4	8.3	4.7
	Semi-processed	9.0	15.0	15.6	22.0
	Fully processed	14.6	15.1	19.1	32.3
Wood and furniture	First stage of processing	1.2	9.0	2.0	0.0
	Semi-processed	4.0	15.0	7.3	6.2
	Fully processed	6.4	15.0	14.7	15.6
Paper, printing and publishing	First stage of processing	0.0	7.1	3.6	0.0
	Semi-processed	6.1	15.0	12.1	5.8
	Fully processed	5.9	13.8	11.9	7.7
Chemicals	First stage of processing	6.1	15.5	6.8	3.5
	Semi-processed	6.5	15.7	6.3	3.3
	Fully processed	8.5	15.1	6.6	7.7
Non-metallic mineral products	First stage of processing	0.0	15.0	6.0	0.0
	Semi-processed	10.4	15.0	7.3	4.9
	Fully processed	13.2	14.9	11.1	7.1
Basic metal	First stage of processing	4.0	7.9	3.8	0.0
	Semi-processed	4.9	17.9	9.5	3.1
Fabricated metal products and machinery	Semi-processed	6.9	15.0	13.7	2.4
	Fully processed	9.3	15.5	13.0	5.2
Other	First stage of processing	13.8	27.8	8.6	2.5
	Semi-processed	7.5	15.0	12.0	4.3
	Fully processed	14.8	14.9	17.4	7.3
Total industry	First stage of processing	10.0	25.6	7.3	5.6
	Semi-processed	7.3	16.3	8.5	12.9
	Fully processed	11.1	18.9	12.5	11.2
Overall escalation	First stage of processing	9.6	27.3	6.8	4.8
	Semi-processed	7.3	16.3	8.5	12.9
	Fully processed	11.1	18.9	12.5	11.2

Note: Calculations exclude specific rates and include the *ad valorem* part for compound and alternate rates. Excluding in-quota rates

Source: WTO Secretariat calculations, based on data provided by the Members.

Preferential tariffs for developing countries and the erosion of preferences

32. Under the GATT "Enabling Clause", non-reciprocal preferential treatment may be offered to developing countries. A number of countries offer such treatment under the Generalized System of Preferences. The preferences are usually offered to a specific number of countries and for various ranges of products, although a number of countries have recently removed all tariffs on products entering from LDCs.[36] Others, such as the United States and the EC, have also passed legislation offering preferential treatment for specific countries: the United States under the African Growth Opportunities Act (AGOA), which offers preferential treatment for qualifying African countries; and

[36] Examples of such countries that have removed tariffs on imports from LDCs include New Zealand (1 July 2000), Norway (2002) and Australia (July 2003).

the EC under the Everything but Arms (EBA) Agreement, which accords duty-free and quota-free entry to all products imported from LDCs, except arms and munitions and three agricultural products (bananas, rice and sugar), for which tariffs are due to be removed by 2009. GSP schemes usually exclude "sensitive products", such as agricultural products and textiles and clothing; imports of these excluded products are normally subject to MFN duty.

33. Analysis of preferences for developing and least-developed countries shows that average GSP rates in the Quad are on average 1 to 2 percentage points lower than MFN rates; differentials are smaller for sensitive sectors such as textiles and clothing and agriculture (Table 5).

34. With constant progress in overall trade liberalization, through *inter alia* multilateral and regional negotiations, preference erosion has become an important issue in current WTO negotiations. Multilateral trade negotiations on general tariff reductions are often said to be a two-edged sword for developing countries. On the one hand, they produce benefits via improved access for developing country exports to world markets, but on the other hand, they can be costly due to an erosion of their existing preference margins.

Table 5
MFN and developing country preferential tariffs in the "Quad"
(Per cent)

	MFN	GSP[a]	LDC[b]
United States 2004	4.9	2.6	..
WTO agricultural products	9.7	6.2	..
Textiles and clothing	9.0	8.8	..
EC 2004[c]	6.5	4.5	1.7
WTO agricultural products	16.5	14.5	9.0
Textiles and clothing	8.0	7.2	0.0
Japan 2004/05	6.3	5.1	3.1
WTO agricultural products	16.1	16.7	15.3
Textiles and clothing	6.7	5.0	0.0
Canada 2005	6.6	5.3	2.5
WTO agricultural products	22.3	20.0	15.3
Textiles and clothing	8.9	8.1	0.0

.. Not available.

a Generalized System of Preferences.
b Least Developed Countries Preferences.
c Data for EC's GSP and LDC are based on the 2001 tariff (and nomenclature), the latest available on such preferential rates.

Note: AVEs have been used as available. In case of unavailability, the *ad valorem* part is used for compound and alternate rates. Calculations exclude in-quota rates.

Source: WTO Secretariat calculations, based on data provided by Members.

35. It is difficult to calculate the magnitude of preference erosion, as arriving at an appropriate quantitative estimate of the full effects of MFN tariff reductions for developing countries receiving preferences is a rather complex task. Different studies show that the erosion of tariff preferences will not have an equal impact on all developing or least- developed countries.[37] The impact depends on the composition of their exports and their dependence on, and the use of, preferential rates. For some

[37] See, for example, Low, P., R. Piermartini and J. Richtering, "Multilateral Solutions to the Erosion of Non-Reciprocal Preferences in NAMA", October 2005; Alexandraki, Katerina (2005) "Preference erosion: cause for alarm?", IMF, *Finance & Development*, March; Paul Brenton and Takako Ikezuki (2005) "The impact of agricultural trade preferences, with particular attention to the least-developed countries", World Bank, *Global Agricultural Trade and Developing Countries;* See, also, Francois, J., B. Hoekman and M. Manchin. "Preference Erosion and Multilateral Trade Liberalization", Centre for Economic Policy Research, July 2005. Available online at: http//www.cepr.org/pubs/dps/DP5153.asp.

developing and least-developed countries, exports will hardly be affected by the erosion; for others, there could be much at stake, even if the preferential margin is very small. But unless trade liberalization is put on hold, tariff erosion will be unavoidable. To temporarily lessen the damage of tariff erosion, a better use of preferential schemes could be achieved by extending the coverage to all products and removing quotas or increasing quota levels. In agriculture, for example, the problem of tariff peaks on products of export interest to developing countries still exists and import quotas hinder exports further. Moreover, from one year to the next, a product's preference or even a country's access to a preference may be removed. By making preferential schemes more predictable, the motivation to invest in developing countries in order to take advantage of preferences might be strengthened. Rules of origin also hamper the ability to take full advantage of preferential rates. Their lack of transparency and complexity can generate important administrative costs, decreasing the benefit of the preference considerably.[38] Rules of origin are often considered to be the main cause of low utilization rates[39] of preferential schemes.

36. For sub-Saharan African countries, the overall value of trade preferences granted by the EC, Japan and the United States is rather small.[40] In 2002, the latest year for which data are available, the value of EC preferences to sub-Saharan African countries, under the Cotonou Agreement and under the EBA/GSP, amounted to about 4% of the value of those countries' exports to the EC. The value of U.S. preferences to the same countries, under AGOA and the GSP, amounted to 1.3% of the value of their exports to the United States, whilst Japanese preferences to sub-Saharan African exporters amounted to 0.1% of the value of their exports. Hence, for a majority of beneficiaries, preferences appear to have had a limited impact on exports. Consequently, for sub-Saharan countries, the erosion of tariff preferences is likely to have a limited effect. However, it is important to point out, that the benefits of those preferences are concentrated in a small number of countries and sectors; hence, for specific countries, and for certain products[41], the erosion of tariff preferences might have a significant negative impact.

37. A crucial question for countries undergoing preference erosion is whether, during WTO negotiations, they should opt for slowing down the pace of MFN tariff reductions to maintain greater tariff preferences for as long as possible. The disadvantage of preferences is that developing countries might tend to become dependent on the preferential access granted to certain products at the expense of other products where they do possess a comparative advantage. In the long run, with preferential margins becoming smaller, or even abolished, those countries might see their exports dependent on preferential margins drastically reduced. An example of such dependence is the market distortion created by the ATC and its precursor, the MFA. Under the MFA, which was negotiated in 1974, quotas were imposed on exports of textiles and clothing from the most competitive developing countries. A number of other countries took advantage of this constraint by developing a textiles and clothing industry.[42] Since January 2005, with the termination of the ATC, quotas have been abolished for textiles and clothing. Countries that were granted preferential access under the ATC now need to compete without that preferential access.

[38] WTO document WT/REG/W/45, 5 April 2002. For example, Canada's textiles and clothing imports from LDCs increased considerably after it relaxed its rules of origin in January 2003 (in addition to eliminating tariff rates) of such products.

[39] The utilization rate is defined as the ratio of imports actually receiving preferential treatment in relation to imports eligible for preferential treatment.

[40] Paul Brenton and Takakao Ikezuki, 16 May 2005 "The value of trade preferences for Africa", Trade Note 21, the World Bank Group.

[41] Such as sugar and clothing.

[42] For example, with abundant cheap labour involved in the manufacture of low-priced clothing, Bangladesh's share of clothing in total exports rose from 0.2% in 1980 to 76.6% in 2004 (UNSD, Comtrade database).

3. Agriculture – Still the most distorted sector

38. Agriculture plays a central role in many developing countries, accounting for just over one quarter of their GDP and about half of their employment; by contrast, agriculture in OECD countries accounts for only around 2% of GDP and 7.3% (in 2001) of employment. With nearly three quarters of the world's poor concentrated in rural areas, mainly in developing countries, and depending heavily on agriculture for their livelihoods, trade liberalization in agriculture is crucial to the alleviation of poverty. In agriculture, the conversion of quantitative restrictions and other non-tariff measures into tariffs ("tariffication") and the curtailment of subsidies were among the major achievements of the UR; tariffication of NTBs, in particular, paved the way for future reductions in agricultural tariffs.[43] Nonetheless, both tariffs and domestic support for agriculture are still relatively high, especially in many OECD countries. In the Quad, for example, applied MFN tariffs on agricultural products average more than four times those on non-agricultural products, thus impinging on the opportunities of developing and other countries to benefit from trade in such products. Total support to agriculture by OECD countries in 2004 exceeded US$1 billion per day, more than six times all development assistance. Much of this support is linked to production; this encourages higher output resulting in surpluses, especially in several OECD countries where such support is most generous. Support linked to production in combination with export subsidies tends to lower world prices of agricultural products and leads to the displacement of developing countries' products, not just from subsidizing countries' markets, but also from their own and third markets, to the detriment of poor farmers in developing and least developed countries. In general, agriculture remains the most protected, subsidized, and thus distorted, sector of many Members' economies, with far-reaching social and economic repercussions, not just domestically, but globally. Estimates by the World Bank and IMF suggest that the benefits from dismantling all border measures and eliminating subsidies affecting agriculture would be very large for industrialized and developing countries alike.[44]

39. Under the Doha Ministerial Declaration, it was agreed that the agriculture negotiations would aim at achieving substantial reductions in trade-distorting domestic support, substantial improvements in market access and reductions, with a view to phasing out, all forms of export subsidies. In addition, the Declaration requires that special and differential treatment for developing countries be integral to all parts of the negotiations and be reflected in the results. The General Council Decision of 1 August 2004 clarified that reductions in tariffs, AMS and the total permitted level of trade-distorting domestic support would be achieved by tiered formulas and that all forms of export subsidies would be phased out by eliminating direct subsidies and export credits of 180 days or more and introducing rules on other export credits, food aid and exporting state trading enterprises. It also set out how flexibility could be provided for all Members through sensitive products and for developing country Members through Special Products and a Special Safeguard Mechanism.

40. Further progress was made in the Ministerial Conference in Hong Kong, China. It was agreed that all forms of export subsidies would be eliminated by 2013 along with further details concerning the rules on export credits, food aid and exporting state trading enterprises. On domestic support, the position of Members on the bands for the tiered formula for reductions in both overall trade-distorting support and AMS were agreed along with a number of other issues; disciplines are to be developed to

[43] The Uruguay Round Agreement of 1994 resulted in agricultural policies being subjected to multilateral rules and effective disciplines for the first time. The Uruguay Round Agreement on Agriculture (URAA), replaced non-tariff import barriers by bound tariffs, opened previously closed markets, curbed export subsidies; categorized domestic programmes on the basis of their potential to distort trade, and disciplined the most trade-distorting forms of support. Agriculture was also affected by other agreements, notably SPS and TBT, whose aim was to forestall the use of such measures for purposes of protection.

[44] Estimates of the benefits top US$350 billion for the world (World Bank, 2004, *Global Economic Prospects*, p. 105). According to the IMF, the static global welfare gains from removing agricultural support tariffs and subsidies would be US$128 billion annually; the dynamic gains (from higher investment and faster productivity growth) may well be several times larger. (IMF, 2002, *World Economic Outlook*, Washington, D.C, p. 85).

achieve effective cuts in trade-distorting domestic support consistent with the Framework adopted by the General Council on 1 August 2004. On market access, progress was made on some elements of special and differential treatment. Ministers agree to intensifying work on outstanding issues to achieve the DDA objectives and resolved to establish modalities no later than 30 April 2006 and to submit comprehensive draft Schedules no later than 31 July 2006.

41. Agricultural support programmes are partly justified by those Members using them as being necessary to address non-trade concerns, such as income support for agricultural households, preservation of the environment and food security. While the view that such non-trade concerns are legitimate domestic objectives is widely shared among WTO Members, some attach more importance to these concerns than others. Much of the debate has, therefore, been about the magnitude of support to agriculture, as well as the effectiveness of the various measures aimed at achieving these multiple objectives.

42. Clearly, domestic agricultural policies and international trade are closely intertwined, with protective border measures often used alongside domestic support programmes. In particular, a domestic support programme that holds the domestic price above the world level requires accompanying import restrictions such as tariffs; the higher the domestic support price, the higher the accompanying tariff or its equivalent. Further, to the extent that domestic support programmes generate a surplus, export subsidies have been used to help dispose of the surplus.

43. Total support to agriculture by OECD countries, as measured by the total support estimate (TSE)[45], was US$378 billion in 2004[46], compared to US$349 in 2003 and US$306 billion in 1986-88. The EC (15), Japan and the United States collectively account for approximately four-fifths of such support (although as a percentage of the value of gross farm receipts, support is highest in Switzerland, Norway, Korea, Iceland and Japan, respectively). In 2002-2004, average annual total support was the equivalent of 1.2% of GDP in the OECD area, compared to an annual average of 2.3% in the peak 1986-88 period. Agriculture's contribution to GDP in the OECD area is currently about 2%. In Japan, Korea, Norway, and Switzerland, total support to agriculture is close to, or even exceeds, the sector's contribution to GDP.

44. Nearly three quarters of total support is provided to farmers. Such support, as measured by the producer support estimate (PSE), represented 30% of total farm receipts in 2004, the same level as in 2003, but down from 37% in 1986-88. In other words, close to one-third of OECD Members' current gross farm receipts result from transfers associated with their agricultural policies. In 2002-04, the PSEs for Japan, the EC, Canada and the United States were 58%, 34%, 22% and 18%, respectively. In Iceland, Korea, Norway and Switzerland, PSEs were even higher, ranging from 63% to 69%. Thus, for every $100 earned by a farmer in these four countries, some two-thirds was the result of transfers associated with agricultural support measures. Among OECD countries, support levels in 2002-04 were the lowest in New Zealand (2%) and Australia (4%).[47] Rice, sugar and milk remain the most supported commodities, with transfers to producers close to, or exceeding, half of gross receipts. The prices received by OECD farmers in 2002-04 were on average 29% above world prices (compared with 57% in the mid-1980s), thereby shielding farmers in many countries from world market signals. At the same time, the prices paid by OECD consumers in 2002-04 were on

[45] The total support estimate (TSE) is the value of all gross transfers from taxpayers and consumers arising from policy measures that support agriculture, regardless of their objectives and impact on farm production and income or consumption of farm products. More details of the definition and calculation of the total support estimate and producer support estimate are found in the Annex.

[46] OECD, 2005, *Agricultural Policies in OECD Countries: Monitoring and Evaluation 2005*, OECD, Paris.

[47] While government support in Australia and New Zealand is low, these countries have relatively strict SPS regulations, thought necessary to ensure that their reputation as reliable exporters of high quality agricultural products is not jeopardized by pests and diseases, but which nonetheless tend to impede imports of such products.

average 33% higher than world prices (compared to 59% in the mid-1980s). Whereas domestic prices paid by consumers were, on average, the same as those at the border in Australia, they were 10% higher in the United States, 26% higher in the EC, and double or more in Japan, Korea, Norway and Switzerland. Overall, consumers in OECD countries were implicitly taxed at a rate of 21% as a result of market price support (MPS) policies.

45. While the overall level of producer support in OECD Members, as measured by the PSE, has not changed very much since the mid-1990s, there has been a noticeable shift in the composition of support away from transfers paid by consumers in the form of market price support (MPS) to direct payments. The share of overall producer support fell from almost 78% in 1986-88 to roughly 60% in 2002-04 (Table 6). Between the same periods, the combined share of MPS, output-linked support payments and payments based on input use dropped from 91% to 74%. This drop is significant because these types of support measures are the most distorting forms of assistance as far as production and trade are concerned, contributing to over-production in the OECD area to the detriment of both those OECD Members where support is relatively low and of developing countries.[48] Such measures are also relatively ineffective in transferring income to farmers or in achieving environmental objectives. By contrast, there is only a very modest use of policies targeted at specific objectives and beneficiaries.

Table 6
Composition of Producer Support Estimate by measure, 1986 to 2004
(Percentage share in PSE)

Measure	United States			European Communities (15)			Japan			Canada			OECD		
	1986-88	2002-04	2004	1986-88	2002-04	2004	1986-88	2002-04	2004	1986-88	2002-04	2004	1986-88	2002-04	2004
Market Price Support	38.7	35.3	34.8	86.9	54.8	53.8	89.6	90.1	90.6	52.4	47.8	46.5	77.6	61.3	59.9
Payments based on output	8.0	10.1	14.9	4.9	3.5	3.5	3.1	3.2	3.1	15.7	4.4	5.2	5.0	4.4	5.2
Payments based on area planted/animal numbers	31.1	6.2	3.0	2.6	28.2	29.2	0	0	0	15.5	10.6	12.6	6.5	15.6	16.8
Payments based on historical entitlements	0	14.1	11.4	0	0.6	0.6	0	0.4	0.3	0	13.1	10.1	0.2	4.8	4.8
Payments based on input use	17.9	17.6	15.5	4.9	8	8.1	4.2	3.3	3.2	14.4	5.1	5.9	8.4	8.9	8.6
Payments based on input constraints	1.8	4.8	4.0	0.7	4.9	5.2	3.2	3.0	2.7	0	0.1	0.1	1.2	3.6	3.6
Payments based on overall farm income	2.5	5.1	4.3	0	0	0	0	0	0	0	17.4	20.7	0.9	1.4	1.3

Notes: Data for 2004 are provisional. For the United States, Counter cyclical payments accounted for 6.7 and 12.1% of total PSE during the period 2002-04, and 2004, respectively.

Source: OECD, PSE/CSE database 2005.

[48] Under the WTO Agreement on Agriculture, domestic support measures are classified as "Amber Box" (trade-distorting policies, such as price support, certain direct payments and input subsidies), "Blue Box" (trade distorting policies but with production-limiting conditions), "Green Box" (measures deemed to be non or at most minimally trade-distorting), with S&D for developing countries. Whereas in the United States and Japan "amber" box subsidies accounted for somewhat less than one quarter of total domestic support in 1998 (the latest year for which such data are available), such subsidies accounted for more than half of total support in the EC and Canada.

46. In 2003-05, OECD Members introduced a number of policy changes unilaterally. The United States implemented the 2002 Farm Act, providing new forms of payments to producers for the purpose of stabilizing farm incomes. In the EC, agreement was reached on the 2003 reform of the Common Agricultural Policy (CAP), involving a significant further step in the direction of decoupling support from production decisions, to be implemented from 2004 onwards. At the same time, the Czech Republic, Hungary, Poland and Slovak Republic were among the ten new Members admitted to the EC in May 2004, so that their existing agricultural polices are being replaced by the CAP, with EC payments being phased in gradually over a ten-year period. Elsewhere in Europe, Switzerland adopted a new agricultural policy reform package that will be implemented over the period 2004-2007, continuing the long-term shift away from the most trade-distorting measures. Japan put in place in March 2005 a new "Basic Plan for Food, Agriculture, and Rural Areas", with a focus on multi-commodity production, more efficient farms, land retention in agriculture, and the environment, while Korea is realigning its policies towards achieving better rice production management and rural development, both behind significant border protection. Canada implemented its Agricultural Policy Framework, aimed at stabilizing farm incomes, and made emergency payments to compensate for losses related to BSE. Emergency payments, related to drought, were also provided in Australia.

47. At the WTO, recent agricultural disputes settlement panels concerned U.S. subsidies for cotton and EC subsidies for sugar. The rulings against these policies could have far-reaching consequences for those Members' domestic policies as well as for the current multilateral negotiations. Other disputes and panel rulings involve state-trading enterprises, phytosanitary requirements and geographical indications.

48. Government intervention in agriculture is also extensive in many developing countries; whereas tariffs on agricultural products are often just as high in developing as in OECD countries, if not higher, subsidies tend to be used rather less, owing to their budgetary cost. As a result, overall support in these countries appears, by and large, to be lower than in the OECD average. For example, according to preliminary estimates of TSE/PSEs made by the OECD, support in Brazil is comparable to that in Australia and New Zealand, far below the OECD average. Support in China, India and South Africa, which involves mainly market-price support, is somewhat higher than in Australia, Brazil and New Zealand, but still well below the OECD average. The main components of support in China, India and South Africa is market price support, although subsidies are also used.[49]

49. Farm support programmes have multiple domestic objectives, including: income support for agricultural households; preservation of the environment, notably traditional rural life and amenities; food security; and food safety.[50] The last three of these objectives involve matters where markets alone may fail to achieve a socially desirable outcome due to the existence of "externalities" or "public goods".[51] Accordingly, one can distinguish between two broad types of agricultural policies; those intended to redistribute income and those aimed more at addressing market failure. In this regard, there would appear to be a serious mismatch between these objectives and the policy measures designed to achieve them, thus casting doubt on the appropriateness and effectiveness of such

[49] Subsidies for inputs such fertilizer, power and water are important in India, for example, as well as in some other developing countries.

[50] OECD, 2002, "Agricultural Policies in OECD Countries: A Positive Reform Agenda", 6 November 2002 (COM/AGR/TD/WP(2002)19/FINAL.

[51] An externality arises where a decision by one agent, whether a producer or consumer, has side-effects that impinge on others. For example, farms may produce excessive pesticide residues (negative externalities) as well as crops; they may also produce environmental as well as aesthetic benefits (positive externalities). In these cases, the market determined output may be too much because of unpaid external costs or too little owing to uncompensated external benefits. Public goods (or services), such as clean air or an attractive countryside, are those for which the use by one agent does not diminish the amount available to others. A public good may be a joint-output, and therefore an externality, of private production. As in the case of positive externalities, the market tends to result in too little public goods.

measures.[52] More careful design and better targeting of agricultural policies would enable Governments to pursue their multiple objectives in a more cost-effective manner with minimal disruption to international markets for agricultural products. The DDA presents Members with the opportunity to achieve such reforms multilaterally, thereby benefiting industrialized and developing countries alike. According to the IMF, removal of agricultural support (tariffs and subsidies) as part of a comprehensive effort to lower trade barriers would raise global economic welfare by US$128 billion annually, the bulk of which appears to be due to the removal of tariffs. While nearly US$98 billion of this welfare gain would accrue to industrial countries through more efficient production and lower food prices for many consumers, the benefits to developing countries would also be substantial, at some US$30 billion. These benefits are particularly large for food-exporting regions, including sub-Saharan Africa, where many of the world's poorest live.

50. Despite the large overall gains from liberalization of agriculture, some developing countries may gain very little by liberalization of commodity markets. For example, there is some evidence that the long-run benefits of liberalization in the cocoa market, where changes have been most pronounced, accrue largely to consumers in developed countries rather than to the exporting countries (owing to loss of implicit or explicit export taxes) and farmers in non-liberalizing countries – farmers in liberalized African markets are broadly neither better nor worse off.[53] Countries that are significant food importers may also be initially negatively affected by such liberalization. Therefore, not only should trade liberalization be accompanied by complementary policies, it may, in the case of some countries, require support to redress unfavourable effects.

51. While agriculture is of great immediate importance to developing countries, pronounced declines in many commodity prices during the past decade have meant that, by and large, agricultural exporters face declining terms of trade, which can reduce the beneficial impact of growth on economic welfare in an open economy. If, as expected, this downward trend continues over the long term, *developing countries will have to export increasing volumes of such products in exchange for the same value of manufactured goods and services. Consequently, developing countries need to look beyond agriculture in the current negotiations*. Furthermore, for developing countries to benefit from lower protection of agriculture (and other sectors), they also need to overcome a wide range of supply constraints on their exports, including lack of finance and poor infrastructure; developed countries' barriers to market access may in some cases pale in comparison with such supply constraints in developing and especially least developed countries.

[52] In particular, with regard to income redistribution, existing policy measures are relatively inefficient instruments for delivering income support to rural households. According to the OECD, *the bulk of the support that does reach farmers goes to the larger farms,* many of whom already have higher incomes. Direct income payments are much more efficient in delivering income support, especially if they are de-coupled from agricultural activity; such payments can also be targeted more easily at those households felt to be most in need of assistance. If the current production-based support measures were replaced by direct income payments, efficiency costs could be halved without reducing the incomes of farm households; the savings would be even greater if support were targeted at lower income farm households through the income tax system or social security programmes. The more a policy measure pays to domestic farmers without affecting their production decisions, the greater the share of income retained by farm households and the smaller the impact on production and trade. (See OECD, 2002, "Farm household income issues in OECD Countries: a synthesis report", AGR/CA/APM(2002)FINAL, Paris.)

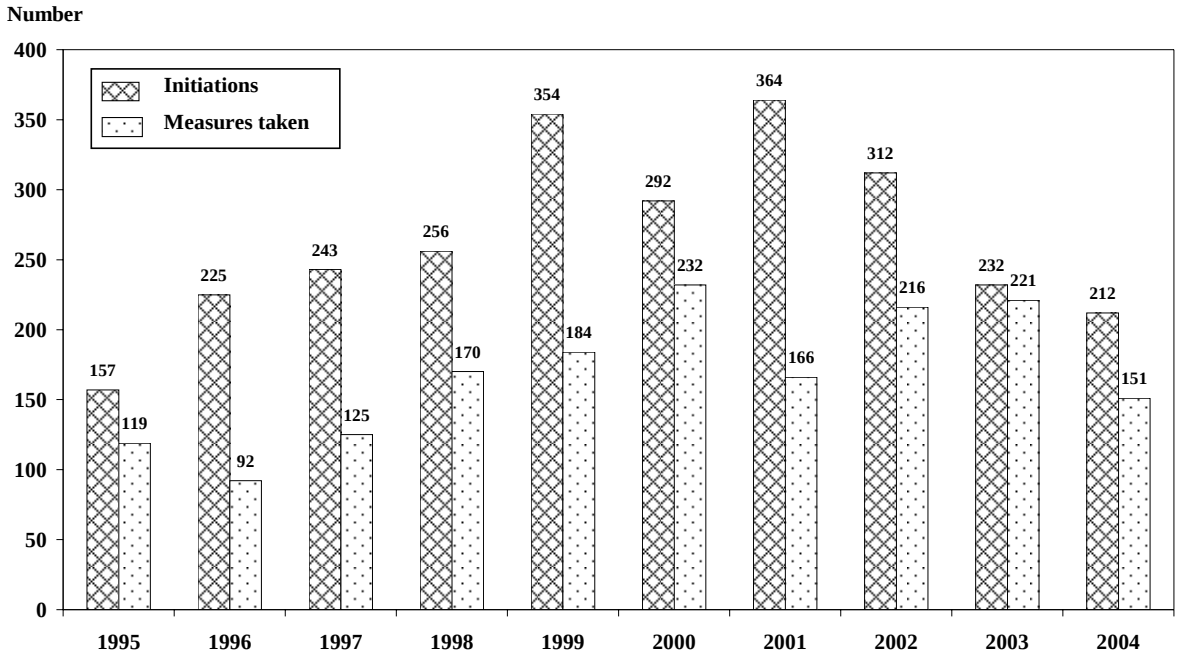
[53] Whereas producer prices have tended to rise as a share of f.o.b. prices as intermediation costs and tax have declined, the downward shift in the aggregate supply curve in conjunction with inelastic demand results in lower world prices. Farmers thus get a larger share of a lower price (see Christopher Gilberts and Panos Varangis, 2003, "Globalization and International Commodity Trade with Specific Reference to the West African Cocoa Producers" in R.E. Baldwin and L.A. Winters (Editors), *Challenges to Globalization*, NBER).

4. Contingency measures

Anti-dumping

52. During the period 1 January 1995 to 30 June 2005, WTO Members have reported initiating 2,743 new (original)[54] anti-dumping investigations[55]. After peaking in 2001, the number of new anti-dumping initiations reported by Members has fallen, from 364 in 2001 to 311 and 233, respectively, in 2002 and 2003, and down to 213 in 2004, the last year for which complete data are available. (Chart 3); in the first half of 2005, 96 initiations have been reported. In 2004, the initiations were mainly in the areas of chemicals, plastics and rubber, and base metals; in the first half of 2005, plastics and rubber became the most affected, followed equally by chemicals and base metals. Since 1995, base metals and chemicals have been the two most affected sectors, followed by plastics and rubber, machinery and electrical appliances, and textiles and articles thereof (Chart 4). Since 1995, the largest numbers of initiations have been reported by India (412), the United States (358), and the EC (318). In 2004, the most anti-dumping initiations were reported by the EC (30), China (27), the United States (26), Turkey (25), and India (21); in the first half of 2005, South Africa (17) reported most initiations, followed by the EC (15), India (13) and China (11). Since 1995, the initiations have been mainly targeted at China (434) and the EC and member states[56] (403). In 2004, initiations were mainly targeted at China (49) followed by the Republic of Korea (24) and Chinese Taipei (21); in the first half of 2005, China (22) was the main target followed by Chinese Taipei (9) and India (8).

Chart 3
Anti-dumping: initiations of investigations and measures taken, 1995 to 2004



Source **: WTO Secretariat.**

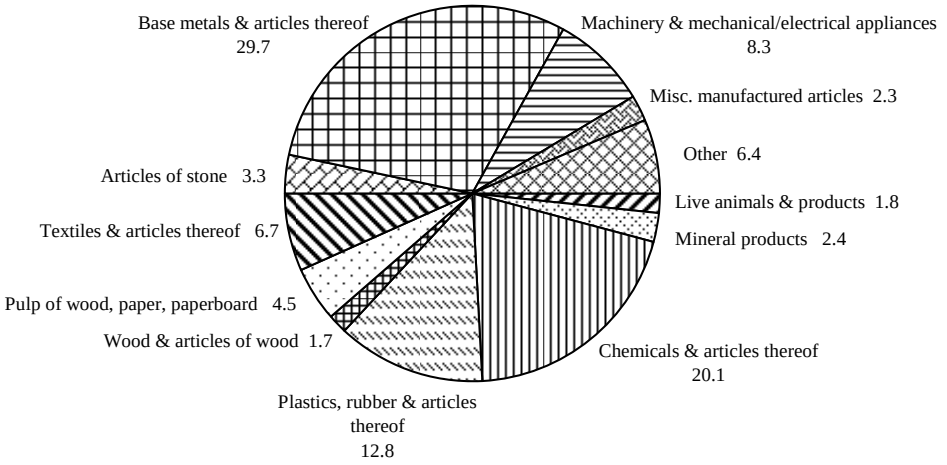
[54] These figures thus do not cover initiations of the various types of reviews of anti-dumping measures in force.

[55] These figures are derived from semi-annual reports of anti-dumping actions taken submitted by Members. They are incomplete due to missing reports and/or missing information in reports submitted.

[56] Not counting the 10 new member states that acceded to the European Union (EU) in May 2004.

Chart 4
Anti-dumping initiations by sector, 1995 to 2004

Per cent



Note: Other includes vegetable products (1.4%); fats & oils (0.3%); prepared foodstuffs, beverages, tobacco (1.5%); raw hides & skins (0.1%); footwear & headgear, etc. (0.8%); precious stones etc. (0.04%); transport equipment (0.8%); precision instruments (1.1%); and works of art (0.4%).

***Source*: WTO Secretariat.**

53. On average, 63% of reported initiations result in measures being taken by Members. The number of new measures reported peaked in 2000 (232 measures) before falling to 166 in the following year. It rose to 216 and 221 measures in 2002 and 2003, respectively, before dropping to 151 measures in 2004; in the first half of 2005, 53 new measures have been reported. In 2004, the Members who notified the largest number of measures were India (29), Turkey (16), China (14) and the United States (14); in the first half of 2005, the United States (13) notified the largest number of measures, followed by China (10) and India (7). Overall, since 1995, India (309), the United States (229), and the EC (200) have reported the largest number of new anti-dumping measures applied. Those that have most frequently been targeted by these new anti-dumping measures include: China (317), the EC and member states[57] (231) and the Republic of Korea (123). As of the end of 2004, Members reported having a total of 1,340 anti-dumping measures in force, compared with the 1,388 reported as of the end of 2003.

Countervailing and safeguard measures

54. Countervailing measures tend to be used less frequently by Members than anti-dumping measures. During the period 1995-June 2005, 178 initiations of new (original)[58] countervail investigations were reported by Members (compared to 2,647 for anti-dumping).[59] The number of reported initiations peaked in 1999 at 41. In 2004, only eight initiations were reported, down from 15 in 2003; between January and June 2005, two additional investigations had been initiated. In contrast to anti-dumping investigations, around 35% of which have been conducted by developed country Members, around 80% of countervail investigations have been conducted by developed

[57] Not counting the 10 new member states that joined the EU in May 2004.
[58] These figures thus do not cover initiations of the various types of reviews of anti-dumping measures in force.
[59] These figures are derived from semi-annual reports of anti-dumping actions taken submitted by Members. They are incomplete due to missing reports and/or missing information in reports submitted.

Members. The main initiators overall since 1995 have been the United States (70) and the EC (44)[60]; in 2004, Canada (four) and the United States (three) reported the largest numbers of initiations. The sectors that have been most affected since 1995 include base metals (71 initiations), followed by prepared foods, beverages and spirits and tobacco (23), and plastics (19).

55. On average, around 60% of original investigations (110) since 1995 have resulted in countervailing measures being applied by Members. Overall, the United States (45) and the EC (22)[61] have reported the largest numbers of countervailing measures. This was also the case for 2004, with both the EC and the United States reporting two measures; Canada reported two measures during January-June 2005. Since 1995 over half (57) of the measures reported have affected base metals.

56. The use of safeguards, although minor compared to anti-dumping and countervailing measures, continues to be active.[62] In 2003, Members notified 16 safeguard initiations, a decline from 34 initiations in 2002, but slightly higher than the 15 initiations notified in 2001. The number of definitive safeguard measures notified increased to 19 in 2003, from 13 in 2002. Members had notified 10 definitive safeguard measures in 2001. In 2004, as of 1 November, Members had notified 13 initiations and 6 definitive measures. The main users since 1995 have been India (eight measures imposed) followed by the United States and Chile (six each) and the Czech Republic and the Philippines (five each). Most safeguard initiations occur with regard to chemical products, foodstuffs and metals.

5. Services

Overview: 10 years of the GATS

57. Services account for a growing share of Members' national income. It is estimated that in OECD countries, services currently account for over 70% of employment and value added.[63] In developing and least-developed countries, that share is smaller, but growing rapidly. During the ten year period since 1995, exports and imports of commercial services have grown on average by almost 6% every year (the growth of trade in merchandise goods has been slightly higher, but also under 6%, during this period). The share of trade in services of developed and developing countries has remained relatively stable during this period with developed countries accounting for around three quarters of exports of commercial services, and with developing and least developed economies accounting for around 22% and 0.4% respectively.[64] The OECD estimates that trade in services compared to trade in goods is still relatively small if measured on a Balance-of-Payments basis (services trade for example accounts for only about 20% of total OECD trade), perhaps signifying the possibility for significant expansion in trade in services.[65]

58. The delivery of efficient services, not just cross-border, but within national boundaries, is important because they are key inputs into other sectors and are a rising share of consumption.

[60] Not counting the 10 new member states that joined the EC in May 2004.

[61] Not counting the 10 new member states that joined the EC in May 2004.

[62] The data on safeguards do not include safeguard actions taken with respect to agriculture or actions taken by Members under the transitional product-specific safeguards provided for in China's Protocol of Accession to the WTO.

[63] OECD (2005), *Growth in Services: Fostering Employment, Productivity and Innovation*, Meeting of the OECD Council at Ministerial Level 2005, Online. [Available at: http://www.oecd.org/dataoecd/58/52/34749412.pdf [7 May 2005].

[64] International Trade Statistics Section, WTO.

[65] It should also be noted that most data concerning trade in services are derived from balance of payments statistics and therefore tend to underestimate the actual size of the trade flows that are covered by the GATS to a significant degree. They ignore, in particular, transactions under Mode 3 (commercial presence), which is estimated to account for 50% of services trade under the GATS, and a possibly large share of Mode 2 (consumption abroad).

Telecommunications, financial and transport services, for example, are essential for the production and movement of goods, and also for maintaining efficiency in other services (for example, tourism, and a range of IT-based services), which are increasingly becoming an important export of developing countries. Recent research suggests that in light of significant remaining barriers to trade in services, liberalization will result in significant gains. For example, Francois, van Meijl and van Tongeren (2003) find that a reduction in such barriers could result in income gains ranging from US$23 billion, if 50% of border measures were liberalized, to over US$50 billion globally if all measures were liberalized.[66]

59. Given the importance of this sector, one of the major achievements of the Uruguay Round was the General Agreement on Trade in Services (GATS). The GATS was also significant because not only did it include cross-border trade in services, but also three other modes by which services are transacted, i.e. consumption of services abroad (Mode 2), commercial presence (Mode 3) and presence of natural persons (Mode 4).[67] This was an acknowledgement that the delivery of many kinds of services required the location of providers close to consumers. The GATS definition of services trade therefore applies as well to transactions involving cross-border movements of consumers and suppliers (commercial entities and natural persons). Most services are included, with the notable exception of "services supplied in the exercise of governmental authority" and "measures affecting air traffic rights and services directly related to the exercise of these rights".[68] The broad coverage of the GATS is balanced by flexibility given to Members when scheduling their commitments. Thus, although all Members are legally required to submit a schedule of commitments, they are free to select those sectors in which they are ready to bind access conditions and to attach limitations to these commitments or to exclude one or more modes from coverage. Members were free to list MFN exemptions for periods not exceeding ten years in principle. The GATS also contains various provisions to accommodate Members' level of economic development and their economic and regulatory structures.

60. The Uruguay Round did not end negotiations on services. In addition to negotiations on rules (domestic regulation, emergency safeguards, government procurement and subsidies), for which the GATS contains particular negotiating mandates, Members agreed to continue negotiations to expand specific commitments in financial services, maritime transport, movement of natural persons and telecommunications. Further negotiations on financial services resulted in substantial improvements in scheduled commitments and in the number of Members that made commitments. Similarly, the basic telecommunications services negotiations resulted in a significant increase in the number of Members participating, especially developing countries, and eventually accounted for over 90% of the global telecommunications market. Additional regulatory principles, set out in the "reference paper", were also agreed for optional scheduling as additional commitments to prevent, *inter alia*, abuse of market power, especially of dominant telecommunications services suppliers.

61. Negotiations on maritime services have been more difficult politically, although many Members continue to expand bilateral agreements covering maritime transport, thereby contributing to some liberalization. In addition, domestic unilateral liberalization has led to significant reductions

[66] Francois, Joseph, Hans van Meijl and Frank van Tongeren (2003), "Trade Liberalization and Developing Countries under the Doha Round", Centre for Economic Policy Research Discussion Paper Series, no. 4032, August.

[67] Notwithstanding the difficulties of measuring trade in services, it is estimated that approximately 50% of trade in services is conducted through Mode 3, followed by 35% through Mode 1, and 10 to 15% through Mode 2; Mode 4 accounts for around 1-2% of trade in services (Data from the WTO Economic Research and Statistics Division. Data on commercial presence calculated from foreign affiliates trade in services (FATS) statistics on turnover, while data on cross border supply and consumption abroad is proxied by commercial services exports excluding trade and travel exports, respectively from IMF balance of payment statistics).

[68] Article I(3) of the General Agreement on Trade in Services and the Annex on Air Transport Services, respectively.

in protectionism in the sector. In the WTO, however, it was agreed to suspend the negotiations and to resume them in the current, Doha Development Agenda, round of trade negotiations.

62. Negotiations on the movement of natural persons were extended due mainly to the dissatisfaction of developing countries at the level of access provided under the GATS schedules tabled at the end of the Uruguay Round. Market access was mainly confined to business visitors and intra-corporate transferees (including managers and technical staff) with specified time limits. Developing countries, however, would also like improved market access for other categories of service providers, given especially that they tend to have a comparative advantage in relatively lower skilled and labour intensive services.

63. Perhaps partly due to the fact that a lot of negotiating energy in the Uruguay Round was spent on devising the basic architecture of the GATS and that trade disciplines were being extended to completely new areas (not only in terms of sectors and modes, but also of the administrations concerned), Members tended to bind the status quo, or even less, in a limited number of sectors. Liberalizing commitments, if any, were rare. Given an ongoing process of internal reform in many Members, in particular in basic infrastructural services, the gap between bound and actual access conditions has continued to widen over time. A contrast is provided by new Members acceding to the WTO. In general, the schedules submitted by these Members tend to include more sectors than those of current Members at similar, and sometimes far higher, levels of development and involve more liberal commitments. Table 7 lists commitments by types of Members.

Table 7
Specific commitments by types of Members, 2005

Members	Average number of sector commitments per Member	Range (Lowest/highest number of scheduled sectors)
Least developed Members	24	1 – 111
Developing & transition Members	52	1 – 147
- Transition Members only	104	58 – 147
Developed Members	105	87 – 115
Accessions since 1995	103	37 – 147

Note: Total number of sectors: ~160; total number of Members: 148.
Source: WTO Secretariat.

Current negotiations

Progressive liberalization

64. The built-in services agenda follows from Article XIX:1 of the GATS, which provides for successive rounds aimed at achieving progressively higher levels of liberalization. In addition, the Annex on Article II Exemptions (MFN exemptions) calls for all such exemptions to be subject to negotiation in any subsequent trade round. The first round of such negotiations was due to start not later than five years from the date of entry into force of the WTO Agreement (i.e. to start on 1 January 2000). The Guidelines and Procedures for the negotiations were adopted by the Council for Trade in Services in March 2001.[69] The Doha Declaration set target dates for initial requests for specific commitments of 30 June 2002 and for initial offers of 31 March 2003.

65. The DDA's "July package" 2004 set a date of May 2005 for the submission of revised offers. By end-October 2005, a total of 69 initial offers, representing 93 Members, had been tabled. Of these offers, 28 had been revised since May 2005 (representing 52 Members). It appears that the emphasis has remained on the sectors and modes that already dominate existing schedules, and that there have

[69] WTO document S/L/93, 29 March 2001.

been relatively few changes to "sensitive" services, such as education, health and other social services, and Mode 4.

Rule making agenda

66. Several Articles of the GATS call for continued issue-specific negotiations beyond the timeframe of the Uruguay Round: domestic regulations (Article VI), emergency safeguards (Article X), government procurement (Article XIII) and subsidies (Article XV). The Negotiating Guidelines of March 2001, subsequently confirmed by the Doha Declaration, provided for these negotiations to be integrated into the wider framework of the services negotiations.

67. Overall, there has been little progress in the rule making areas to date.

68. The negotiations on Domestic Regulations are mandated in Article VI(4) of the GATS and cover licensing requirements and procedures, qualification requirements and procedures**,** and technical standards.[70] The mandate of the Working Party calls for the development of generally applicable disciplines for all services sectors as well as disciplines, as appropriate, for individual sectors or groups of sectors. The rationale of these negotiations is to protect the commitments inscribed in the schedules from being gradually undermined through non-transparent and/or excessively burdensome regulatory requirements. The negotiations are without prejudice to Members' rights to regulate for their own national policy objectives. An initial step was taken in the form of the Guidelines for Mutual Recognition Agreements or Arrangements in the Accountancy Sector in 1997, followed by the Disciplines on Domestic Regulation in the Accountancy Sector in 1998. The latter are expected to be integrated into the GATS, and to become binding at the end of the current round of services negotiations.[71]

69. Negotiations on emergency safeguard measures, government procurement and subsidies have been on the negotiating agenda of the Working Party on GATS Rules since its inception in March 1995.[72] Although emergency safeguard measures have attracted more attention over the years than the two other issues, Members do not appear very close to agreeing on rules on this matter. In fact, the positions appear to remain divergent on basic issues, such as the desirability and feasibility of such a mechanism and the form that measures may take under individual modes of supply. Discussions on government procurement have recently focused on a proposed scheduling mechanism that would allow for the assumption of access disciplines. Members have not yet been able to agree, however, on whether the mandate contained in Article XIII covers negotiations on access issues. On subsidies, discussions are still at an exploratory stage and have recently revolved around definitional issues and an information exchange.

70. At the WTO Ministerial Conference in Hong Kong, China, Members reaffirmed the need to continue and conclude the negotiations on services following the objectives and principles stipulated in the GATS, the Doha Ministerial Declaration and other relevant provisions adopted by Members for the current negotiations.[73] Particular attention is drawn to the economic situation of LDCs which are not expected to undertake new commitments. Also, the Declaration at Hong Kong, China reiterates the commitment to pay special attention to sectors and modes of supply of export interest to

[70] The annual report 2005 of the Working Party on Domestic Regulations, which is tasked with these negotiations, is contained in WTO document S/WPDR/8, 23 September 2005.

[71] WTO document S/L/63, 15 December 1998.

[72] An overview of the Working Party's activities in 2005 is contained in WTO document S/WPGR/15, 22 September 2005.

[73] Including the Guidelines and Procedures for the Negotiations on Trade in Services adopted by the Special Session of the Council for Trade in Services on 28 March 2001 and the Modalities for the Special Treatment of Least-Developed Country Members in the Negotiations on Trade in Services adopted on 3 September 2003, as well as Annex C of the Decision adopted by the General Council on 1 August 2004.

developing countries.[74] Overall, it is fair to conclude that, as in other areas of the negotiations, much remains to be done in order to enable commercially significant results.

6. Regional (and bilateral) trade agreements –Building blocks or stumbling blocks?

71. The number of regional trade agreements (RTAs) and the world share of trade under them has been steadily increasing over the last ten years; 2005 is no exception to this trend with 29 RTAs notified to the WTO in the course of the year.[75] Several RTAs are awaiting entry into force, others are currently being negotiated and many more are being proposed. This suggests that RTA activities are likely to further intensify in the near future, particularly in the absence of a significant breakthrough in the multilateral process.

72. Developments in 2005 confirm some major trends in RTA activity. First, for many countries, the conclusion of RTAs has become a vital part of their commercial policy. Second, RTAs are becoming increasingly multifaceted, in many cases establishing regulatory trade regimes that go beyond multilaterally agreed trade regulations. Third, agreements between developed and developing countries are on the increase, and so are RTAs among developing countries; this points to a decreasing reliance by some developing countries on non-reciprocal systems of preferences and to new trade alliances being forged among key developing countries. Fourth, RTA dynamics show a general pattern of expansion and consolidation; not only do cross-regional RTAs account for a large proportion of the total increase in RTAs, but continent-wide trading agreements are in the making.

73. RTA activities in Europe revolve around two main hubs, the European Communities (EC) and the European Free Trade Association (EFTA). After years of expansion, the EC has lately been focusing on consolidating its extensive intra-European RTA network. The EC enlargement by ten new members in May 2004 ushered in this process which is set to continue in the coming years as more countries are added to the list of candidates for EC accession.[76] In South Eastern Europe, as part of the Stabilization and Association process, the EC has been negotiating bilateral agreements with the countries of the region;[77] in parallel, a network of bilateral FTAs among nine parties to the Stability Pact is now virtually in place.[78] Further afield, the EC has been focusing on advancing and finalizing ongoing negotiations.[79] These include FTAs with countries in North Africa and the Middle East as part of the Barcelona Process;[80] with the Gulf Co-operation Council (GCC); with MERCOSUR; and the Economic Partnership Agreements (EPAs) with the African, Caribbean and Pacific (ACP) group of countries.[81] Prospective RTAs may include an EC-ASEAN FTA, following

[74] WTO document, WT/MIN(05)/DEC, 22 December 2005.

[75] A total of 34 RTA notifications were received by the WTO in 2004, made under GATT Article XXIV, GATS Article V and the Enabling Clause (including accessions to existing RTAs); for a complete list of RTAs notified to the GATT/WTO see <http://www.wto.org/english/tratop_e/region_e/region_e.htm>

[76] Adding to the current membership process with Bulgaria and Romania, negotiations were opened with Croatia and Turkey on 3 October 2005.

[77] The EFTA States and Turkey are pursuing similar negotiations.

[78] The Stability Pact process involves Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYROM, Romania, and Serbia and Montenegro. The FTA network has been extended to Moldova and UNMIK (Kosovo). In 2005, 13 such agreements were notified to the WTO.

[79] The FTA with Chile entered into force in March 2005.

[80] One of the aims of the Barcelona Process is the establishment of a Euro-Mediterranean Free Trade Area by 2010. Partners to this process are Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestinian Authority, Syria, Tunisia and Turkey. As with the other networks of intra-European RTA negotiations, the EFTA States and Turkey are pursuing RTA negotiations with these same countries.

[81] EPAs are reciprocal FTAs supposed to replace the existing non-reciprocal systems of preferences under the Cotonou Agreement between the EC and the 77 ACP countries. EPA negotiations have been opened with Central Africa (CEMAC), West Africa (ECOWAS), Eastern and Southern Africa (ESA), the Southern African Development Community (SADC), the Caribbean Forum of ACP States (CARIFORUM), and with the Pacific ACP States.

the decision in April to set up a "vision" group to assess its feasibility. The EFTA States concluded FTAs with Korea and Tunisia and launched negotiations with Thailand in 2005. Other ongoing EFTA negotiations relate to FTAs with Canada and the South African Customs Union (SACU).

74. In the Western Hemisphere, the patchwork of RTAs is becoming increasingly complex. In North America, the United States' active pursuit of RTAs over the last few years is beginning to bear fruit; the FTA with Australia entered into force in January 2005 and negotiations have been concluded with Bahrain, Morocco, the Dominican Republic-Central American Free Trade Agreement (DR-CAFTA)[82] and Oman. RTAs under negotiation include the United Arab Emirates (UAE), Thailand, Panama, SACU, and the Andean countries.[83] Among those being considered are RTAs with Qatar, Kuwait, Korea and Egypt. Canada showed a renewed interest in RTAs in 2005 by giving consideration to possible FTAs with Korea, CARICOM, the Andean Countries and the Dominican Republic; these would add to its ongoing negotiations with Singapore, the EFTA States and the Central America Four.[84] An FTA with Korea is being considered also by Mexico, whose FTA with Japan entered into force in April.

75. In South America, MERCOSUR members have been working towards the objective of a fully fledged customs union.[85] MERCOSUR has opened membership negotiations with Venezuela and it has concluded framework agreements with three members of the Andean Community,[86] India, SACU, Egypt, Morocco and the GCC, all of which aim towards the gradual establishment of FTAs; partial scope agreements providing for limited trade concessions have been concluded with Egypt, India, Morocco and SACU. MERCOSUR's FTA negotiations with the EC have resumed, preliminary talks have been held with Canada and a feasibility study of an FTA with Korea is under way. As for Chile, in 2005, it concluded negotiations with Brunei, New Zealand and Singapore for the Trans-Pacific Strategic Economic Partnership (SEP-4), and it launched negotiations for an FTA with China, and for a partial scope agreement with India; parallel to these initiatives, Chile is conducting a feasibility study of an FTA with Japan and Thailand.

76. The pursuit of RTAs among Asia-Pacific countries further intensified in 2005. Singapore signed FTAs with India, Jordan, Korea and SEP-4; it concluded FTA negotiations with Panama, launched negotiations with Kuwait, Qatar, Pakistan, Peru and Sri Lanka, and is considering negotiations with SACU, UAE, Bahrain and Egypt.[87] Japan, Korea and Thailand are all seeking RTAs. Japan signed an FTA with Malaysia and is negotiating with Korea, Indonesia, Philippines and Thailand; it is also considering the launching of negotiations with Australia and Chile. Korea, having concluded an FTA with Chile, signed FTAs with EFTA and Singapore in 2005, is negotiating with ASEAN, Canada and Japan, and is studying the feasibility of FTAs with China, India, MERCOSUR, Mexico and the United States. Thailand has signed FTAs with New Zealand and Australia, is negotiating with EFTA, Japan, Peru and the United States, and is considering FTAs with Chile and Pakistan. China's pursuit of RTAs has also gained momentum, adding to the ongoing FTA negotiations with ASEAN,[88] negotiations with the GCC countries, Chile, Australia, New Zealand and

[82] DR-CAFTA parties are Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and the Dominican Republic on one side and the United States on the other.

[83] Negotiations with Peru have been concluded and those with Colombia and Ecuador are ongoing. Bolivia is not yet party to these negotiations.

[84] El Salvador, Guatemala, Honduras and Nicaragua.

[85] MERCOSUR has been focusing, among others, on the elimination of the exceptions to the common external tariff, the entry into force of the Protocol of Montevideo on Trade in Services, and the entry into force of the Protocol of Olivos for the Settlement of Disputes.

[86] These are Colombia, Ecuador and Venezuela. Free-trade with Bolivia and Peru is regulated under the agreements concluded between MERCOSUR and Bolivia and Peru, respectively.

[87] Singapore has ongoing negotiations with Canada and Mexico.

[88] The Framework Agreement on Comprehensive Economic Cooperation between ASEAN and the People's Republic of China, including its Early Harvest programme, was notified to the WTO in December 2004.

Pakistan. FTA feasibility studies are also being undertaken with Iceland, India and Korea. At the broader regional level, China has raised the suggestion of an East Asian Community. Australia and New Zealand are both negotiating FTAs with ASEAN and Malaysia. Australia has also launched FTA negotiations with the UAE and a feasibility study for an FTA with Japan.

77. Although limited to those regions showing greatest RTA activities, this brief overview of RTA dynamics maps the lines of an international trading environment characterized by the coexistence of trade conducted under MFN conditions and an increasing number of layers of preferential trading regimes under RTAs.

78. The process of freer trade through RTAs may exert leverage for openness and competitive liberalization in international trade relations, thus furthering the multilateral process. But a proliferation of non-MFN trading networks, subject to different regulatory regimes, could also jeopardize two mainstays of the multilateral trading system, i.e. transparency and predictability in trade relations, and ultimately alter global trade patterns through, among others, trade and investment diversion.

79. The lack of an effective WTO mechanism to monitor RTA developments exacerbates the systemic challenges that RTAs may pose to the multilateral trading system. DDA negotiations on RTAs, in the Negotiating Group on Rules, aim at addressing these challenges, by clarifying and improving the relevant disciplines and procedures under existing WTO provisions.[89] Since early 2004, meaningful progress has been achieved towards setting up a WTO process that would enhance the transparency of RTAs, with the view to resolving the impasse of the Committee on Regional Trade Agreements (CRTA)[90], and to allowing Members to exercise better surveillance of RTA dynamics. Also, in 2005 work has progressed on some "systemic" issues, with the aim of making the conditions governing WTO Members' participation in RTAs more coherent and unambiguous. Particular attention has been devoted to the question of intra-RTA trade liberalization and neutrality of RTAs towards third parties; the focus of this discussion suggests increasing concerns by many Members of the possible negative effects of RTAs on third parties trade and on the multilateral trading system as a whole. In December, Ministers, considering that "[t]ransparency of RTAs is ... of systemic interest as are disciplines that ensure the complementarity of RTAs with the WTO", called for an intensification of negotiations with a view both to a provisional decision on RTA transparency by 30 April 2006 and appropriate outcomes by end-2006 on WTO disciplines governing RTAs.

7. Dispute settlement

80. The number of cases brought before the dispute settlement mechanism, set up in 1995, has been considerable. Between 1 January 1995 and 1 October 2005, 333 cases had been filed with the Dispute Settlement Body (DSB), of which 135 have resulted in the establishment of panels covering 166 disputes. This, in turn, led to the actual composition of 112 panels covering 142 disputes. (It should be noted that some disputes are resolved after the establishment of panels by the DSB, but before their actual composition.) Nearly two thirds of the cases[91] brought to the DSB involved

[89] Contained in GATT Article XXIV, for agreements covering trade in goods, and in GATS Article V, for agreements in the area of trade in services. The 1979 Decision of the GATT Council on Differential and More Favourable Treatment (Enabling Clause) governs the conclusion of preferential arrangements among developing countries (trade in goods only).

[90] Notified RTAs in force totalled 180 in June 2005. WTO Members are allowed to participate in regional initiatives, albeit subject to certain criteria and procedures. The CRTA, the body entrusted with verifying the compliance of RTAs with the relevant WTO provisions, has continued in 2005 the examination of an increasingly long backlog of RTAs. However, the CRTA made no further progress on its mandate of consistency assessment, due to long-standing institutional, political and legal difficulties. Since the establishment of the WTO, Members have been unable to reach consensus on the format, and substance of the reports on any of the examinations entrusted to the CRTA.

[91] Based on 314 cases (as at 17 September 2004).

industrialized countries, 218 as complainants and 201 as respondents. Developing countries were involved in 126 cases as complainants and 127 cases as respondents. The main areas of complaint have been: GATT 1994 (245 requests)[92], subsidies (61), agriculture (53) and anti-dumping (60).

81. With one exception, LDCs have not used the dispute settlement mechanism, although some have participated as third parties in disputes.[93] Bangladesh was the first LDC to request consultations under the mechanism in January 2004.[94] Assistance is provided to LDCs that do wish to use the mechanism, notably through the Advisory Centre on WTO Law (ACWL).[95] The ACWL was formed in October 2001 as an independent, inter-governmental organization to help developing, and especially LDC, Members make more effective use of the WTO's dispute settlement mechanism. All countries designated by the United Nations as least-developed that are Members of the WTO are entitled to ACWL services, regardless of whether they are members of the Centre. The ACWL charges modest fees for its services. As at 1 April 2005, the Centre had 37 members (10 developed country members, who make monetary contributions, but are not entitled to its services, and 27 developing country members entitled to the services of the ACWL). Since July 2001, the Centre has provided legal advice to LDCs on a number of issues, including: the implications of paragraph 6 of the Doha Ministerial Declaration on the TRIPS Agreement and Public Health; the WTO-consistency of certain subsidies; the viability of initiating a dispute under Article VI of the GATT 1994; and the viability of resorting to Article XVIII of the GATT 1994.

82. The main developed-Member users of the WTO dispute settlement mechanism are the United States, the EC, Canada and Japan. Up to 1 October 2005, the United States brought 80 complaints and was respondent in 89; the EC and its member States brought 70 complaints and were respondent in 53; Canada was involved in 26 cases as complainant and 13 as respondent; and Japan was complainant in 12 cases and respondent in 14. A significant number of cases (56 or 17%) have occurred between the two largest users, the United States and the EC. Among the developing countries, the main users are Brazil (22 cases as complainant and 13 as respondent), India (16 cases as complainant and 17 as respondent), and Argentina (9 and 15 cases, respectively, as complainant and respondent).

83. Panel reports have been circulated (up to 1 October 2005) in 104 (out of the 135 panels established and 112 panels actually composed) cases, of which 69 were appealed. Of these 104 cases, 38 were initiated by developing countries, 63 by industrialized countries and three by a combination of both. With regard to the two largest traders, the EC has initiated 34 panel proceedings and the United States has initiated 35 panel proceedings. The United States and the EC were also the main respondents in cases for which panels were requested, 48 and 26 cases, respectively. Developing countries were respondents in 40 cases for which panel proceedings were initiated.

84. Of the cases that do go to WTO dispute settlement, a large number tend to be resolved bilaterally at the consultations stage. For those cases that go beyond consultations to panels, around two thirds are subsequently appealed. In cases where Members have failed to agree through consultation on implementation of the DSB's recommendations and rulings, recourse to the compliance procedures under Article 21.5 of the Dispute Settlement Understanding (DSU) has been sought in about one sixth of the cases. Members have, in general, implemented the recommendations and rulings made by panels and by the Appellate Body in the "reasonable period of time" as

[92] There is some double counting as some of the cases alleging violations of Article III of the GATT 1994 also involved alleged violations of Article I.

[93] Least developed countries that have participated in disputes as third parties include Bangladesh, Benin, Chad, Madagascar, Malawi, Senegal and Tanzania.

[94] Bangladesh requested consultations with India on 28 January 2004 regarding the latter's imposition of anti-dumping duties on imports of lead acid batteries from Bangladesh (WTO document, WT/DS306/1, 2 February 2004); in February 2004, the EC requested to join these consultations (WTO document WT/DS306/2, 16 February 2004).

[95] Information available at: http://www.acwl.ch/e/index_e.espx.

determined either by mutual agreement or through arbitration under Article 21.3 of the DSU. However, in a few cases, where compliance by Members has been successfully challenged, the complaining parties have sought and received authorization by the DSB to suspend concessions and obligations against the non-complying Member. Although the number of such cases remains small, the value of trade affected by these suspensions has been significant. Since the previous issue of the Overview of Developments in the International Trading Environment[96], there has been one additional case of such authorization involving the U.S. "Byrd Amendment". To date, the cases that have resulted in DSB authorization of retaliation are:

- EC ban on meat and meat products (complaints by the United States and Canada)
- EC banana regime (complaints by the United States and Ecuador)
- Brazil export financing for aircraft (complaint by Canada)
- United States Foreign Sales Corporations (FSCs) (complaint by the EC)
- Canada export credits and loan guarantees for aircraft (complaint by Brazil)
- United States 1916 Anti-Dumping Act (complaint by the EC)
- United States Offset Act (Byrd Amendment) (complaints by Brazil, Canada, Chile, EC, India, Korea, Japan and Mexico)

85. With respect to the EC banana regime, the United States withdrew its retaliation after a settlement in 2001 involving the US, Ecuador and the EC under which the EC agreed to go to a tariff-only regime in 2006. In its decision of 14 November 2001, the Ministerial Conference agreed to waive until 31 December 2007, Article 1(1) of GATT 1994 to permit the EC to provide certain preferential tariffs for products from ACP countries. The Annex to this decision sets forth certain procedures to be followed in the case of bananas, including resort to arbitration, following rebinding of the EC tariff on bananas to implement the EC's proposed tariff-only regime. The arbitration will determine whether the proposed rebinding would at least maintain market access for MFN banana suppliers to the EC market. In this context requests for arbitration were made by Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Panama and Venezuela.[97] The arbitrator was appointed on 2 May 2005.[98] The arbitrator issued its first award under the arbitration on 4 August 2005 and a second arbitration award on 27 October 2005.

86. In the case of the United States 1916 Anti-Dumping Act, an arbitration decision concerning the appropriate level of retaliation was circulated on 24 February 2004, although the EC never requested authorization to suspend concessions and obligations pursuant to the decision and the United States repealed the law in late 2004.[99] In the case of the FSC dispute, the EC suspended concessions and obligations on 1 March 2004 on a number of products imported from the United States. Such countermeasures consisted of an additional customs duty of 5% to be enforced on 1 March 2004, followed by an automatic, monthly increase by 1% up to a ceiling of 17% to be reached on 1 March 2005, if the United States had failed to comply with the ruling by then.[100] However, following the passage in October 2004 of a new corporate tax law repealing the FSC/ETI, the EC suspended these sanctions on 1 January 2005. At the same time, however, the EC expressed concern over certain transition provisions in the newly passed legislation and initiated compliance proceedings at the WTO challenging these provisions and initiated an Article 21.5 compliance

[96] WTO document WT/TPR/OV/10, 15 November 2004.
[97] WTO documents WT/L/607, 1 April 2005; and WT/L/607/Add.12, 2 May 2005.
[98] WTO document WT/L/607/Add.12, 2 May 2005.
[99] WTO document WT/DS136/ARB, 24 February 2004. On 10 November 2004, the United States notified the Secretariat that on 8 October 2004, the U.S. House of Representatives had approved the Miscellaneous Trade and Technical Corrections Act of 2004 (H.R. 1047). H.R. 1047, which includes a provision to repeal the 1916 Act. (WT/DS136/14/Add.32, 11 November 2004) It was signed into law by the President on 3 December 2004.
[100] European Commission Press Release IP/04/282, "US Foreign Sales Corporations (FSC): EC starts countermeasures on U.S. products", Brussels 1 March 2004, [Online]. Available at: http://Europe.eu.int/rapid/pressReleasesAction.do?reference=IP/04/282&format=HT..., [1 June 2004].

procedure in early 2005. The compliance panel agreed with the EU that the United States had not fully complied with its WTO obligations in a report circulated to Members on 30 September 2005.

87. In the case of the United States Offset Act (Byrd Amendment), on 26 January 2004, the United States referred the case to arbitration for determination of the proper level of retaliation. The Arbitrator ruled that the suspension of concessions should be based on the annual disbursements under the Act (for the most recent year for which data were available) accruing from imports from the country authorized to suspend concessions.[101] In November 2004, the DSB authorized suspension of concessions. On 29 April 2005, the delegations of the EC and Canada notified the DSB that they were suspending, as of 1 May 2005, the application of concessions and related obligations under GATT 1994 on imports of certain products originating in the United States pursuant to the Arbitrator's decision. On 18 August 2005, Japan informed the DSB of its intent to impose sanctions as of 1 September 2005.

8. Trade-related aspects of intellectual property rights

Overview of developments

88. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), along with the GATT and the GATS, was one of the key aspects of the Uruguay Round Agreements. It aims to ensure minimum standards of protection for intellectual property rights across all WTO Members, while providing scope for Members to fine-tune this in the light of their own needs.

89. The TRIPS Agreement recognized that some Members would require longer than others to enact the relevant legislation. The Agreement therefore provides for longer transition periods for developing and least-developed countries than for developed country Members. Under Article 65, the transition periods provided are one year following the date of entry into force of the WTO Agreement for all Members; in addition, developing countries are entitled to delay implementation by another four years, or in cases of product patent protection to areas of technology not so protectable upon entry into force of the WTO Agreement, for an additional five years (2005). Least-developed countries have until 2006 with the possibility of an extension. In respect of pharmaceutical products, the transition period for LDCs has been extended to 2016 as a result of a Ministerial decision during the Doha Ministerial Meeting in 2001.

90. Over the last ten years, as Members have proceeded with implementing their TRIPS obligations, some significant decisions have been taken by the WTO, notably the decision taken under the Doha Declaration on the TRIPS Agreement and Public Health and the Decision of 30 August 2003 on paragraph 6 of this Declaration.

The Doha Declaration on the TRIPS Agreement and Public Health

91. The Doha Declaration on the TRIPS Agreement and Public Health emerged from a discussion initiated by the African group in April 2001 on access to medicines. Although the TRIPS Agreement permits Members to take various kinds of measures to limit intellectual property rights, for example for public health reasons, the question was raised as to whether this flexibility was sufficient. There were also different interpretations about the nature and scope of the flexibility provided in the TRIPS Agreement, in particular with respect to compulsory licensing and parallel imports. Further, there was concern about whether Members felt comfortable to use such flexibility to the full without challenge from other Members.

[101] For example, in the case of Brazil, the amount authorized would result from the following equation: the amount of disbursements under the Act for the most recent year for which data are available relating to anti-dumping or countervailing duties paid on imports from Brazil at that time as published by the United State authorities multiplied by 0.72 (WT/DS217/ARB/BRA, 31 August 2004).

92. The Declaration reaffirms the right of Members to take measures to protect public health and to use the flexibility in the TRIPS Agreement to do so. While maintaining commitments in the TRIPS Agreement, the Declaration also clarifies a number of aspects of the flexibility, such as making clear that Members are free to determine the grounds for granting compulsory licences and that Members are free to determine what constitutes a national emergency, which could include public health crises, such as HIV/AIDS and other epidemics.

93. The Declaration also contains an agreement by Ministers to extend the transition period for implementation of the TRIPS Agreement by LDCs until the beginning of 2016 for the protection of patents and rights in undisclosed information with respect to pharmaceutical products. The TRIPS Council took action under Article 66.1 of the TRIPS Agreement to give effect to this extension in June 2002. It also recommended a waiver for LDCs for the same period from obligations under the "exclusive marketing rights" provisions of Article 70.9. The waiver was subsequently adopted by the General Council in July 2002.

94. Another issue that arose was the ability of Members with limited capacity to manufacture pharmaceuticals to make effective use of compulsory licensing. Under Article 31(f) of the TRIPS Agreement, compulsory licences have normally to be given "predominantly for the supply of the domestic market" of the Member issuing the licence. Thus, concern was raised as to whether sources of supply of generic medicine would be available to Members who might want to import under a compulsory licence, given this requirement in the Agreement and given also that some important suppliers of generic medicines would have to change their legislation by 2005 to protect pharmaceutical product patents. This problem was recognized in paragraph 6 of the Declaration.

95. The Decision on this paragraph adopted by the General Council on 30 August 2003 grants three waivers from the obligations set out in Article 31(f) and 31(h) of the TRIPS Agreement. Essentially these waivers: permit, subject to certain conditions, the grant of a compulsory licence for production for export of pharmaceutical products needed to address public health problems by Members that do not have sufficient capacity to manufacture them; waive the obligation on the importing Member to provide adequate remuneration to the rights holder where remuneration in accordance with Article 31(h) is being paid in the exporting Member for the same products; and waive the obligation on any developing or least-developed country that is party to a regional trade agreement (of which at least half the membership is composed of countries on the UN list of least-developed countries), a move intended to facilitate the local production of pharmaceutical products in these Members.

96. At its meeting of 6 December 2005, the TRIPS Council decided to approve a proposal to amend the TRIPS Agreement to reflect the waiver of 30 August 2003.[102] The amendment, which was adopted by the General Council on 6 December 2005[103], transforms the waiver into a permanent amendment of the TRIPS Agreement through a new Article 31*bis* and an Annex to the Agreement setting out the terms of use and procedural matters. The decision will be formally built into the TRIPS Agreement when two-thirds of the WTO's Members have accepted the change. They have set themselves until 1 December 2007 to do so. The waiver will remain in force until the amendment enters into force.

Current issues

97. In addition to the debate on public health and access to medicines, there are a number of other issues that are currently being debated in the TRIPS Council. These are: the relationship between the TRIPS Agreement and the Convention on Biological Diversity (CBD) and certain related matters as

[102] WTO document IP/C/41, 6 December 2005.

[103] WTO document WT/L/641, 8 December 2005; see also WTO Press Release 426 of 6 December 2005. Available at: http://www.wto.org/english/news_e/pres05_e/pr426_e.htm, [19 January 2006].

well as the protection of geographical indications; in addition, incentives for the transfer of technology to least developed countries under Article 66.2 of the TRIPS Agreement are discussed in the TRIPS Council.

The Relationship between the TRIPS Agreement and the Convention on Biological Diversity and the Protection of Traditional Knowledge and Folklore

98. The first of these issues, the relationship between the TRIPS Agreement and the Convention on Biological Diversity (CBD) was first discussed in the WTO in the Committee on Trade and Environment in 1995 and from 1999 in the TRIPS Council under the review of Article 27.3(b). The Doha Ministerial Declaration instructed the TRIPS Council "to examine, *inter alia*, the relationship between the TRIPS Agreement and the Convention on Biological Diversity, the protection of traditional knowledge and folklore...".[104] Since then a set of three issues (the relationship between the TRIPS Agreement and the CBD, protection of traditional knowledge and folklore and a review of the provisions of Article 27.3(b)) have been under discussion in the TRIPS Council. In addition, this set of issues also figures among the outstanding implementation issues to which solutions are being sought in the WTO by developing countries

99. The main issue currently under discussion in the TRIPS Council is the relationship between the TRIPS Agreement and the CBD. In the TRIPS Council, three positions appear to have emerged with regard to compatability of the TRIPS Agreement with the CBD: that there is a conflict between the two agreements[105]; that there is no conflict and both agreements can be implemented in a mutually supportive manner at the national level[106]; and that, while there is no inherent conflict, there is a case for international action to ensure that they are implemented in a mutually supportive manner.

100. Some of those Members that believe that there is a conflict between the two agreements are concerned that the TRIPS Agreement, by allowing the patenting of certain genetic material, provides for the appropriation of genetic resources without respecting the sovereign rights of countries over their genetic resources (as required under the CBD). They have therefore suggested that the TRIPS Agreement be amended so that life forms and parts thereof become non-patentable. Many developing countries have expressed a concern that the TRIPS Agreement allows the granting of patents for inventions that use genetic material without ensuring the respect of the CBD provisions on prior informed consent and benefit sharing. They have proposed that patent applicants be required to disclose information regarding the source and origin of any genetic material or related traditional knowledge used in their inventions and evidence of prior informed consent and of arrangements for fair and equitable sharing of benefits.[107] In their view, such a disclosure requirement would be an important complement to national access and benefit-sharing regimes, especially in making more effective their enforcement in respect of uses of genetic material and related traditional knowledge outside their country of origin.

101. Those who believe that there is no inherent conflict between the two agreements argue that the TRIPS Agreement and the CBD have different objectives and deal with different subject-matter and that the granting of patent rights over inventions using genetic material does not prevent compliance with the CBD, but rather could facilitate it. For example, the information disclosure requirements of patent regimes could facilitate the licensing and transfer of technology and in the sharing of benefits and conservation of biological diversity through voluntary contracts. In their view, genetic material in its natural state cannot be patented as it does not meet the criteria for patentability laid down in the TRIPS Agreement. They propose that the objectives of the CBD could be

[104] Paragraph 19 of the Doha Ministerial Declaration, WTO document WTO/MIN(01)/DEC/1, 20 November 2001.
[105] For example, WTO documents IP/C/W/356, 24 June 2002; and IP/C/W/404, 26 June 2003.
[106] See for example WTO documents IP/C/W/257, 13 June 2001; and IP/C/W/443, 18 March 2005.
[107] WTO documents IP/C/W/356, 24 June 2002; and IP/C/W/434, 26 November 2004.

implemented through appropriate national systems, including access and benefit-sharing regimes and the use of voluntary contracts based on such national law. According to proponents of this view, therefore, no change is required to the TRIPS Agreement. They argue that disclosure of origin is unlikely to result in prior informed consent and benefit sharing since disclosure does not constitute a mechanism to transfer the benefits resulting from exploitation of the patent. Moreover, such a system would not address benefit sharing for those inventions that were commercialized outside the patent system.[108] They are concerned that instead such a system would likely add uncertainty to the current patent system and add additional administrative burdens especially on developing-country Members.[109]

102. Some other Members have referred to proposals they have tabled in WIPO for the disclosure of source or origin, and not of evidence of prior informed consent or benefit-sharing arrangements. One proposal is that the Patent Co-operation Treaty of WIPO be amended to allow a disclosure requirement. Another is that a mandatory disclosure requirement be introduced at the national, regional and international level on all patent applicants that would be legally binding, but not linked to patent validity.

103. The discussion on the protection of traditional knowledge and folklore is linked closely to that of the relationship between the CBD and the TRIPS Agreement. In the Council for TRIPS, recent discussions on this issue have focused mainly on the disclosure *inter alia* of the traditional knowledge used in the invention as part of the procedure of applying for a patent.[110] The issue is also being discussed in other fora including the World Intellectual Property Organization (WIPO), the Convention on Biological Diversity and the Food and Agriculture Organization (FAO).

104. At the Ministerial meeting in Hong Kong, China, held in December 2005, Ministers requested the Director General to intensify his consultations with Members on outstanding implementation issues including issues related to the relationship between the TRIPS Agreement and the Convention on Biological Diversity.

Geographical indications

105. Geographical indications (GIs) are covered by Articles 22-24 of the TRIPS Agreement. Broadly speaking, a GI is a place name identifying a product that has certain characteristics or reputation because it comes from that place. Article 22 provides for a standard level of protection for all such GIs, to prevent their use in a way that would mislead the public or be an act of unfair competition. Under Article 23, a higher level of protection is provided for GIs for wines and spirits. For example, they are to be protected even if there is no risk of the public being misled, e.g. even if the true origin of the good is being indicated. Certain exceptions are permitted, for example, when a name has become generic.

106. In regard to the TRIPS Agreement, there are currently two issues relating to GIs that are being debated: the negotiation of a multilateral register of GIs for wines and spirits, as mandated in the Doha Declaration and in fulfilment of Article 23.4 of the TRIPS Agreement; and issues relating to extending the protection granted under Article 23 to GIs for products other than wines and spirits. Work on the multilateral register began in July 1997 and negotiations on this matter have been under way since 2001. Members continue to be far apart notably on two major issues. One is the question of what should be the legal effect of the registration of a GI in the multilateral system. Under one proposal, such a registration would mean that domestic authorities in each WTO Member would have to presume (rebuttably) that the GI is protected and would be prevented from refusing protection on

[108] WTO document IP/C/W/434, 26 November 2004.
[109] WTO document IP/C/W/443, 18 March 2005.
[110] For example, submission by Bolivia, Brazil, Cuba, Dominican Republic, Ecuador, India, Peru, Thailand and Venezuela (WTO document IP/C/W/403, 24 June 2003).

certain grounds, unless that Member has entered a reservation in the register in regard to that GI. Under another proposal, the effect of the registration of a GI in the database would be that provision would be made for the domestic authorities of each Member participating in the system to consult the database of such registrations when making national decisions regarding registration and protection of trademarks and GIs in accordance with their domestic law. The other key point of difference relates to whether the legal effects of a registration would apply in all WTO Members, as envisaged in the former proposal, or only in those Members opting to participate in the system, as envisaged in the latter proposal. There is also a compromise proposal which would envisage limited legal effects, only applicable in those Members opting to participate in the system.

107. The second issue of providing higher protection for GIs for products other than wine and spirits has been the subject of consultations in the context of the process being held under the auspices of the Director-General in regard to outstanding implementation issues. At the Ministerial meeting in Hong Kong, China held in December 2005, Ministers requested the Director General to intensify consultative work on outstanding implementation issues, including on issues related to the extension of the protection of geographical indications provided for in Article 23 of the TRIPS Agreement to products other than wines and spirits.

Technology Transfer

108. The transfer of technology is a goal enshrined in the TRIPS Agreement. Article 7 of the Agreement states that the "the protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare and to a balance of rights and obligations". Article 66.2 of the Agreement states that "Developed country Members shall provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least developed country Members in order to enable them to create a sound and viable technological base". Technology transfer has also been a demand of developing and least-developed countries in the TRIPS Council. In the Doha Declaration, Ministers agreed that a working group, under the auspices of the General Council, would be set up to examine "the relationship between trade and transfer of technology and of any possible recommendations on steps that might be taken within the mandate of the WTO to increase flows of technology to developing countries".[111]

109. In the Council on TRIPS, following the Doha Declaration, a decision was taken in February 2003 agreeing to *inter alia* monitor actions taken or planned by developed countries under Article 66.2 of the TRIPS Agreement.[112] Under the Decision, developed country Members are required to submit annual reports of their activities (full reports every third year and updates in the intervening years), which are to be reviewed by the Council at the end of each year.

110. Technology transfer has long been an important aspect of intellectual property rights. Those who support strong IPRs argue that they provide an incentive for technology transfer, for example, through licensing. The security provided by IPR protection allows the IPR holder to negotiate contracts for technology licensing and eventual transfer. The disclosure requirements of IPRs also enable information that may otherwise be secret to be released into the public domain. While the theoretical economic literature on the impact of intellectual property rights on technology transfer and innovation tends to be rather ambiguous, the empirical literature finds, with a number of

[111] In the WTO Working Group on Trade and Technology Transfer, discussions have focused thus far on inter alia the channels of technology transfer, the relationship between technology transfer and the home and host country environments, as well as the identification of issues relating to the transfer of technology in the WTO Agreements.

[112] WTO document IP/C/28, 20 February 2003.

qualifications, that the relationship may be more positive.[113] Moreover, one would expect that in sectors such as pharmaceuticals and software, firms would be quite concerned about the risk of illegal copying and would therefore tend to invest less in countries with weak IPRs. Recent industrial and company surveys have found that this is indeed the case.[114] On the other hand, stronger IPRs may also strengthen the bargaining power of the firm holding the proprietary technology, and therefore significantly increase the costs of technology transfer.

111. Nevertheless, there is evidence to suggest that other factors, including, not in any particular order, the trade and investment climate, efficient governance, market size and growth, proximity to suppliers and demanders and infrastructure, are equally, if not perhaps more, important than IPR protection in facilitating technology transfer and its successful diffusion.[115] For example, despite IPR protection and enforcement being rather weak, multinational firms chose to invest in large, developing countries such as Brazil, China and India, presumably for other reasons, including the size of the local market.[116] The transfer of technology and the quality of the technology transferred will also depend greatly on the level of technological capability in the country. Countries tend to acquire technology more readily if domestic firms are engaged in research and development and there exists a sound base of technical skills and human capital.[117] This would seem to suggest that technology transfer and diffusion would take longest in the poorest economies.[118]

9. Standards, technical regulations and sanitary and phytosanitary measures

112. With the gradual reduction in tariff and non-tariff barriers (such as licensing and quotas) to imported products, increasing international attention is being given to other non-tariff barriers,

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[113] There are several studies on this subject, for example, Yang, G. and K.E. Maskus (2001), "Intellectual Property Rights and Licensing: An Econometric Investigations", *Weltwirtschaftliches Archiv*, Vol. 137, no. 1, pp. 58.79. More recently, the question of whether stronger intellectual property rights result in increased technology transfer is examined in Branstetter, L.E., R. Fisman and C.F. Foley, 2004, "Do Stronger Intellectual Property Rights Increase International Technology Transfer? Empirical Evidence from U.S. Firm Level Panel Data", *World Bank Policy Research Working Paper no. WPS3305*, May.

[114] See for example Levin, R. C., A. Klevorick, R. Nelson and S.G. Winter (1987), "Appropriating the Returns from Industrial Research and Development", *Brookings Papers on Economic Activity*, no. 3 which found in a survey of American companies that executives tend to place greater emphasis on IPRs in the pharmaceutical and chemical industries, as an incentive to innovate; similarly Mansfield (1986), "Patents and Innovation: An Empirical Study", *Management Science*, 32, pp. 173-181 found that the share of innovative activity that would not take place in the absence of patent protection ranged from 65% and 30% in pharmaceuticals and chemicals respectively, to 1% for some kinds of machinery and zero for office equipment, motor vehicles, rubber and textiles. The results are replicated for Germany and Japan in a later survey (Mansfield, E. 1995, "Intellectual Property Protection, Direct Investment and Technology Transfer: Germany, Japan and the United States", *International Finance Corporation Discussion Paper no. 27).* Evidence that licensing between multinational headquarters and their affiliates based in other countries increases as IPRs in the country the affiliate is based in are strengthened is presented in Branstetter, L.G., Raymond Fisman and C. F. Foley (2004),"Do Stronger Intellectual Property Rights Increase International Technology Transfer? Empirical Evidence from U.S. Firm-Level Panel Data", *World Bank Policy Research Working Paper no. WPS3305*, May.

[115] Maskus, Keith E. (2003), "Encouraging International Technology Transfer", *UNCTAD/ICTSD Capacity Building Project on Intellectual Property Rights and Sustainable Development*, December.

[116] Lall, S. and M. Albaladejo (2002), "Indicators of the Relative Importance of IPRs in Developing Countries", *Queen Elizabeth House Working Paper Series, no. 85*, April.

[117] Hoekman, B. M., K. E. Maskus and K. Saggi (2004), "Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Options", *World Bank Research Working Paper no. 3332*, June; and Maskus, K. E. (2003), "Encouraging International Technology Transfer", *UNCTAD/ICTSD Capacity Building Project on Intellectual Property Rights and Sustainable Development*, December. Lall and Albaladejo (2002), suggest on the basis of available econometric cross section data that there is an inverted U-shaped relationship between IPRs and income, with the intensity of IPRs first falling with rising incomes and then rising as countries develop sufficient technology capacity to become innovators.

[118] Maskus, Keith, E. (2003), "Encouraging International Technology Transfer", *UNCTAD/ICTSD Capacity Building Project on Intellectual Property Rights and Sustainable Development*, December.

including technical regulations and sanitary and phytosanitary measures.[119] Indeed, there is concern among some WTO Members that such measures could be used as disguised forms of protectionism and could vitiate benefits otherwise derived from tariff reductions.

113. Product standards are used in order to, *inter alia*, guarantee product quality, safeguard health, or protect the environment. Under WTO rules, measures to achieve these objectives are allowed provided they are implemented in a non-discriminatory manner and do not cause unnecessary obstacles to international trade. The main disciplines for these types of measures are contained in the Agreements on Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary (SPS) Measures. The SPS Agreement, which covers measures intended to safeguard human, animal or plant life and health, has specific disciplines requiring such measures to be based on scientific principles. This might mean, for example, that imports of certain goods are permitted subject to presentation of appropriate health certificates or upon completion of inspection procedures at the border.

114. Both the SPS and TBT Agreements promote the use of international standards. The use of common standards may facilitate production and trade; for instance, a technical regulation (TBT measure) based on international standards may provide information regarding characteristics of a product and thereby enable the producer to ensure its compatibility with other systems. An international standard may also provide a public good, for instance, by establishing emission levels and thereby contributing to cleaner air. While the SPS Agreement indicates which international standards are relevant for human, animal and plant health, the TBT Agreement is not as explicit.[120]

115. Considering the importance given by both the SPS and TBT Agreements to international standards, and the explicit encouragement in both agreements for Members to participate in the standard-setting process, several developing country Members continue to express concerns in respect of difficulties they have encountered in this regard. Over the last few years, several international standard-setting bodies have undertaken various actions to enhance the participation of developing country Members in their work. For instance, the ISO General Assembly adopted, in 2004, an ISO Strategic Plan for the period 2005-2010, which aims, *inter alia*, at enhancing developing country involvement in its technical activities. The IEC has also reported, over the last two years, on the increased use of its "Affiliate Country Programme", which is aimed at facilitating the participation of developing countries in the elaboration of international electrotechnical standards. The Food and Agriculture Organization (FAO) and the World Health Organization (WHO) have also been supporting the participation of developing countries in The Codex Alimentarius Commission through the FAO/WHO Codex Trust Fund since end-February 2004.[121]

116. Trade Policy Reviews show that while there is an overall trend towards adopting international standards, several Members have standards with no international equivalents. For example, among developed countries, 92% of Japan's standards were based on international standards in 2004 (compared with 90% in 2002), while about two-thirds of standards issued by the EC's standards setting organizations CEN and CENELEC (compared with 40% of standards set by CEN and 80% set by CENELEC in 2001) were harmonized with international standards; data for the United States were not available. Among developing countries, 56% of national industrial standards were aligned with international standards in Senegal in 2002, 54% in the Philippines in 2001, 35% in Mongolia in

[119] UNCTAD document TB/B/COM.1/EM.27/2 (23 June 2005), provides evidence of the increasing use of technical measures.

[120] The SPS Agreement mentions the following international standards-setting organizations: the Codex Alimentarius Commission (Codex, for food safety), the World Organisation for Animal Health (former International Office of Epizootics (OIE)), and the relevant international and regional organizations operating within the framework of the International Plant Protection Convention (IPPC) .

[121] http://www.fao.org/newsroom/en/news/2004/46967/index.html and CODEX document, ALINORM 04/27/10F, May 2004.

2004.[122] Most of the transition economies in Europe reviewed are moving towards basing their standards on EU standards.[123]

117. Since the entry into force of the WTO Agreements, the number of technical regulations and conformity assessment procedures notified by developing Members has increased. Slightly over half of all TBT notifications have been made by developing Members. The number of such notifications amounted to 6,098 between 1 January 1995 and 31 December 2004.[124] In 2004, 638 notifications were submitted by Members, down from 794 in 2003; the European Communities, along with its Member States, notified the largest number of regulations (80[125]), followed by Israel (44) and Thailand (44). By the end of 2004, Members had notified 4,163 SPS measures to the WTO[126]; the number of annual notifications in 2004 was 617. Developed countries are significant users of such measures, mainly for food safety reasons; developing countries are also using them with greater frequency. The United States notified the largest number of SPS measures (173), followed by Canada (42), New Zealand (39), China (37), the Republic of Korea (27) and the European Communities (23).

118. Both SPS and TBT Committees continue to consider various specific trade concerns that arise between Members. Since 1995, about 200 such concerns have been discussed in the SPS committee, and 130 in the TBT committee. There have been 30 alleged violations of the SPS Agreements, and 17 where TBT provisions have been invoked.[127] Eleven dispute resolution panels have been established to examine complaints relating to the SPS Agreement, and in six of these cases the Appellate Body has also given a ruling; in the TBT area there has only been one case involving an Appellate Body ruling.[128]

119. While most countries acknowledge that standards are necessary, developing country Members in particular are concerned that multiple testing requirements associated with similar standards in different markets as well as the rising complexity of conformity assessment requirements make these costs very high.[129] According to UNCTAD's Trade Analysis and Information System (TRAINS), the number of tariff lines affected by technical measures varies widely between countries.[130] This may, to some degree, explain increased attention in the TBT Committee to matters relating to conformity assessment procedures, i.e. how to check that Members are actually complying with the requirements set out in technical regulations. For instance, in March 2005, the TBT Committee held a special workshop on Supplier's Declaration of Conformity (SDoC), which is one approach available to

[122] WTO document G/TBT/W/166, 26 June 2001 and WT/TPR/S/137, 18 August 2004, and WT/TPR/S/119, 30 June 2003.

[123] For example, as of July 2003, among the 17,571 standards in force in Bulgaria, 9,995 were Bulgarian national standards, 6,469 European standards, and 1,107 ISO and/or IEC standards; 52% of EU standards were implemented as Bulgarian standards. (WTO document WT/TPR/S/121, 15 September 2003)

[124] WTO document G/TBT/15, 4 March 2005.

[125] Notifications by the European Commission and the 15 Member States.

[126] These do not include corrigenda, addenda and revisions. WTO document G/SPS/GEN/510/Rev.1, 23 February 2005.

[127] WTO documents G/SPS/36, and G/TBT/15, 11 July 2005 and 4 March 2005.

[128] On SPS: two panels were established to examine the United States' and Canada's complaints regarding the EC ban on meat treated with growth-promoting hormones; two panels to examine complaints against Australia's restrictions on imports of fresh, chilled or frozen salmon and salmonids; one to examine Japan's requirement that each variety of certain fruits be tested with regard to the efficacy of fumigation treatment; one regarding Japan's restrictions on apples due to fire blight (G/SPS/36). On TBT: one Panel on EC – Trade Description of Sardines (G/TBT/15).

[129] See, for example, "The Cost of Compliance with SPS Standards for Moroccan Exports: A Case Study, Agriculture and Rural Development Discussion Paper, the World Bank, Aloui and Kenny (2004).

[130] For example, in Australia, Brazil, China and the United States, more than 25% of tariff lines are covered by technical measures, while less then 3% of tariff lines are covered by such measures in Japan, South Africa, the European Communities, and Hong Kong, China. It should be noted that the TRAINS covers only government-imposed requirements and the latest available data vary significantly between countries. (WTO (2005), World Trade Report**]**)

facilitate the acceptance of conformity assessment results. Moreover, the Committee intends to hold, in early 2006, a workshop addressing various approaches to conformity assessment. The results of this workshop as well as the ongoing work programme on conformity assessment[131] should feed into the Fourth Triennial Review of the TBT Agreement to be adopted at the end of 2006.

120. The lack of recognition of conformity assessment may also be a barrier to trade. Both the SPS and TBT Agreements encourage the negotiation of mutual recognition agreements (MRAs). Such agreements, for instance on the acceptance of the results of conformity assessment procedures, increase confidence in testing entities and procedures between trading partners. However, while there is a growing trend to conclude such MRAs, presently this is largely confined to agreements between developed countries.[132]

121. A number of developing countries have received technical assistance on TBT; assistance includes seminars, workshops, awareness programmes by the ITC and WTO[133], as well as by APEC, UNDP, UNIDO, and ISO.[134] In addition to initiatives by various governments and standard-setting institutions, mainly of developed countries, in order to provide TBT-related assistance, developed countries have also assisted several developing countries, including Uganda, Malawi, and Zambia in, for example, setting national standards by financing technical assistance programmes implemented by the Joint Technical Assistance Program (JITAP) and the Integrated Framework.[135] The TBT Committee has, in following up on recommendations from the Third Triennial Review of the Agreement, adopted a voluntary mechanism for the notification of specific technical assistance needs and responses.[136]

122. Since 2002, the SPS Standards and Trade Development Facility (STDF) has been established by the Food and Agriculture Organization, the World Organization for Animal Health, the World Bank, the World Health Organization and the WTO with a view to assisting developing countries enhance their expertise and capacity to analyze and to implement international SPS standards, improving their human, animal and plant health situation, and thus their ability to gain and maintain market access. The STDF *inter alia* provides financial grants for developing countries that seek to comply with international SPS standards with a view to gaining or maintaining market access; it also provides a forum for dialogue on SPS technical assistance issues among its five partner organizations and interested donors.[137] Since 2002, France, the Netherlands, Denmark, the United Kingdom and Canada have given funds to the STDF.

123. Foreign direct investment can facilitate recipient developing countries' efforts to harmonize their standards with those of their export destinations. Products and production facilities established by export-oriented foreign direct investors are more likely to meet standards of export markets; the recipient country's domestic industries that provide inputs (e.g. parts and services) to such production

[131] WTO document G/TBT/13, 11 November 2003.

[132] For example, the European Communities has concluded MRAs on conformity assessment procedures with Australia/New Zealand, Canada, Israel, Japan, Switzerland and the United States; Norway with Australia, Canada, New Zealand, and Switzerland; Canada with the EC and Switzerland; Australia and New Zealand (jointly through 1996 Trans Tasman Mutual Recognition Agreement) with the EC, Norway/Iceland/Liechtenstein, and Singapore; Switzerland and Liechtenstein with the EC; Japan with the EC. the United States participates in a number of mutual recognition agreements in which foreign conformity assessments of U.S. regulations are accepted on a bilateral product-specific basis. (WTO Trade Policy Review, various reports**,** and OECD (2004)).

[133] A summary of WTO's technical assistance programmes is provided in WTO document G/SPS/GEN/510/Rev.1, 23 February 2005.

[134] WTO document G/TBT/W186 and W186/Add.1, 14 October 2002 and 13 March 2003.

[135] WTO document WT/TPR/S/93, 21 November 2001. Some countries, including Uganda, have left the membership of the ISO apparently owing to financial difficulties in keeping membership.

[136] WTO document G/TBT/16, 8 November 2005.

[137] See the STDF homepage at http://www.standardsfacility.org.

would also need to meet those standards. Since the existence of multiple standards for similar products would entail high cost for producers, and since the use of international standards have become more prevalent in many countries, harmonization of domestic standards with those of international standards would be beneficial for developing countries with a view to reducing compliance cost for their domestic producers and exporters.

10. Trade facilitation

The economic benefits of trade facilitation

124. With tariff and non-tariff barriers to trade having fallen owing to successive rounds of trade negotiations, other impediments to the cross-border movement of goods have become more evident. These impediments include regulation, administration and enforcement of international trade and related policies. While such impediments have similar economic effects to import tariffs and export taxes, they tend to be far less transparent or predictable than such tax measures. Trade facilitation involves reducing the cost of transactions associated with these (and other) impediments to trade.[138] It includes the elimination of unnecessary administrative barriers through the modernization of import and export procedures, standards and other transaction costs.

125. Faster and more efficient processing of imports and exports can bring both commercial gains to private business and secure revenue due to governments insofar as imports (and exports) are taxed. The economic impact of compliance costs and charges is similar to a tariff, although the government may not collect any revenue. In addition, restricted entry or delays in releasing goods at borders usually increase uncertainty in doing business. Delays in importing intermediate goods may retard the production of end goods or products further down the domestic production chain. Poor port management or costly trade insurance also inhibits imports and exports, thereby squeezing importers' and exporters' profit margins, increasing end-user prices, or leading to irregular supplies. Against this background, the gains from trade facilitation include an increasing trade volume, a higher level of competition, a better business environment (thereby also encouraging FDI), and a higher participation of small and medium-sized enterprises in international trade. Developing countries in particular may gain from better integration into regional or global production networks. Furthermore, improved clearance of goods may help translate increased production capacities into higher export volumes. Finally, efficient border procedures ensure proper collection of border tax revenues.

126. The benefits to business of trade facilitation result in particular from reductions in the following cost components: compliance costs (producing and transmitting required documents); service charges (banking, insurance, cargo handling, transport, etc.); time costs (processing and procedural time); business opportunities (lost business or business not considered); personal opportunity cost (e.g. time lost waiting in lines), and costs related to unpredictability and corruption.[139] In the case of some goods, such as perishable products, the efficiency of clearance procedures has added urgency.

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[138] While there is no standard or "agreed" definition of trade facilitation, more narrow concepts refer only to reforming customs procedures and technical regulations relating to the flow of goods across borders. Broader definitions of trade facilitation also include issues such as transport infrastructure and ports logistics, technical regulations, and delays in payments Krista Lucenti (2003): "Is There a Case for Further Multilateral Rules on Trade Facilitation?" in State Secretariat of Economic Affairs and Evenett, S. (eds): *The Singapore Issues and the World Trading System: The Road to Cancun and Beyond*, Berne.

[139] Tom Butterfly (2003): "Trade Facilitation in a Global Trade Environment", in: United Nations Economic Commission for Europe: *Trade Facilitation – The Challenges for Growth and Development*, Geneva.

127. The economic benefits through improved trade facilitation are potentially very large.[140] Francois, van Meijl and van Tongeren (2003) find trade facilitation to be an important source of welfare gain, including over US$95 billion in the OECD countries and over US$150 billion across the world; this is reportedly, around a third of the total welfare gains from trade liberalization in goods and services.[141] The biggest gains from trade facilitation would be enjoyed by those countries that are highly trade-oriented, such as in south-east Asia. Research by the World Bank focused on APEC countries shows large improvements in international trade flows as a result of a reduction of regulatory barriers between APEC members and the use of efficiency enhancing tools such as e-business.[142] According to these calculations, which are based on data for the year 2000, total intra-APEC trade is expected to increase by about US$254 billion (an increase of around 21% in intra-APEC trade in manufactures), with more than half (US$139 billion) coming from improvements in port efficiency and the customs environment, and around US$115 billion from improvements "behind the border" (including the regulatory environment). In a follow-up paper, which takes a more global perspective and covers 75 countries, gains from trade facilitation are estimated to be US$377 billion.[143] While all regions gain in imports and exports, developing countries gain more in terms of exports than imports, in large part through increased exports to the OECD markets.

128. Trade facilitation issues have been addressed in numerous international fora, including the World Customs Organization (WCO) and UNCTAD, both of which also provide technical assistance with regard to trade facilitation. The WCO maintains a customs reform and modernization programme to provide training for customs officers to implement required changes in customs procedures and evaluate their impact on trade facilitation and customs compliance. The WCO's 1999 Revised Kyoto Convention remains a crucial reference on the simplification and harmonization of customs procedures. UNCTAD maintains an automated system for customs data and management used by a large number of developing countries, and provides technical assistance to improve customs clearance and data management. The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) has developed a series of recommendations, some of which reflect best standards and practices in trade procedures and standards.[144] The recommendations also include guidelines for designing trade documents.

129. Regional agreements also often include efforts to harmonize customs procedures, rules and measures. For example, the Canada-U.S. Shared Border Accord commits both governments to align, to the maximum extent possible, the customs clearance processes along their shared border. This agreement marked the creation of the Free and Secure Trade (FAST) programme, which seeks to harmonize clearance procedures at the border for drivers, carriers, and importers, and offers expedited

[140] Studies on documentation costs in international trade date back as early as to the early 1970s. Based on a business survey, the United States' National Council on International Trade Development found that such costs represented 7.5% of the value of total U.S. exports and imports.

[141] Even under the assumption of constant returns to scale and 50% liberalization of border measures, they estimate total gains to the world of US$63 billion (US$41 billion from liberalization in the OECD countries and US$22 billion from liberalization in the developing countries) (Francois, J., H. van Meijl, and F. van Tongeren, 2003, "Economic Benefits of the Doha Round for the Netherlands": Report submitted to the Ministry of Economic Affairs, Directorate General for Foreign Economic Relations).

[142] John S. Wilson, C. L. Mann and T. Otsuki (2003), "Trade facilitation and Economic Development: Measuring the Impact", *World Bank Policy Research Working Paper, no. 2988*, March. The paper also discusses previous research on the impact of trade facilitation, including by UNCTAD, APEC and the OECD.

[143] John S. Wilson, C. L. Mann and T. Otsuki (2004), "Assessing the Benefit of Trade Facilitation: A Global Perspective", *World Bank Policy Research Working Paper, no. 3224*, February.

[144] United Nations Economic Commission for Europe (undated): *List of UNECE-UN/CEFACT Recommendations on Trade Facilitation*.

clearance.[145] A similar programme has been elaborated under the U.S./Mexico Border Partnership Plan.

130. In APEC, trade facilitation has been a key objective since the inception of the regional forum in 1989. The 1994 Bogor Declaration emphasized that trade facilitation was needed to complement trade liberalization in order that businesses and consumers could enjoy the benefits of trade. The 1996 Osaka Action Agenda agreed to align national norms with international standards and to recognize each others' national standards.[146] The Shanghai Trade Facilitation Action Plan, launched in 2001, set the objective of achieving a 5% reduction of transaction costs across the APEC region by 2006, building on voluntary undertakings. In the context of this Action Plan, various methodologies have been developed to help economies to benchmark their current situation and to track their progress, in quantifiable financial terms, toward the transaction cost reduction goal.[147] The Santiago Initiative for Expanded Trade in APEC, adopted at the APEC Summit in Chile in 2004, has trade facilitation as one of its two main components.[148]

131. The modernization of customs procedures has been a key objective of many governments in recent years. Introducing information technology can greatly contribute to the promotion of transparency, efficiency, and simplification of customs procedures. For example, in an increasing number of countries, including developing country Members, the necessary forms can be downloaded from the Internet and submitted electronically. Other steps taken by governments include the introduction of single export forms[149] and the establishment of one-stop offices or single windows, which allows traders to lodge information with a single institution to fulfil all trade-related requirements[150].

132. In addition to the necessity of streamlining customs procedures, numerous governments have recognized the strategic importance of increasing the efficiency of the maritime port system. Nigeria, for example, has adopted a new port policy that aims to attract private investment in port and auxiliary services, while the Government restricts itself to regulatory functions.[151]

The negotiations in the WTO

133. Trade facilitation is a relatively new topic on the multilateral negotiating table. It was added to the WTO agenda as one of the "new" issues in December 1996 at the Singapore Ministerial meeting. As was the case for the other "Singapore issues", the 2001 Ministerial Declaration at Doha stated that a decision regarding negotiations on trade facilitation was to be taken after the Fifth Ministerial Conference in 2003 "by explicit consensus". In the period up to the Conference, the WTO

[145] WTO, (forthcoming), *Trade Policy Review - United States 2006*. Additional information on the FAST programme is available at: http://www.cbp.gov/linkhandler/cgov/import/commercial_enforcement/ctpat/fast/fast.ctt/FASTBrochure.doc

[146] WTO, 2000, *Trade Policy Review - Singapore 2000*; and WTO, 2002, *Trade Policy Review—Japan, 2002*.

[147] Asia-Pacific Economic Cooperation (2004): *Trade Facilitation and Trade Liberalization: From Shanghai to Bogor*.

[148] Asia-Pacific Economic Cooperation (2005): *Outcomes and Outlook 2004/05*.

[149] WTO, 2003: *Trade Policy Review - Chile* 2003; WTO, 2002: *Trade Policy Review - Dominican Republic 2002*.

[150] WTO, 2003: *Trade Policy Review - Niger* 2003; WTO, 2004: *Trade Policy Review - Republic of Korea 2004*.

[151] WTO, 2005, *Trade Policy Review - Nigeria 2005*. The example of Nigeria also shows the links between customs efficiency and port efficiency as the large number of agencies responsible for cargo clearance often leads to congestion at seaports. The Government has now taken steps to reduce the number of agencies involved in cargo clearance.

Goods Council, which has been studying trade facilitation since 1997[152], was instructed to "review and, as appropriate, clarify and improve relevant aspects of Articles V (freedom of transit), VIII (fees and formalities connected with importation and exportation), and X (publication and administration of trade regulations) of the GATT and identify the trade facilitation needs and priorities of Members, in particular, developing and least developed countries".

134. The launch of negotiations on trade facilitation in July 2004 marked a new phase in multilateral efforts to expedite the movement of goods and cut disruptive red tape. Elevating the WTO's contribution to those endeavours from analysing related obstacles to working towards their elimination, the decision to embark on the exercise reflected the growing recognition of the role of trade facilitation in fostering development and thus in the Doha Round. It underlined the global awareness of the potential gains from this undertaking and its link to economic growth. No longer considered as the "plumbing" of trade policy, trade facilitation has come to be seen as an important economic issue and a core element of a country's trade strategy.

135. A number of steps have already been undertaken to advance this process, leading to concrete suggestions on how to enhance the underlying regulatory framework concerning trade. Various proposals were made by Members, particularly with respect to improvements of GATT Articles V, VIII and X[153], in line with the agreed scope of the negotiations[154]. The focus on those three Articles implies a concentration of work on transparency and simplification issues, with efforts also being made to enhance predictability. Substantive areas covered range from transit issues over import/export-related fees and formalities to the publication and administration of trade regulations, with the overall objective to speed up the movement, release and clearance of goods. Measures proposed to this end include enhanced publication and information requirements, consultation mechanisms, strengthened appeal and due process procedures and a number of initiatives to expedite clearance processes. All of these measures aim at lowering costs, enhancing trading opportunities (especially for small and medium-sized enterprises) and allowing for more efficient resource allocation.

136. Technical assistance and capacity building as well as special and differential treatment are part and parcel of any proposed measure, with thought also being given to cost implications and related needs. The mandate calls for an innovative approach that links the implementation capacities of developing and least-developed countries to the extent and timing of their entering into new commitments in this area.[155]

137. While the end result of this process remains to be seen, the initial phase of the negotiations has already led to an encouraging convergence of views and their translation into concrete ideas, paving the way for a substantially upgraded treatment of trade facilitation at the multilateral level. The high level of support and large degree of shared objectives in this regard will further add to the WTO's positive contribution to the international trading environment.

[152] This was in response to the instruction by Ministers at the Ministerial Conference in Singapore held in 1996, to commence exploratory and analytical work on the simplification of trade procedures in order to assess the scope for WTO rules in this area.

[153] WTO documents TN/TF/W/6 to TN/TF/W/75.

[154] Annex D of the July Decision of the General Council of 1 August 2004 (WTO document WT/L/579).

[155] This approach was endorsed by the Consultative Board established to consider how the WTO could be reinforced and equipped to meet the institutional challenges it faces. (Peter Sutherland and others (eds.) (2005): *The Future of the WTO – Addressing Institutional Challenges in the New Millennium*, Geneva).

Annex Table 1
Structure of MFN tariffs in least developed countries reviewed in 2005
(Per cent)

		Guinea			Sierra Leone	
		1998	2005	U.R.[a]	2004	U.R.[b]
	Bound tariff[c]					
1.	Bound tariff lines (% of all tariff lines)	40.8[d]	40.8[d]	40.8[d]	100.0	100.0
2.	Simple average bound rate	21.1	21.1	21.1	47.5	47.5
	Agricultural products (HS01-24)	38.6	38.6	38.6	41.8	41.8
	Industrial products (HS25-97)	12.9	12.9	12.9	48.5	48.5
	WTO agricultural products	39.4	39.4	39.4	40.6	40.6
	WTO non-agricultural products	11.5	11.5	11.5	48.7	48.7
	Textiles and clothing	16.9	16.9	16.9	50.0	50.0
3.	Tariff quotas (% of all tariff lines)	0.0	0.0	0.0	0.0	0.0
4.	Duty free tariff lines (% of all tariff lines)	1.2	1.2	1.2	0.0	0.0
5.	Non-*ad valorem* tariffs (% of all tariff lines)	0.0	0.0	0.0	0.0	0.0
6.	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	0.0	0.0	0.0	0.0	0.0
7.	Nuisance bound rates (% of all tariff lines)[e]	0.0	0.0	0.0	0.0	0.0
	Applied tariff					
8.	Simple average applied rate	16.6	14.9	..	14.7	..
	Agricultural products (HS01-24)	17.6	18.5	..	18.6	..
	Industrial products (HS25-97)	16.4	14.3	..	14	..
	WTO agricultural products	17.6	17.8	..	17.9	..
	WTO non-agricultural products	16.4	14.5	..	14.1	..
	Textiles and clothing	16.4	20.0	..	23.3	..
9.	Domestic tariff "peaks" (% of all tariff lines)[f]	0.0	0.0	..	0.7	..
10.	International tariff "peaks" (% of all tariff lines)[g]	88.6	41.3	..	47.6	..
11.	Overall standard deviation of tariff rates	2.6	7.1	..	10.7	..
12.	Coefficient of variation of tariff rates	0.2	0.5	..	0.7	..
13.	Tariff quotas (% of all tariff lines)	0.0	0.0	..	0.0	..
14.	Duty free tariff lines (% of all tariff lines)	0.0	0.0	..	0.0	..
15.	Non-*ad valorem* tariffs (% of all tariff lines)	0.0	0.0	..	0.0	..
16.	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	0.0	0.0	..	0.0	..
17.	Nuisance applied rates (% of all tariff lines)[e]	0.0	0.0	..	0.4	..

.. Not available.

a Based on 2005 tariff schedule.
b Based on 2004 tariff schedule.
c Calculations are only based on bound tariff lines.
d Including partially bound rates (representing 0.7% of total lines).
e Nuisance rates are those greater than zero, but less than or equal to 2%.
f Domestic tariff peaks are defined as those exceeding three times the overall simple average applied rate (indicator 8).
g International tariff peaks are defined as those exceeding 15%.

Note: MFN tariff calculations are based on effectively applied rates (including taxes).

Source: WTO Secretariat calculations, based on data provided by the Members.

Annex Table 1 (cont'd)
Structure of MFN tariffs in selected countries reviewed in 2005
(Per cent)

		Bolivia			Ecuador		Paraguay			Trinidad & Tobago	
		1998	2005	F.B.[a]	2005	F.B.[b]	1997	2004[c]	F.B.[a]	2004	F.B.[b]
	Bound tariff										
1.	Bound tariff lines (% of all tariff lines)[d]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2.	Simple average bound rate	40.0	40.0	40.0	..	21.0	32.7	32.7	32.7	57.6	57.6
	Agricultural products (HS01-24)	40.0	40.0	40.0	..	26.5	33.3	33.3	33.3	85.1	85.1
	Industrial products (HS25-97)	40.0	40.0	40.0	..	20.1	32.6	32.6	32.6	51.3	51.3
	WTO agricultural products	40.0	40.0	40.0	..	25.4	33.2	33.2	33.2	89.9	89.9
	WTO non-agricultural products	40.0	40.0	40.0	..	20.3	32.6	32.6	32.6	50.8	50.8
	Textiles and clothing	40.0	40.0	40.0	..	28.4	33.7	33.7	33.7	56.9	56.9
3.	Tariff quotas (% of all tariff lines)	0.0	0.0	0.0	..	0.4	0.0	0.0	0.0	0.0	0.0
4.	Duty free tariff lines (% of all tariff lines)	0.0	0.0	0.0	..	0.0	0.0	0.0	0.0	1.8	1.8
5.	Non-*ad valorem* tariffs (% of all tariff lines)	0.0	0.0	0.0	..	0.0	0.0	0.0	0.0	0.0	0.0
6.	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	0.0	0.0	0.0	..	0.0	0.0	0.0	0.0	0.0	0.0
7.	Nuisance bound rates (% of all tariff lines)[e]	0.0	0.0	0.0	..	0.0	0.0	0.0	0.0	0.0	0.0
	Applied tariff										
8.	Simple average applied rate	9.7	8.2	..	11.4	..	9.6	8.9	..	9.1	..
	Agricultural products (HS01-24)	10	9.9	..	16.7	..	10.7	10.1	..	20.5	..
	Industrial products (HS25-97)	9.6	7.9	..	10.6	..	9.5	8.7	..	6.9	..
	WTO agricultural products	10	9.8	..	15.7	..	10.4	9.9	..	17.9	..
	WTO non-agricultural products	9.6	7.9	..	10.8	..	9.6	8.8	..	7.6	..
	Textiles and clothing	10	10.0	..	18.1	..	17.9	17.4	..	9.0	..
9.	Domestic tariff "peaks" (% of all tariff lines)[f]	0.0	0.0	..	0.7	..	0.0	0.1	..	8.4	..
10.	International tariff "peaks" (% of all tariff lines)[g]	0.0	0.0	..	24.5	..	26.2	22.7	..	28.2	..
11.	Overall standard deviation of tariff rates	1.3	3.0	..	7.0	..	6.8	6.8	..	11.8	..
12.	Coefficient of variation of tariff rates	0.1	0.4	..	0.6	..	0.7	0.8	..	1.3	..
13.	Tariff quotas (% of all tariff lines)	0.0	0.0	..	0.5	..	0.0	0.0	..	0.0	..
14.	Duty free tariff lines (% of all tariff lines)	0.0	5.8	..	3.2	..	6.1	14.0	..	45.4	..
15.	Non-*ad valorem* tariffs (% of all tariff lines)	0.0	0.0	..	0.0	..	0.0	0.0	..	0.4	..
16.	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	0.0	0.0	..	0.0	..	0.0	0.0	..	0.4	..
17.	Nuisance applied rates (% of all tariff lines)[e]	0.0*	0.0	..	0.0		16.4	21.3	..	0.0	..

.. Not available.
* Negligible.
F.B. Final bound.

a Based on 1998 tariff schedule.
b Based on 1995 tariff schedule.
c As at July.
d Calculations are only based on bound tariff lines. Including fully bound and partially bound rates.
e Nuisance rates are those greater than zero, but less than or equal to 2%.
f Domestic tariff peaks are defined as those exceeding three times the overall simple average applied rate (indicator 8).
g International tariff peaks are defined as those exceeding 15%.

Note: Excluding in-quota rates. Calculations exclude specific rates and include the ad valorem part for compound and alternate rates. Final bound calculations are only based on bound tariff lines.

Source: WTO Secretariat calculations, based on data provided by the Members.

Annex Table 1 (cont'd)
Structure of MFN tariffs in selected countries reviewed in 2005
(Per cent)

		Mongolia			Philippines			Qatar		Romania		
		2000	2004	F.B[a]	1999	2004	F.B.[b]	2004	F.B.[c]	1999	2005	F.B.[d]
	Bound tariff											
1.	Bound tariff lines (% of all tariff lines)[e]	100.0	100.0	100.0	..	..	64.8	..	100.0	100.0	100.0	100.0
2.	Simple average bound rate	18.4	18.4	17.6	..	..	25.7	..	16.0	40.0	37.7	37.7
	Agricultural products (HS01-24)	19.0	19.0	19.0	..	..	36.5	..	25.2	117.7	107.1	107.1
	Industrial products (HS25-97)	18.3	18.3	17.4	..	..	23.3	..	14.5	17.5	17.0	17.0
	WTO agricultural products	19.0	18.9	18.9	..	..	34.8	..	25.7	134.2	121.5	121.5
	WTO non-agricultural products	18.3	18.4	15.2	..	..	23.4	..	14.5	16.2	16.0	16.0
	Textiles and clothing	21.5	21.8	21.7	..	..	28	..	16.4	24.0	23.9	23.9
3.	Tariff quotas (% of all tariff lines)	0.0	0.0	0.0	..	..	..	..	0.0	2.0	2.1	2.1
4.	Duty free tariff lines (% of all tariff lines)	0.6	0.5	1.6	..	..	2.3	..	0.9	4.4	7.3	7.3
5.	Non-*ad valorem* tariffs (% of all tariff lines)	0.0	0.0	0.0	..	..	0.0	..	0.0	0.0	0.0	0.0
6.	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	0.0	0.0	0.0	..	..	0.0	..	0.0	0.0	0.0	0.0
7.	Nuisance bound rates (% of all tariff lines)[f]	0.0	0.0	0.0	..	..	0.0	..	0.0	0.0	0.0	0.0
	Applied tariff											
8.	Simple average applied rate	5.0	5.0	..	9.7	7.4	..	5.2	..	19.8	17.5	..
	Agricultural products (HS01-24)	5.1	5.1	..	14.8	10.6	..	6.8	..	32.3	26.3	..
	Industrial products (HS25-97)	4.9	5.0	..	8.9	6.9	..	4.9	..	16.2	14.9	..
	WTO agricultural products	5.1	5.1	..	14.1	10.3	..	7.1	..	34.0	28.0	..
	WTO non-agricultural products	4.9	5.0	..	9.1	7.0	..	4.9	..	16.2	14.8	..
	Textiles and clothing	5.0	5.0	..	18.5	11.3	..	5.0	..	24.0	22.2	..
9.	Domestic tariff "peaks" (% of all tariff lines)[g]	0.0	0.0	..	1.9	5.1	..	0.5	..	2.9	2.4	..
10.	International tariff "peaks" (% of all tariff lines)[h]	0.0	0.0	..	23.1	7.5	..	0.5	..	51.9	46.9	..
11.	Overall standard deviation of tariff rates	0.5	0.5	..	9.6	7.9	..	7.0	..	17.9	13.7	..
12.	Coefficient of variation of tariff rates	0.1	0.1	..	1.0	1.1	..	1.3	..	0.9	0.8	..
13.	Tariff quotas (% of all tariff lines)	0.0	0.0	..	1.3	0.6	..	0.0	..	2.0	2.1	..
14.	Duty free tariff lines (% of all tariff lines)	0.9	0.9	..	0.3	3.7	..	5.8	..	5.5	10.8	..
15.	Non-*ad valorem* tariffs (% of all tariff lines)	0.0	0.0	..	0.0	0.0	..	0.7[i]	..	0.0	0.0	..
16.	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	0.0	0.0	..	0.0	0.0	..	0.7	..	0.0	0.0	..
17.	Nuisance applied rates (% of all tariff lines)[f]	0.0	0.0	..	0.0	21.5	..	0.0	..	0.0	0.4	..

.. Not available.
F.B. Final bound.

a Based on 2004 tariff schedule.
b Based on 1999 tariff schedule.
c Based on 1996 tariff schedule.
d Based on 2005 tariff schedule.
e Calculations are only based on bound tariff lines. Including fully bound and partially bound rates.
f Nuisance rates are those greater than zero, but less than or equal to 2%.
g Domestic tariff peaks are defined as those exceeding three times the overall simple average applied rate (indicator 8).
h International tariff peaks are defined as those exceeding 15%.
i Including prohibited tariff lines, representing 0.3%.

Note: Excluding in-quota rates. Calculations exclude specific rates and include the *ad valorem* part for compound and alternate rates. Final bound calculations are only based on bound tariff lines.

Source: WTO Secretariat calculations, based on data provided by the Members.

Annex Table 1 (cont'd)
Structure of MFN tariffs in selected countries reviewed in 2005
(Per cent)

		Egypt			Tunisia			Nigeria		
		1998	2005	F.B.[a]	1994	2005	F.B.[a]	1997/98	2003	F.B.[b]
	Bound tariff[c]									
1.	Bound tariff lines (% of all tariff lines)	98.7	98.7	98.7	..	60.7	60.7	19.2	19.2	19.2
2.	Simple average bound rate	..	..	38.6	..	65.6	65.6	..	118.4	118.4
	Agricultural products (HS01-24)	..	..	93.4	..	119.1	119.1	..	149.7	149.7
	Industrial products (HS25-97)	..	..	29.6	..	40.1	40.1	..	69.8	69.8
	WTO agricultural products	..	..	96.2	..	117.3	117.3	..	150	150
	WTO non-agricultural products	..	..	29.6	..	39.3	39.3	..	49.2	49.2
	Textiles and clothing	..	..	31.3	..	57.7	57.7	..	60	60
3.	Tariff quotas (% of all tariff lines)	..	..	0	..	2.6	2.6	..	0.0	0.0
4.	Duty free tariff lines (% of all tariff lines)	..	..	0	..	0.0	0.0	..	0.0	0.0
5.	Non-*ad valorem* tariffs (% of all tariff lines)	..	..	0.2	..	0.0	0.0	..	0.0	0.0
6.	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	..	..	0.2	..	0.0	0.0	..	0.0	0.0
7.	Nuisance bound rates (% of all tariff lines)[d]	..	..	2.6	..	0.0	0.0	..	0.0	0.0
	Applied tariff									
8.	Simple average applied rate	26.8	20.0	..	30.7	31.7	..	24.4	28.6	..
	Agricultural products (HS01-24)	63.4	64.1	..	36.6	65.7	..	32.8	50.8	..
	Industrial products (HS25-97)	20.9	12.8	..	29.8	21.8	..	23	25.0	..
	WTO agricultural products	64.9	66.4	..	35.0	66.8	..	32.8	50.2	..
	WTO non-agricultural products	20.9	12.8	..	30.1	22.6	..	23.1	25.3	..
	Textiles and clothing	36.7	24.4	..	39.1	31.1	..	42.9	42.7	..
9.	Domestic tariff "peaks" (% of all tariff lines)[e]	0.5	0.4	..	0.0	5.5	..	0.5	5.0	..
10.	International tariff "peaks" (% of all tariff lines)[f]	52.7	26.6	..	90.4	64.7	..	51.6	56.5	..
11.	Overall standard deviation (SD) of tariff rates	127.4	148.3	..	11.8	30.4	..	18.0	22.3	..
12.	Coefficient of variation (CV) of tariff rates	4.8	7.4	..	0.4	1.0	..	0.7	0.8	..
13.	Tariff quotas (% of all tariff lines)	0.0	0.0	..	..	1.6	..	0.0	0.0	..
14.	Duty free tariff lines (% of all tariff lines)	0.2	5.3	..	1.2	15.0	..	0.0	0.0	..
15.	Non-*ad valorem* tariffs (% of all tariff lines)	0.2	0.2	..	0.0	0.0	..	0.0	0.0	..
16.	Non-*ad valorem* tariffs with no AVEs (% of all tariff lines)	0.2	0.2	..	0.0	0.0	..	0.0	0.0	..
17.	Nuisance applied rates (% of all tariff lines)[d]	0.9	23.7	..	0.0	0.0	..	0.0	0.0	..

.. Not available.
F.B. Final bound.

a Based on 2005 tariff schedule.
b Based on 2003 tariff schedule.
c Calculations are only based on bound tariff lines.
d Nuisance rates are those greater than zero, but less than or equal to 2%.
e Domestic tariff peaks are defined as those exceeding three times the overall simple average applied rate (indicator 8).
f International tariff peaks are defined as those exceeding 15%.

Note: Excluding in-quota rates. Calculations exclude specific rates and include the *ad valorem* part for compound and alternate rates.

Source: WTO Secretariat calculations, based on data provided by the Members.

Annex: Definition and Calculation of TSEs and PSEs[156]

Total transfers associated with agricultural policies (Total Support Estimate (TSE)) is "an indicator of the annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures which support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products". The TSE equals the sum of the following:

(1) transfers from consumers of agricultural commodities and taxpayers to agricultural producers (PSE);
(2) transfers from taxpayers to general services provided to agriculture (including R&D; agricultural schools; inspection services; infrastructure; marketing and promotion; and public stockholding); and
(3) transfers from taxpayers to consumers of agricultural commodities.

The first component of the TSE is the Producer Support Estimate (PSE), which is "an indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm-gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on farm production or income". The PSE is calculated as the sum of the following:

(i) market price support (MPS), which indicates the gross transfers from consumers and taxpayers to agricultural producers arising from policy measures that create a gap between domestic market prices and border prices of a specific agricultural commodity, measured at the farm-gate level;
(ii) payments based on output;
(iii) payments based on area planted or animal numbers;
(iv) payments based on historical entitlements;
(v) payments based on input use;
(vi) payments based on input constraints;
(vii) payments based on overall farming income; and
(viii) miscellaneous payments.

When calculating TSEs and PSEs for a given country, the OECD points out that "the only component that has to be calculated for each commodity is the part of market price support", as "all the other TSE and PSE components are recorded, explicitly or implicitly, as budgetary expenditure", or being estimated in the budget.

Source: OECD (2005), "Producer and Consumer Support Estimates: OECD Database 1986-2004 User's Guide", available at: http://www.oecd.org/dataoecd/56/31/35010085.pdf [13 January 2006]

[156] The methodology used by the OECD to calculate assistance for agriculture is different from the WTO's Aggregate Measure of Support (AMS).