

DISCUSSION PAPER NO 7

Selected Issues Concerning the Multilateral Trading System

by

Rohini Acharya and Michael Daly

World Trade Organization
Geneva, Switzerland

Disclaimer and citation guideline

Discussion Papers are presented by the authors in their personal capacity and opinions expressed in these papers should be attributed to the authors. They are not meant to represent the positions or opinions of the WTO Secretariat or of its Members and are without prejudice to Members' rights and obligations under the WTO. Any errors or omissions are the responsibility of the authors.

Any citation of this paper should ascribe authorship to staff of the WTO Secretariat and not to the WTO.

This paper is only available in English – Price CHF 20.-

To order, please contact:

WTO Publications
Centre William Rappard
154 rue de Lausanne
CH-1211 Geneva
Switzerland

Tel: (41 22) 739 52 08

Fax: (41 22) 739 57 92

Website: www.wto.org

E-mail: publications@wto.org

ISSN 1726-9466

ISBN 92-870-3301-3

Printed by the WTO Secretariat

XI-2004

Keywords: tariffs, trade negotiations, economic development

JEL classification code: F13, F14, O19

© World Trade Organization, 2004. Reproduction of material contained in this document may be made only with written permission of the WTO Publications Manager.

With written permission of the WTO Publications Manager, reproduction and use of the material contained in this document for non-commercial educational and training purposes is encouraged.

ACKNOWLEDGEMENTS

The authors are indebted to Clemens Boonekamp, Michael Finger, Patrick Low, Suja Mavroidis, Roy Santana, Frank Wolter and their colleagues in the Trade Policies Review Division, for their helpful comments and suggestions on a previous draft, and to Verena Hess and Gérard Durand, for their statistical assistance.

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	CAUSES OF CURRENT ACCOUNT IMBALANCES.....	2
III.	TARIFFS - UNFINISHED BUSINESS.....	5
IV.	SUPPORT FOR AGRICULTURE AND NON-TRADE CONCERNS.....	13
V.	BARRIERS TO MARKET ACCESS FOR TEXTILES AND CLOTHING.....	18
VI.	OTHER MAJOR NON-TARIFF BARRIERS TO TRADE.....	20
VII.	MARKET ACCESS FOR SERVICES.....	22
VIII.	CONCLUSION.....	26
IX.	REFERENCES.....	27

LIST OF BOXES, TABLES AND CHARTS

BOX 1:	ACCOUNTING FOR A COUNTRY'S CURRENT ACCOUNT DEFICIT	29
TABLE 1:	STRUCTURE OF MFN TARIFFS IN THE "QUAD" (PER CENT)	30
TABLE 2:	STRUCTURE OF MFN TARIFFS IN SELECTED DEVELOPING COUNTRIES (PER CENT)..	31
TABLE 3:	TARIFF ESCALATION IN THE "QUAD" BY 2-DIGIT ISIC INDUSTRY	32
TABLE 4:	TARIFF ESCALATION IN SELECTED DEVELOPING COUNTRIES BY 2-DIGIT ISIC INDUSTRY	33
TABLE 5:	MFN AND DEVELOPING COUNTRY PREFERENTIAL TARIFFS (PER CENT)	34
CHART 1:	SIMPLE AVERAGE MFN TARIFF RATES FOR THE "QUAD", BY HS SECTION	35
CHART 2:	SIMPLE AVERAGE MFN TARIFF RATES FOR SELECTED DEVELOPING COUNTRIES, BY HS SECTION	36

I. INTRODUCTION

Since the establishment of the General Agreement on Tariffs and Trade (GATT) in 1947, successive rounds of multilateral trade negotiations under the GATT have greatly reduced trade impediments, especially tariffs, thereby fostering economic development. The Uruguay Round (UR) of negotiations completed in 1994 resulted in a tripod of rules under the auspices of the World Trade Organization, which was established in 1995. The tripod consists of the GATT 1994, the General Agreement on Trade in Services (GATS), and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).¹ In an attempt to build on the results of the UR, Members met in Seattle in November 1999 to launch a new round of negotiations, but this effort failed. One of the main reasons for this failure was the perception among developing countries that the WTO agreements negotiated under the UR had failed to meet their development needs and that the new mandate proposed in Seattle did not address their specific problems, including difficulties implementing the current WTO agreements. After a two-year delay, however, Members reached agreement in Doha in November 2001 to put in place a comprehensive agenda for negotiation and future work, the Doha Development Agenda (DDA), which is intended to address issues of particular concern to developing countries.

The DDA suffered a setback in September 2003 at the Ministerial conference in Cancún, where efforts

by Members to agree to a broad negotiating framework broke down. The main stumbling-blocks were agriculture and "new issues". This paper explores some selected issues, including misconceptions, concerning international trade and investment. Particular attention is focused on several issues that are of special interest to developing countries. The rest of the paper is organised as follows:

- The next section highlights a widely held misconception among trade negotiators regarding the causes of trade imbalances.
- Some unfinished business concerning tariffs, notably the matters of tariff "peaks" and tariff escalation, together with special and differential (S&D) treatment in this regard are considered in Section 3.
- The rationale for high degree of support for agriculture is evaluated in Section 4.
- Section 5 deals with the market access concerns of developing countries in textiles and clothing.
- With the decline in tariffs and quantitative restrictions, the emergence of other potential barriers to trade such as anti-dumping, technical standards and SPS measures is discussed in Section 6.
- Some market access issues in services are considered in Section 7.
- The final section contains some concluding remarks.

¹ Given that the smooth functioning of multilateral trading system requires not just an agreed set of rules, but also the means for resolving differences and disputes between Members, these rules were complemented by a strong dispute settlement mechanism.

II. CAUSES OF CURRENT ACCOUNT IMBALANCES

Macroeconomic and other imbalances can have major implications not just for growth, but for international trade and investment flows. In addressing these imbalances, therefore, governments need to ensure the coherence of macroeconomic (that is, fiscal and monetary/exchange rate) policies and policies concerning trade and investment; in particular, it is inappropriate to use trade measures to address problems arising from macroeconomic imbalances.

In the US, for example, during the past couple of years or so, there has been a re-emergence of a large and growing fiscal deficit alongside the related large current account deficit – the so-called "twin deficits". The large and widening current account deficit has provoked allegations that some foreign governments and producers are engaging in "unfair" trading practices to the detriment of US producers.² Such allegations tend, in turn, to lead to protectionist pressure from vested interests representing some sectors aimed at persuading the US Government to implement measures (notably contingency actions and Section 301 investigations)³ to curb imports of some products from specific countries and to push for further opening of foreign markets to US exporters.⁴ Such pressures have been aimed especially at countries

such as China and Japan, that account for a large part of the US trade deficit.⁵

However, the United States' overall current account deficit, if not the size of bilateral trade imbalances,⁶ bears little relation to the openness of its trading partners' markets or their trade policies and practices. Instead, it reflects macroeconomic imbalances; that is, the failure of national saving to keep pace with domestic investment (Box 1), a gap that has widened as a consequence of the recent turnaround in the Federal Government's budget from a cyclically-adjusted surplus (government saving) of 1.1 per cent in 2001 to a forecast deficit (government dissaving) of 3.2 per cent in 2004.⁷ The imbalance between national saving and domestic investment has been made up by foreign investors, who have continued to be attracted to the

² With regard to the United States' large trade deficit with China, a Republican member of the House Appropriations subcommittee on commerce issues is reported to have remarked recently that "When trade is so one-way, there is something desperately wrong with our trade policy" ("US House Republican Vows Action on Chinese Imports", Dow Jones International News Service, 22 May 2003). More recently, the President of the United States is reported to have stated that "We expect countries like China to understand that trade imbalances means that trade is not balanced and fair." ("Bush Says US Trade with China is 'Unbalanced'", Dow Jones International News Service, 21 January 2004).

³ There have been no new Section 301 investigations since March 2001, only special 301 investigations.

⁴ Reportedly, the chairman of the International Steel Group in the US even blamed the burgeoning balance-of-payments deficit on the rulings and regulations of the WTO (see "Analysis: Return to trade unilateralism" United Press International, 9 April 2003).

⁵ Japan, in particular, was long under constant pressure to accord greater market access to US exporters as well as to restrain its exports to the US. Japan's trade surplus with the US was seen by US trade negotiators and policymakers as an indicator of the net benefits received by Japan. Whenever US deficits with Japan have risen, US trade negotiators have tended to exert pressure on Japan to open up its markets and reduce exports to the US. It may be that, in order to placate the US Government, Japanese policymakers acted to raise the dollar value of the yen, thereby tending to reduce Japanese exports and raising imports from the United States and elsewhere, thus cutting the trade deficit. Over time, this led to the secular appreciation of the yen and thus arguably contributed to the asset-price bubble in the late 1980s and to the current slump in Japan's economy. See McKinnon and Ohno (1997) and Fung et al. (2002).

⁶ Interestingly, the Council of Economic Advisers (2004, p. 257), in its recent Economic Report of the President, maintains that "*bilateral deficits*, such as the US trade deficit with China, reveal *nothing* about underlying economic forces in either country". It goes on to add that "[W]hile trade barriers are a cause for concern, there is no economic sense in which a bilateral deficit is either good or bad. It would be an extraordinary coincidence if all countries had balanced trade with each of their partners. One of the benefits of the international financial system is that it frees countries from these bilateral constraints, bilateral deficits and surpluses are a natural consequence of a trading world composed of many countries."

⁷ See US Congressional Budget Office (<http://www.cbo.gov/showdoc.cfm?index=5802&sequence=2>). Fiscal deficits have implications for monetary and exchange rate policies. A recent study in the United States suggests that a projected rise in the budget deficit of 1 per cent of GDP raises long-term interest rates by 0.4 to 0.6 percentage points (Gale and Orszag, 2002).

US by its liberal investment regime, profitable investment opportunities, and attractiveness as a safe haven.⁸ Nevertheless, excessive reliance on capital imports to bridge the gap between national saving and domestic investment does involve dangers, and can lead to crises, as recent experience in Asia and Latin America has shown.

In contrast to the US, Japan has registered a persistently large current account surplus; its economy has been for the past decade in a circle of inadequate demand, high level of debt (public and private), and deflation, from which escape has been extremely difficult (WTO, 2003), although there are now signs of a sustained recovery. The current account surplus reflects the fact that large fiscal deficits⁹ are more than offset by high levels of private saving; the result is that national saving greatly exceeds domestic investment owing to Japan's high propensity to save, particularly at the corporate level, and stagnant business investment. The resulting weak domestic demand has meant that what little growth there is has been due mainly to exports, especially those destined for China.

A depreciation of the US dollar against the euro and the yen and, indeed, other currencies would help redress the large current account imbalances between the US, EU, Japan and other countries, notably China. A cheaper dollar would contribute to a rebalancing of the US economy away from domestic demand to exports by increasing the price competitiveness of goods and services produced in the US. Other ways in which the trade account imbalance might be redressed would be through faster growth in other countries, which would also raise demand for US exports, and increased national saving and/or reduced domestic investment. The latter is the least desirable way of

⁸ Foreign investment has thus enabled the US economy to grow faster than would have been the case had it relied solely on domestic saving. Foreign investment has also contributed to the marked improvement in labour productivity, which remains higher than in most other countries and continues to post solid gains.

⁹ The persistence of its large fiscal deficits is such that Japan's government debt is approaching the equivalent of some 160 per cent of its GDP.

redressing the imbalance as it could slow the expansion of US productive capacity and reduce economic growth, while the promotion of faster growth abroad is largely in foreign hands. The US government could, however, take steps to reduce the fiscal deficit and remove disincentives to private saving.¹⁰ The resulting stimulus to exports will also help increase aggregate demand, thereby boosting not just profits and wages in the US, but also prices at home, thus guarding against deflation. On the other hand, the corresponding appreciation of the euro and yen in relation to the dollar, which is equivalent to a tightening of monetary policy in the EU and Japan, could add to deflationary pressures there and elsewhere, thus likely requiring offsetting loosening of their monetary policies. In an effort to maintain export competitiveness, however, Asia in particular appears to be resisting depreciation of the US dollar through large-scale intervention on the foreign exchange market. The currencies of several East Asian Members of the WTO, including China, its Special Administrative Regions and Malaysia, remain pegged to the US dollar, while Japan too has intervened in the exchange market to attenuate the rise in the yen so as to minimise resulting deflationary pressure (and boost its exports). In addition to recycling current account surpluses back to the US as inward investment, including the purchase of US Treasury securities, thereby in effect helping to finance the US fiscal deficit (and keeping interest rates, and thus the cost of capital, lower than they would otherwise be)¹¹, these countries have also been willing to accumulate large increases in their foreign exchange reserves.¹²

¹⁰ Personal saving in the US fell to less than 1 per cent of personal disposable income in August 2004 (<http://www.bea.gov/bea/newsrel/pinewsrelease.htm>) (06/October/2004).

¹¹ According to figures released in August 2004, Japan was by far the largest foreign holder of US Treasury securities (holding US\$689 billion) followed by China (US\$165 billion - almost doubling during the past four years).

¹² The fact that authorities in some of these countries feel the need to prevent their currencies from rising and to maintain their current account surpluses and thereby accumulate such a high level of foreign reserves suggests that they may not yet be sufficiently confident about the ability of their financial systems to withstand sudden reversals in foreign capital flows. These reserves provide a cushion against financial instability.

For example, East Asia's central banks have amassed some US\$2 trillion in low-yielding foreign exchange reserves, with Japan and China, respectively, accounting for over US\$800 and nearly US\$500 billion. Such "exchange rate protection" by these Asian and other countries has meant that hitherto the euro-zone has borne the brunt of the US dollar's depreciation and the associated adjustment, with the euro having appreciated by over 40 per cent against the dollar since its trough in July 2001.¹³ While there may remain some scope for a further easing of monetary policy in the euro-zone to counteract the effects of the rise in the euro¹⁴, further relaxation of fiscal policy in the main euro-zone countries has been constrained by fiscal rules set by the Stability and Growth Pact.¹⁵ Necessary adjustment in the zone

may also be hampered by various structural rigidities. Insofar as the sharp rise in the value of the euro leads to a fall in the prices of imports, it may have repercussions on the EU's trade policy and possibly its stance in the current trade negotiations; quite apart from the fact that lower import prices tend to increase real protection as far as specific duties are concerned, lower import prices could also possibly trigger increased assistance in the form of price support measures for agricultural products and the use of contingency measures to protect products that are especially sensitive to imports. On the other hand, to the extent that the fall in the value of the US dollar increases import prices in the US, it might be expected to have the opposite repercussions on US trade policy.

However, there is also perhaps a danger that such practices could contribute to asset price bubbles in these countries.

¹³ The "current strength" of the euro (at around US\$1.20) is perhaps rather exaggerated. In 1995, the basket of national currencies that preceded it was trading at US\$1.37. The euro's current trade-weighted value is roughly the same as it was at its launch five years ago.

¹⁴ According to the European Central Bank (2004), inflation in the euro area dropped in December 2003 to 2 per cent and in the course of 2004 is expected to fall below 2 per cent and remain in line with price stability thereafter; "price stability" is defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below, but close to, 2 per cent. However, the recent surge in oil prices, which breached US\$50 per barrel in September 2004, thereby more than doubling since the start of 2002, could contribute to inflationary pressure.

¹⁵ The Pact requires that a Member State's fiscal deficit not exceed 3 per cent of GDP and that their government debt-to-GDP ratios amount to no more than 60 per cent.

III. TARIFFS - UNFINISHED BUSINESS

As a result of successive rounds of multilateral trade negotiations under the auspices of the General Agreement on Tariffs and Trade (GATT) and its successor, the World Trade Organization (WTO), tariffs on imported industrial goods have declined dramatically. Indeed, once commitments made under the Uruguay Round (UR), concluded in 1995, are fully implemented, the overall import weighted MFN tariff average on such products in industrial countries will have fallen to less than 4 per cent. This seemingly low current level of tariff protection may give the impression that tariffs are no longer a major barrier to international trade, especially as far as industrial products in industrial countries are concerned, and are not, therefore, a major issue in the DDA.¹⁶ However, notwithstanding the achievements of the UR and previous rounds of negotiations, especially the increase in the proportion of tariff lines that are subject to bindings together with negotiated cuts in bound rates¹⁷, tariffs remain an important obstacle to international trade and consequently a distortion to competition and thus economic development. Even in industrialized countries, where average MFN tariff rates are seemingly low,¹⁸ the existence of tariff "peaks" in certain sectors, notably textiles and clothing as well as agriculture, suggests that the domestic dead-weight and net welfare losses caused by tariff protection as well as the costs to consumers in those countries could be high.¹⁹ Such

¹⁶ Tariffs are not only a barrier to imports. Insofar as they are levied on inputs and reflected in the prices of final products in the importing country, they also constitute export taxes to the extent that those final products are tradeable.

¹⁷ Initially, multilateral trade negotiations focused, by and large, on the liberalization of trade in goods. One of the main principles underlying the GATT and its associate agreements is that trade barriers, insofar as they are used at all, should involve tariffs rather than non-tariff barriers (NTBs); negotiations could then concentrate on *binding* tariff rates and securing multilateral reductions therein.

¹⁸ Import weighted tariff averages tend to underestimate the overall level of protection, by assigning a small weight to the highly protected products, with no weight at all being given to prohibitive tariffs. As a consequence, simple tariff averages are felt to be a more accurate indicator of the level of tariff protection.

¹⁹ Imperfect competition (or rising marginal costs under perfect competition) may mean that the domestic price does not increase

losses and costs to consumers are also likely to be high in developing countries, where overall tariff protection tends to be greater than in industrialized countries, thereby constituting not only a serious impediment to trade between industrialized and developing countries (North-South trade), but also to trade among developing countries (South-South trade). Additional unsatisfactory features of tariffs include the lack of tariff bindings for non-agricultural products together with considerable gaps between applied and bound rates, largely in developing countries, the use of opaque specific (as opposed to *ad valorem*) rates and tariff quotas, and tariff escalation.

Particular attention is focused on the so-called "Quad" group of major traders (namely the US, the EU, 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 perhaps true, albeit to a lesser extent, of tariffs applied by major developing countries, notably China, India, Brazil and South Africa.²⁰ The use of tariffs by the Quad and these four developing countries to impede access to their markets can lead to welfare losses on a global scale as well as domestically, because they tend to hamper developing countries' efforts to achieve export-led growth (in the absence of significant terms of trade effects).²¹

by the full amount of the tariff, in which case there may be a gain in the terms of trade for the importing country.

²⁰ Since acceding to the WTO in 2001, China has overtaken Canada to become the fourth largest trader.

²¹ There is a theoretical possibility that export growth might reduce economic welfare if such growth leads to a deterioration in the exporting country's terms of trade that is sufficiently strong to more than offset the primary gain from growth, a phenomenon known as "immiserizing" growth (Bhagwati, 1958), which is rarely observed in practice.

Some simple summary indicators capturing the level and structure of tariffs in the Quad are reported in Table 1 for 1995, prior to the implementation of the UR tariff cuts (or 1996, if data for 1995 were not available), and for the latest available year.²² 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.

A. BOUND MFN TARIFFS

Bindings are a key element of trade liberalization as they reduce the uncertainty concerning Members' trade regimes. This is especially true in the case of tariffs. 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 outcome was the "tariffication" of non-tariff barriers (NTBs) for agricultural products that had previously been subject to quotas. The Quad have bound close to 100 per cent of all their tariff lines. Full implementation of UR commitments resulted in relatively low simple average bound rates for industrial products, although wide differences exist across products. While the simple average of bound MFN rates under the UR will be in the range of 4.6 per cent in the US to 8.4 per cent in Japan, the average for agricultural products is two to five times higher than that for industrial products. As regards industrial products, bound rates are among the highest for textiles and clothing, with the post-UR average ranging from 6.7 per cent in Japan to 12.2 per cent in Canada. Whereas China, Brazil and South Africa have also bound most, if not all, of their tariff lines, India has bound less than three-quarters. Final average bound rates (once the UR commitments are fully implemented) range from nearly 10 per cent in China to over 50 per cent in India.

²² The methodology used to construct these tariff indicators is outlined in Daly and Kuwahara (1998).

B. APPLIED MFN TARIFFS

Applied MFN tariffs are generally at, or close to, bound rates in the Quad. The average for all products in 2002 ranged from 5.1 per cent in the US to 6.9 per cent in Japan; the average for the Quad was 6.3 per cent. Nevertheless, these low average applied tariff levels disguise the fact that agricultural products and textiles and clothing, respectively, are subject to much higher average rates of 16.9 per cent and 8.8 per cent. These applied (as well as bound) MFN averages would tend to underestimate the overall level of tariff protection. In particular, they do not include certain specific duties for which *ad valorem* equivalents (AVEs) are not available; as pointed out later, such duties tend to conceal tariff "peaks".

Tariffs tend to be much higher in developing countries; for example, the average applied MFN tariff rate for China is 12.3 per cent, albeit roughly half the level in 1996 (Table 2). By the time its commitments are fully implemented, China's average bound rate will be 9.9 per cent, which means that applied rates will need to be brought down so as not to exceed this level. The average applied MFN tariff rate in both Brazil and South Africa is currently 11.4 per cent. By contrast, the average in India (2001/02) was 32.3 per cent, one of the highest among developing countries.²³ Whereas in entering 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 a little lower tariffs than those applied to non-agricultural products. China, Brazil and South Africa, unlike India, also levy relatively high tariffs on textiles, clothing and footwear (TCF) products.

One possibly important reason for such high applied MFN tariff rates in India and some other developing country Members is the fact that tariffs

²³ The simple average MFN rates do not include any exemptions or concessions that are also offered on an MFN basis; India, for example, offers a wide range of MFN tariff concessions that may significantly lower the effective tariff rate.

often serve a dual purpose; they protect domestic industries from foreign competition and are 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 their reliance on border taxes for revenues.²⁴ 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. Financial support (from institutions such as the IMF or World Bank) might perhaps help developing countries to manage any loss of tax revenues arising from cuts in applied tariffs. 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, particularly in developing and least-developed countries, can be overcome.

Whereas in the Quad (and other developed countries), applied MFN tariffs are generally at, or close to, bound rates, they are often much 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 in the GATT 1994, and unilateral reductions in applied tariffs since the WTO came into existence. Nevertheless, average applied MFN tariff rates have moved steadily downward.

²⁴ 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. In Brazil and India, for example, bound tariffs are considerably higher than applied tariffs, which means that bound rates could be reduced substantially without affecting tariff revenues.

So called "nuisance" tariffs (whose applied rates exceed zero, but are no more than 2 per cent)²⁵ involve as many as 12.3 per cent of all tariff lines in the US, 12.9 per cent in the EU, and 6.1 per cent in Japan. In China, however, they cover only 1.9 per cent of all tariff lines; such tariffs are negligible in China, Brazil and South Africa.

C. TARIFF DISPERSION AND "PEAKS"

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 wider the dispersion in applied MFN rates, the greater the likelihood that consumers' and producers' decisions are distorted by the tariff structure. Among the Quad, applied MFN tariff rates three or more times the national average (domestic "peaks") continue to protect certain sectors from imports. These "peaks" cover from 1.6 per cent of tariff lines in Canada to between 5.2 per cent and 6 per cent in the US, the EU and Japan. By and large, tariff "peaks" are concentrated in agriculture and food products, partly due to "tariffication", as well as textiles and clothing, which tend to be labour intensive (Chart 1). Many of these products are of major export interest to developing countries; indeed, LDCs' exports are disproportionately affected by tariff "peaks" in the Quad.²⁶ Not surprisingly, the problem of tariff "peaks" features prominently in the DDA. In most developing (and least developed) countries, domestic tariff "peaks" tend to be less pervasive, largely due to these countries'

²⁵ There is no agreed WTO definition of "nuisance" tariffs.

²⁶ The value of Quad imports subject to international tariff "peaks" (that is, rates exceeding 15 per cent) was nearly US\$93 billion in 1999, roughly 60 per cent of which originated in developing countries. This represents about 5 per cent of developing countries' total exports to the Quad. LDCs exports are affected disproportionately by "peaks" in the Quad; products subject to "peaks" accounted for 15 per cent to 30 per cent of LDC's total exports to the US, EU 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 revenue notwithstanding their tariff preferences (Ng and Olarreaga, 2002). This situation may well have changed somewhat owing to unilateral preferences accorded by the US and EC, respectively, under AGOA and EBA.

higher overall levels of tariff protection. In China, for example, such "peaks" cover only 1.8 per cent of tariff lines. In South Africa, the proportion is 3.9 per cent, while they are negligible in India and Brazil. While "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).

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.²⁷ 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.

It is estimated that if all Quad Members were to accord LDCs duty-free access for products subject to tariff "peaks", LDCs' exports to these major markets would rise by between 30-60 per cent, or by as much as US\$2.5 billion; the latter is equivalent to an 11 per cent increase in LDCs' total exports (Hoekman, et al., 2002). Part of this increase in LDCs' exports would be at the expense of other developing countries.

D. NON-AD VALOREM TARIFF RATES

Tariff "peaks" are often concealed by non-*ad valorem* rates,²⁸ which are an important feature of the Quad Members' tariff schedules.²⁹ This is particularly true for agricultural products, especially in the US and the EU, where they

²⁷ Strictly speaking, a uniform, non-zero nominal tariff minimises 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.

²⁸ The simple average of *ad valorem* equivalents (AVEs) for specific duties is two to 20 times the simple average of *ad valorem* duties in the Quad.

²⁹ Norway and particularly Switzerland also rely heavily on specific duties; indeed, all Switzerland's duties are specific.

account for 12.1 per cent and 9.7 per cent of tariff lines, respectively, and will remain so even once the UR is fully implemented.³⁰ This is partly the consequence of the "tariffication" of agricultural NTBs, which were largely converted into specific or mixed³¹ duties, rather than into pure *ad valorem* tariffs, and often combined with quotas. Non-*ad valorem* rates are also an important feature of the tariffs of India and especially South Africa, although in the latter they are expected to disappear once the UR is fully implemented. By contrast, the tariffs of China and Brazil appear to be relatively transparent in this regard, with only 0.7 per cent of all tariff lines being subject to non-*ad valorem* rates in China and none in Brazil.

Specific duties not only conceal tariff "peaks", they also tend to distort domestic production patterns more than *ad valorem* tariffs do, providing disparate levels of assistance for similar goods by taxing imports of cheaper products more heavily; this encourages domestic firms to produce cheaper goods which 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. 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. Furthermore, as *ad valorem* equivalents (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

³⁰ To the extent that specific rates do conceal tariff "peaks" and estimates of their AVEs are not available, as in the EU, Japan, Canada, China, India and South Africa, the indicators of both the levels of tariff protection and the dispersion in rates are underestimated.

³¹ 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 per cent or US\$5 per kilo, whichever is more (or less).

rate changes on countries' trade balances. The use of specific duties can lead to an increase in real tariff protection insofar as the prices of traded goods decline (and to a fall in real protection to the extent that the prices of traded goods increase). Interestingly, Members have agreed in the framework of negotiations concerning non-agricultural market access that duties on non-agricultural products shall be "bound in *ad valorem* terms".

E. TARIFF QUOTAS

As a consequence of the UR, and especially the "tariffication" of agricultural NTBs, tariff rate quotas as a proportion of all tariffs increased considerably in the US, Japan and Canada; they were already significant in the EU prior to the UR. As a consequence, tariff quotas will account for between 1.7 per cent of tariff lines in Japan to 3.2 per cent in the EU, once the UR commitments are fully implemented. By contrast, the tariffs of China and Brazil contains few, if any, tariff quotas. "Out-of-quota" rates (and even "in-quota" rates) in the Quad, may entail potentially prohibitive tariff "peaks". While tariff rate quotas were designed to take into account "current access" prior to the "tariffication" process and are necessary to administer minimum access requirements under the UR, they have left considerable scope for discretion in the allocation of "in-quota" volumes, thereby retaining a number of the drawbacks associated with previous quantitative restrictions, which reduce the benefits of "tariffication".

F. TARIFF ESCALATION

A non-uniform tariff is often used to provide an "escalating" degree of tariff protection so as to encourage downstream processing. This may be accomplished by levying relatively low duties on raw materials with progressively higher tariffs applied to more processed goods involving greater value-added. The outcome is that the level of effective protection increases as goods undergo further processing.³² Indeed, what may be mild

³² The effective rate of protection (ERP) measures the protection provided by the entire structure of tariffs, taking into account

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 that are affected by "peaks", most notably textiles and clothing and food, beverages and tobacco, and non-metallic mineral 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 clothing (Table 4). Not only is tariff escalation a potential impediment to the efficient allocation of resources in the importing country, it also constitutes a major obstacle to local processing of domestically produced primary products as well as of semi-finished goods in the exporting country; consequently, it impedes the industrialisation of developing countries and LDCs seeking to export products with higher value-added, if not mitigated by the GSP or other preferences.³³

G. GSP AND SIMILAR PREFERENCES FOR DEVELOPING AND LEAST-DEVELOPED COUNTRIES

Applied tariff rates may be lower than MFN rates owing to non-reciprocal preferences granted to developing countries under the Generalized System of Preferences (GSP) and supplementary preferences for LDCs. Such preferences are

those levied on inputs as well as those on outputs. 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: $ERP = (t - \sum a_i t_i)/(1 - \sum a_i)$. Thus, if $t = 10$ per cent, $t_i = 5$ per cent for all inputs and $\sum a_i = 0.6$, the ERP is nearly 20 per cent. See Corden (1971) for a full discussion of the concept of effective protection.

³³ 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.

prominent forms of special and differential (S&D) treatment aimed at increasing the export opportunities of developing and least developed countries.

Under the GSP, developed countries discriminate in favour of qualifying developing ones by granting them non-reciprocal tariff reductions below MFN rates for certain products. For example, average GSP rates are 3.7 per cent in the US, 4.5 per cent in the EU, 5.4 per cent in Canada and 5.7 per cent in Japan (Table 5), only 1.2 to 2 percentage points lower than their corresponding average applied MFN rates. Recent Trade Policy Reviews of other major providers of GSP preferences show that the differentials between MFN and GSP rates are considerably smaller for "sensitive sectors", such as agriculture and textiles and clothing, both of which are frequently excluded from GSP and other unilateral preferences (see also section (5) on textiles and clothing below).

This exception to MFN treatment under the GATT was authorised through a ten-year waiver in 1971 and given permanent legal status in 1979 through the "Enabling Clause" of the Tokyo Round agreements. Such preferences are perceived to enhance the ability of developing countries' exporters to compete in developed countries' markets. More than 30 years after the GATT first authorised the GSP as a "temporary" measure, it appears to remain highly popular among developing countries as an important instrument for ensuring their "special and differential treatment" within the multilateral trading system through improved access to developed countries' markets without reciprocal liberalization. Recently, "Quad" and other industrialized countries have passed legislation providing improved, if not duty-free, access for LDCs for almost all products. More specifically, the US enacted the African Growth Opportunities Act (AGOA) in May 2000 and the EU enacted the Everything But Arms (EBA) scheme in March 2001.³⁴ New Zealand (as of 1

³⁴ Under AGOA, 38 African countries currently qualify for preferential treatment; in order to qualify for AGOA, the country must already be eligible for GSP treatment. AGOA extends GSP for eligible sub-Saharan African countries until 1 September 2008 [Online]. Available at: <http://www.agoa.gov/>

July 2001), Norway (as of 2002) and Australia (as of 1 July 2003), have also granted LDCs duty-free access to their markets for all products.³⁵

However, as Table 5 and numerous empirical studies have shown, GSP schemes have at best yielded only a "modest" increase in imports from beneficiary countries, with some of those gains due merely to trade diversion rather than trade creation.³⁶ Even in the cases of more recent supplementary initiatives, such as the AGOA and the EBA, some analyses suggest that market access will be only slightly improved for many of the countries concerned.³⁷

There are several possible reasons for this outcome. First and foremost, such preferences are seldom generalized; they frequently exclude precisely those products (e.g. textiles and clothing) in which developing countries have the greatest comparative advantage, and moreover, where their exports tend to face tariff "peaks" in major markets. This is evident from preferential tariff rates for LDCs provided by the Quad and other countries in textiles and clothing and agriculture (Table 5). Furthermore, they can be unilaterally revoked or modified at any time by the Member according such concessions, thereby leading to uncertainty.

[6 August 2003]. The EBA grants duty free and quota free access for all products from LDCs except arms and munitions and three agricultural products (bananas, rice and sugar); tariffs and quotas on the three agricultural products will be liberalized gradually (tariffs will be removed in 2006 for bananas and 2009 for rice and sugar).

³⁵ Announcement made by Hon. Mark Vaile, Minister for Trade on 27 May 2003, [Online]. Available at: http://www.trademinister.gov.au/speeches/2003/030527_development.html, [8 July 2003]. This follows publication by the Australian Productivity Commission (2002) of a report concluding that the removal of all barriers to trade with LDCs would have a small impact on Australia.

³⁶ See, for example, those studies cited in Ozden and Reinhardt (2003).

³⁷ See, for example, Mattoo et al. (2002) and Brenton (2003).

In particular, a developing country may be "graduated" out of a preference for a product just as it begins to achieve significant success in an export market, thereby discouraging efforts to expand exports.³⁸ Moreover, conditions may be attached to these preferences in order to obtain concessions from developing countries; these concessions may be in non-trade areas.³⁹ Even when eligibility is not a problem, full use of the GSP system and other recent initiatives is hampered by the complexity of the system and technical incapacity of developing countries' exporters. In particular, certain "rules of origin" must be satisfied by exporting countries; these rules usually involve a minimum amount of value added, which can be a deterrent to small countries with limited technological capacity.⁴⁰ Also, rules of origin often require beneficiaries to use inputs produced in the country granting the preference, with potential adverse effects on their exporters' competitiveness.⁴¹ In addition, it would appear that Members according GSP preferences disproportionately substitute non-tariff (including technical and SPS) barriers for tariffs where sensitive GSP-eligible products are concerned. Last, but not least, developing countries' exports are often impeded by supply-side constraints, including lack of trade finance (possibly owing to market failure) and poor infrastructure.

³⁸ For example, since the GSP scheme of the United States was introduced in 1976, 36 of the 154 eligible countries have graduated.

³⁹ In some instances, the EU explicitly links its granting of preferences in addition to those provided by the GSP to beneficiary countries' adherence to labour and environmental standards (see for example, WTO, 2000a). Likewise, US trade laws allow the President to use GSP to promote labour standards and intellectual property rights; this has been extended to the AGOA Act.

⁴⁰ In the EU, for example, the estimated cost of collecting, managing and storing the information needed for origin verification and administration is about 3 per cent of product prices. Moreover, the EU's preferential rules of origin tend to be more restrictive for products (such as beverages, tobacco, textiles, clothing and footwear) with high preferential margins. See WTO (2004, pp.50-51).

⁴¹ Such sourcing may not be the cheapest available, thus raising the production costs of exporters and affording protection to preference-granting producers of fabric and yarn.

Perhaps a more fundamental aspect of the GSP and similar preferences is the fact that there is some evidence that such nonreciprocal preferences may have the perverse effect of delaying trade liberalization by recipients; that is, developing countries removed from GSP tend to adopt more liberal trade policies than those remaining eligible (Ozden and Reinhardt, 2003). The reason is that with trade barriers reflecting the Government's balancing of political support from import-competing and export sectors, the non-reciprocity feature of the GSP shifts the balance in favour of the import-competing sectors in developing countries; it does this by reducing one of the main incentives that developing countries' export industries have to oppose protectionist trade policies at home instead of trying to secure the export sectors' support for more liberal trade policies. Furthermore, given that GSP preferences tends to be devalued by negotiated multilateral reductions in MFN rates, they can provide the wrong signal to exporters in developing countries regarding their long-term comparative advantage and might even deter developing countries from agreeing to multilateral reductions in MFN rates. The new "GSP-plus" non-reciprocal preferences such as the EBA and AGOA also create a systemic risk by excluding some countries that are already recipients of preferences under a different GSP arrangement; the resulting complex set of preferential trading arrangements arbitrarily excludes certain countries and reduces predictability and stability in the multilateral trading system.⁴² This raises the question of what measures, if any, might be taken to help developing

⁴² Page and Hewitt (2002) point out that in addition to countries such as Guyana and Kenya, other major "losers" from such trading arrangements are the large, poor, developing countries such as India, Pakistan and Indonesia. However, Pakistan was granted special EU and other preferences and debt relief and has now been added to the list of countries who receive additional "super GSP" preferences as part of the war on drugs; Indonesia, as a member of OPEC also receives its own preferences. With regard to additional preferences granted under the EU's GSP scheme as part of the war on drugs, the WTO Panel in *EC-Tariff Preferences* recently found that the EC measure is inconsistent with Article 1.1 of GATT 1994 because it failed to demonstrate that the measure is justified under the Enabling Clause or Article XX(6) of GATT 1994. The ruling was partly overturned by the Appellate Body in April 2004.

countries adjust to the erosion of the tariff preferences they currently enjoy.⁴³

Developing countries might be better served by their becoming more fully engaged as WTO Members, with full obligations and rights under the WTO Agreements, than by special GSP-style tariff preferences. Indeed, there is evidence to suggest that such schemes also tend to prolong protectionist policies among recipient countries. Certain more temporary and targeted forms of special and differential (S&D) treatment might be appropriate, where these are designed to address constraints on developing countries' institutional capacity to implement existing as well as new WTO agreements and their different developmental priorities, or where additional time and possible assistance might be required in order to allow the appropriate sequencing of various macroeconomic and structural reforms (including trade liberalization), and for their economies to adjust to these and other reforms.⁴⁴

H. BILATERAL AND REGIONAL PREFERENCES

The proliferation of bilateral and regional agreements since the WTO was established in 1995 has eroded the scope of application of MFN tariffs; such discriminatory agreements, which are mainly among developed countries and thereby effectively exclude many developing countries and especially LDCs, constitute a systemic threat to the MFN principle, one of the cornerstones of the WTO.⁴⁵ The outcome is that MFN tariffs tend to be the exception rather than the rule, especially as far as the EU and Canada are concerned. This means that the preferences accorded by these Members to developing and least-developed Members are not as generous as they appear.

⁴³ According to the IMF, in most LDCs the welfare losses associated with preference erosion are likely to be relatively modest – less than 2 per cent of LDCs' aggregate exports; hence, the countries most affected by the adverse effects of such erosion could be comfortably compensated through increased assistance. Such assistance would be especially important for those LDCs that are currently most heavily dependent on such preferences LDCs (see "Communication from the IMF: Financing of Losses from Preference Erosion", WTO document WT/TF/COH/14, 14 February 2003).

⁴⁴ Members such as Singapore, for example, despite having an income per capita 20 times that of LDCs, are eligible for the same S&D treatment under the WTO Agreements as other low-income developing Members.

⁴⁵ As of August 2004, 298 RTAs have been notified to the GATT/WTO of which 174 were notified since January 1995. 206 notified agreements are currently in force and 60 or more are estimated to be operational although not yet notified. By the end of 2007, if RTAs reportedly planned or already under negotiation are concluded, the total number of RTAs in force might well surpass 300.

IV. SUPPORT FOR AGRICULTURE AND NON-TRADE CONCERNS

Agriculture plays a relatively important role in developing countries' economies, accounting for just over one quarter of their GDP and about half of their employment;⁴⁶ by contrast, agriculture in OECD countries accounts for only around 2 per cent of GDP and 7.3 per cent (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. The conversion of quantitative restrictions into tariffs ("tariffication") and the curtailment of subsidies were among the major achievements of the UR as far as agriculture is concerned; tariffication of agricultural NTBs, in particular, paved the way for future reductions in agricultural tariffs.⁴⁷ Nevertheless, 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 as much as those on non-agricultural products, thus denying developing and other countries the opportunity to benefit from trade in agricultural products. Total support to agriculture by OECD countries is close to US\$1 billion per day, more than six times all development assistance.⁴⁸ Much of this support is linked to production; this encourages higher output

⁴⁶ This suggests that, on average, labour productivity in agriculture in developing countries is roughly one third of the overall level in their economies.

⁴⁷ The Uruguay Round Agreement of 1994 resulted in agricultural policies being subjected to multilateral rules and disciplines. The Uruguay Round Agreement on Agriculture (URAA), replaced non-tariff import barriers by bound tariffs, obliged Members to open closed markets, curbed export subsidies; categorised domestic programmes on the basis of their potential to distort trade, and disciplined the most trade-distorting forms of support. Agriculture is also affected by other agreements, notably SPS and TBT, whose aim was to forestall the use of such measures for purposes of protection.

⁴⁸ US subsidies to domestic cotton growers totalled US\$3.9 billion in 2002, triple US aid to Africa. By depressing world cotton prices, such support cuts poor farmers' incomes in West Africa, Central and South Asia and other poor countries, where cotton plays an important role in economic development. Such subsidies may vitiate the effects of reforms undertaken by these countries.

resulting in large surpluses, especially in several OECD countries where such support is most generous. Support linked to production in combination with export subsidies drives down world prices of agricultural products and leads to the displacement of developing countries' products, not just from subsidising countries' markets but also from their own and third markets, to the detriment of farmers in developing and least-developed countries. Consequently, 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.⁴⁹

Agricultural support programmes are partly justified by those Members using them on the grounds that they are necessary to address non-trade concerns, notably 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. The debate, therefore, has been more about the magnitudes of total support to agriculture together with the appropriateness and effectiveness of various measures aimed at achieving these multiple objectives.

Clearly, domestic agricultural policies and international trade are closely intertwined, with protective border measures often being necessary for the maintenance of domestic support

⁴⁹ Estimates of the benefits top US\$350 billion for the world (World Bank, 2004, p. 105). According to the IMF, the static global welfare gains alone from removing agricultural support in the form of tariffs and subsidies would be \$128 billion annually; the dynamic gains (from higher investment and faster productivity growth) may well be several times larger (IMF, 2002, p. 85).

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. Furthermore, to the extent that domestic support programmes are sufficiently high as to generate a surplus stockpile, and thereby transform a net importer into a net exporter of a commodity, export subsidies may be required to help dispose of the surplus.

Total support to agriculture by OECD (2003) countries, as measured by the total support estimate (TSE), remains high, at US\$318 billion in 2002, roughly the same amount as sub-Saharan Africa's annual GDP. The EU, Japan and the US collectively account for over 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). Total support was the equivalent of 1.2 per cent of GDP in the OECD area, compared with an annual average of 2.3 per cent in the peak 1986-88 period, when the Uruguay Round negotiations were under way. Agriculture's contribution to GDP in the OECD area is currently about 2 per cent. In Japan, the Republic of Korea, Norway, and Switzerland, total support to agriculture is close to, or even exceeds, the sector's contribution to GDP.

Nearly three quarters of total support is provided to farmers. Such support, as measured by the producer support estimate (PSE), represents 31 per cent of total farm receipts, down from 38 per cent in 1986-88. The corresponding PSEs for Japan, the EU, Canada and the United States were 59 per cent, 36 per cent, 20 per cent and 18 per cent. Thus, for every 100 yen a Japanese farmer earned in 2002, 59 came from support measures. Support levels in 2002 were the lowest in New Zealand (1 per cent) and Australia (5 per cent).⁵⁰ Rice, sugar and milk are the most supported commodities, with transfers to producers

⁵⁰ While government support in Australia and New Zealand is low, these countries have relatively strict SPS regulations, which they believe are necessary to ensure that their reputation as reliable exporters of high quality agricultural products is not jeopardised by pests and diseases, but which nonetheless tend to impede imports of such products.

close to, or exceeding, half of gross receipts for these products. The prices received by OECD farmers in 2002, were on average 31 per cent above world prices (compared with 57 per cent 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 were on average 37 per cent higher than world prices. Whereas prices paid by consumers were, on average, the same as those at the border in Australia, they were 10 per cent higher in the United States, 42 per cent higher in the EU, and more than double in Japan, Korea, Norway and Switzerland.

Output-based support (market price support (MPS) and output payments (OP)) and input subsidies remain the dominant forms of producer support in most OECD countries, together accounting for more than three quarters of support to producers, compared to 91 per cent in 1986-88. These 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.⁵¹ Such measures are also relatively ineffective in transferring income to farmers or in achieving environmental objectives.

Government intervention in agriculture is also extensive in many developing countries; whereas tariffs on agricultural products can be just as high in developing than in OECD countries, subsidies tend to be used rather less owing to their budgetary cost.⁵²

⁵¹ Under the WTO Agriculture Agreement, domestic support measures that are considered to distort production and trade (with some exceptions) fall into the so-called "amber box" which is defined in Article 6 of the Agreement as all domestic support other than that in the "blue" and "green" boxes. The blue box is the "amber box with conditions" designed to limit production to reduce distortion by, for example, placing limits on production. Green box subsidies are those that do not distort production or involve minimal distortion. Whereas in the US 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 EU and Canada.

⁵² Some developing countries, including India, are heavy users of subsidies, notably those for inputs such as fertilizer, power and water.

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 (2002a). The last three of these objectives involve matters where markets alone may fail to achieve a socially desirable outcome owing to the existence of "externalities" or "public goods".⁵³ 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 measures.

In particular, policy measures linked to production and consumption are relatively inefficient instruments for delivering income support to rural households. According to OECD (2002b) estimates of income transfer efficiency, no policy measure linked to agricultural activity succeeds in delivering more than half of the monetary transfers from consumers and taxpayers as additional income to farm households. The proportion is one quarter or less in the cases of market price support and deficiency payments and less than one fifth for input subsidies. Notwithstanding its low income transfer efficiency, roughly two thirds of agricultural support in OECD countries involves measures that keep product prices above levels that would otherwise prevail. An intrinsic feature of measures based on agricultural activity is that they cannot be targeted at relatively poor households. In the case of open ended price support, the size of the

⁵³ 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.

transfer is directly proportional to the level of production. Consequently, the bulk of the support that does reach farmers goes not to the smaller farmers but to the larger ones, many of whom already have higher incomes. It is not surprising, therefore, that under the CAP, 70 per cent of support (that is, market price support plus payments to producers) is allocated to the largest 25 per cent of the EU's farms;⁵⁴ in the US, Canada and Japan, the corresponding amounts of support allocated to the largest 25 per cent of farms are 89 per cent, 75 per cent and 68 per cent, respectively. In contrast to the above measures, 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. It follows that 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 (OECD, 2002a, p. 34); 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.

Governments also justify assistance for agriculture on the grounds that market-oriented agriculture would fail to take due account of externalities, particularly protection of the environment, a non-trade concern explicitly mentioned in the Preamble of the WTO Agreement on Agriculture. In their view, a certain level of domestic support and border protection is necessary to maintain agricultural production, especially in areas with low agricultural potential, and thus ensure provision of environmental externalities. This presumably reflects their belief that there is a very close relationship between agricultural production and the provision of positive externalities,

⁵⁴ Farms are classified according to the size of their gross sales (for more details, see OECD, 2002c). Insofar as land is rented by farmers, support would tend to be partly, if not fully, capitalised into land values, thereby benefiting landowners rather than farmers.

including those associated with public goods. In fact, there is very little evidence on the extent of the externalities generated by agriculture, which makes it very difficult to measure the full benefits of government support measures and thus to ensure that these benefits are not outweighed by their costs. Hence, it is also difficult to compare the effectiveness of different support measures in achieving their objectives.

The externalities generated by agriculture are not exclusively positive, however; there may also be some significant negative externalities, directly linked to production. Thus, protection and domestic support policies may encourage environmentally harmful agricultural practices, such as intensive farming, including high use of fertilizers and pesticides. The outcome is resource degradation and environmental stress, such as adverse effects on the ground water, the soil and biodiversity. Furthermore, by depressing incomes and exacerbating poverty in developing countries, such policies make it even more difficult for farmers in these countries to move towards more environmentally sustainable practices.

Governments may also be concerned by the possible failure of market forces to ensure food security, which may be threatened by sharp increases in food prices that make food unaffordable owing to supply shocks caused by adverse climatic conditions, wars or embargoes. As highlighted above, however, in most OECD countries domestic prices are already considerable higher than world prices (roughly one third higher in the EU, and more than double in Iceland, Japan, Korea, Norway and Switzerland). Heavy reliance on domestic production exposes countries to the risk of domestic crop failure as well as to interruptions in the supply of key inputs (such as fuel) that are essential for food production. The effects of supply shocks can be mitigated more effectively by a combination of domestic production, maintenance of domestic production capacity, stockholding and access to a wide range of foreign suppliers.

More careful design and better targeting of agricultural policies would enable governments not only to pursue their multiple objectives in a more cost-effective manner, but 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.⁵⁵ 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.⁵⁶ These benefits are particularly large for food-exporting regions, including Sub-Saharan Africa, where many of the world's poorest live.

Despite the large overall gains from liberalization of agriculture, some developing countries may gain very little, or even be harmed, by liberalization, unilateral or multilateral, 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 at the expense of the governments of 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.⁵⁷ Countries that are significant food importers may also be harmed by such liberalization. As regards potential losers, therefore, it may be necessary for trade liberalization to be accompanied by complementary policies and, in the case of needy developing countries, assistance from international agencies designed to redress the unfavourable redistributive effects arising from liberalization.

⁵⁵ This US\$128 billion relates only to static gains; dynamic gains (from higher investment and faster productivity growth) may well be several times larger (IMF, 2002, p. 85).

⁵⁶ According to a recent study by Hoekman et al. (2002), a 50 per cent cut in tariffs would have a much greater positive effect on the exports and welfare of developing countries than a 50 per cent cut in domestic support.

⁵⁷ 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 Gilberts and Varangis, 2003).

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 raises the theoretical possibility of "immiserizing growth".⁵⁸ 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. Hence, 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), both domestically and abroad, 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 many cases pale in comparison with such supply constraints in developing and especially least-developed countries.

⁵⁸ The above example concerning cocoa highlights the limits to the benefits accruing to producer countries from the liberalization of trade in commodities whose demand is not very elastic. As discussed earlier, a possible deterioration in the terms of trade can reduce the beneficial impact of growth on economic welfare in an open economy. If the deterioration in the terms of trade more than outweighs the primary gain from growth, the outcome is "immiserizing" growth.

V. BARRIERS TO MARKET ACCESS FOR TEXTILES AND CLOTHING

The industrial sector most protected by tariff and non-tariff barriers in developed and developing countries alike has been textiles and clothing, which was long excluded from GATT rules. The benefits of further liberalizing trade in this labour intensive and footloose sector could thus be considerable not just to importing countries,⁵⁹ but also to exporting countries, that are predominantly developing or least-developed.

As regards non-tariff barriers such as quantitative restrictions, under the WTO Agreement on Textiles and Clothing (ATC), three successive stages are defined for integration of textiles and clothing products into the rules of GATT 1994. The first two stages (1995-1997 and 1998-2001) have been completed, and the third and final stage (2002-2004) is currently being implemented. Members were required to integrate a minimum percentage of their total volume of imports of textiles and clothing in 1990 covered by the ATC (16 per cent, 17 per cent and 18 per cent, respectively at the beginning of each of the three stages). They were free to choose the products they wished to integrate but had to include products from each of the four main groups (tops and yarns, fabrics, made-up textile products and clothing). In addition, market access had to be improved through increases in the quota growth rates by at least 16 per cent, 25 per cent and 27 per cent, respectively in the three stages.

These minimum requirements have been met by all Members that undertook the ATC integration programmes; Canada, the EU, Norway and the US, which apply quotas, have also met the growth-rate increase requirements. However, with the exception of Norway, which phased out all its restrictions between 1996 and 2001, the overall

elimination of restrictions has been modest, even if their elimination has proceeded on schedule. With the implementation of stage 3 (1 January 2002), at least 51 per cent of the total volume of the respective Members' 1990 imports of products falling under the ATC have been integrated. Quotas on the remaining 49 per cent of items will be removed by 31 December 2004, a fact that may pose problems for both importers and exporters (see below).

Furthermore, the WTO's Textiles Monitoring Body, in its report on implementation in the first and second stages, observed that products selected for integration had been concentrated in the lower value-added range. Integration in the third stage would seem not to alter this observation significantly, probably implying that the value of products integrated during the three stages would be lower than in volume terms.⁶⁰ The concentration on low value products would also tend to imply that there is escalation in non-tariff protection (greater protection given to higher value-added products); as in the case of tariff escalation, this would suggest that such protection impedes developing countries' efforts to move their production into higher value-added products.

Developing countries, while aware that the quotas will be removed by the end of 2004, remain concerned about the alleged back-loading of commitments and are apprehensive about the potential use of trade defence measures after the agreement is implemented. They fear that with only 51 per cent of the total volume of products incorporated into the GATT, a removal of the remaining 49 per cent at the end of the third stage will result in an import surge, leading major importers to use other measures to restrict imports (see next section). Another issue is the growing number of preferential free trade agreements,

⁵⁹ In the case of the US, for example, a recent study by the International Trade Commission (2002) found that the removal of significant import barriers would result in a welfare gain of US\$14.4 billion to the US economy (or 0.1 per cent of GDP). Liberalization of textiles and apparel accounts for most (US\$13 billion) of this welfare gain. Removal of these import barriers would also result in the net addition of some 17,400 full-time jobs in the US.

⁶⁰ The share of clothing products integrated in each of the three stages was: Canada 7 per cent, 8.8 per cent and 3.83 per cent; the EU 2 per cent, 12 per cent and 6.22 per cent; Norway 1 per cent, 17 per cent and 7.5 per cent; and the US 13 per cent, 11.6 per cent and 2.55 per cent (WTO document G/L/459, 31 July 2001).

which effectively isolate some countries that are not party to these agreements. Exports are also subject to increasingly complex rules of origin which are proving to be major administrative barriers to trade. In an effort to deal with these concerns, Members agreed at the Doha Ministerial Conference that they would exercise restraint in the use of anti-dumping measures against textile and clothing exports previously subject to quotas and also to notify any changes in their rules of origin for any products under the ATC to the WTO.

With the expiry of quotas under the ATC by 1 January 2005, China, with its low labour costs, high productivity and increasingly efficient transport infrastructure, and, to a lesser extent, India are expected to take a lion's share of the world's textiles and clothing market from many other developing countries.⁶¹ However, they will

still face barriers to market access. After the removal of quotas, textiles and clothing will still face formidable barriers to market access in both developed and developing country markets in the form of high tariffs and perhaps safeguard measures.⁶² For the Quad (except Japan), for example, average tariffs for textiles and clothing products are considerably higher than the overall simple average (Table 1). Tariffs on textiles and clothing are even higher in major developing countries (Table 2); in major textiles and clothing exporting countries, such as Bangladesh and India, tariffs on textiles and clothing imports are over 30 per cent.⁶³ For some countries (notably South Africa and, to a lesser extent, Japan), tariffs on textiles and clothing tend to have a larger share of specific duty elements (including compound and alternate rates) than other products; as pointed out earlier, specific duties tend to conceal tariff "peaks".

⁶¹ See US International Trade Commission (2004).

⁶² There have been four disputes involving safeguard measures taken under the ATC and a further 20 disputes, relating to textiles and clothing along with other products, claiming violations of certain provisions of the ATC and/or other Agreements. China's ability to make inroads into the US market will be restrained by uncertainty over the use by the US of a textile-specific safeguard provision contained in China's WTO protocol of accessions.

⁶³ The simple average tariff for 1999/2000 for Bangladesh was 31.5 per cent and in 2001/02 31.3 per cent for India. Other textiles and clothing exporters with high (above 20 per cent) average tariffs on textiles and clothing include Pakistan (26.4 per cent in 2001), Thailand (24.7 per cent in 1999), and Mexico (24 per cent in 2001).

VI. OTHER MAJOR NON-TARIFF BARRIERS TO TRADE

As tariffs and quotas are reduced or removed, other measures that may potentially restrict trade become more apparent. Two issues are discussed here because of their importance to developing countries: trade defence measures, such as anti-dumping, which developing countries are becoming major users of, and technical and SPS regulations, which developing countries fear are becoming a major barrier to their exports.

A. TRADE DEFENCE MEASURES

Contingency measures, such as anti-dumping, countervailing and safeguard actions, are permitted under the relevant WTO Agreements, subject to certain rules. The number of investigations initiated, especially of alleged dumping, has risen significantly since 1995 but after peaking in 2001 seems to have declined in 2002 and 2003. This raises concerns about the appropriate use of the provisions, which were put into place to protect countries from unfair trade arising from "dumping" or from the use of subsidies; their use is viewed by some as a non-tariff barrier to trade. Concern has also been expressed about their improper use as a pretext to protect domestic producers of like products.⁶⁴ A significant percentage of all cases brought to the WTO's dispute settlement body continues to involve the use of anti-dumping measures.⁶⁵

Between 1995 and the end of 2003, some 2,416 anti-dumping investigations were notified by WTO Members. In 2003, the sectors in which most initiations occurred were chemicals and base metals (around half). Base metals have been particularly

⁶⁴ Several Members have called for a review of procedures used to initiate anti-dumping and other trade defence measures. Such a review is now under way in the context of current negotiations; its aim is to clarify and improve disciplines while preserving the basic concepts, principles and effectiveness of the Agreements and their instruments and objectives, and taking into account the needs of developing and least-developed Members.

⁶⁵ As of July 2002 there had been 39 requests for consultations involving anti-dumping measures.

targeted, accounting for some 31 per cent of investigations since 1995; the majority of these investigations relate to steel products which have been the subject of frequent calls by industry to investigate dumping by cheaper producers in the face of oversupply in the world. Developing countries have gradually become major users of such instruments, especially anti-dumping. The Members most frequently subject to the initiation of anti-dumping investigations are other developing and transition economies. In fact, in 2003, India reported the largest number of anti-dumping investigations; overall, since 1995, India has also been the largest initiator, with a cumulative total of some 15.7 per cent of all initiations, followed by the US (13.6 per cent), the EU (11.3 per cent) and Argentina (7.5 per cent).

It is estimated that around half of all anti-dumping investigations are terminated without imposition of final measures. In 2003, the largest number of actions were taken by India, China, Turkey and Thailand. The most affected countries or territories were China and the Republic of Korea. Overall, as at 31 December 2003, a total of 1,511 anti-dumping measures were in force; the largest number of measures were maintained by India (273), the United States (205), the EU (187) and Argentina (138).

Countervailing measures are used more sparingly than anti-dumping measures, with 161 initiations since 1995 (up to June 2003). The main user has been the US (65 initiations). Members are also resorting more frequently to safeguard measures now than a few years ago. In 2001/2002 (30 October - 28 October) Members notified 33 initiations, a sharp increase from 13 in 2001. The number of definitive safeguards has also risen from 6 in 1999 to 14 in 2002 and 20 in 2002/03 (October-October).

B. TECHNICAL BARRIERS AND SPS MEASURES

Under the WTO Agreements on Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary (SPS) Measures, Members may require imports to meet certain national standards dealing with, *inter alia*, technical, health and safety, sanitary and phytosanitary, and environmental requirements. In some cases, the regulations are associated with international agreements or protocols, such as a ban on trade in endangered species under the CITES Convention or on ozone-depleting substances under the Montreal Protocol on Substances that Deplete the Ozone Layer. In others, the restrictions are subject to national requirements and imports may enter the country subject to presentation of health or conformity assessment certificates. Several recent studies suggest that the removal of SPS regulations could generate welfare gains to consumers as well as net gains to society, if consumers compensated those producers adversely affected by the removal of such measures (OECD, 2002c). Nevertheless, food safety concerns remain important.

Since the establishment of the WTO, the number of technical regulations notified has grown steadily, over half of which have been made by developed countries. The number of SPS measures has also increased rapidly, with developed countries accounting for a large share.

Technical regulations and SPS measures have also been the source of frequent disputes in the WTO, partly due to their apparent non-conformity with international norms. Although many countries have a policy of bringing their measures into line with international norms, the actual percentage of standards and SPS measures in individual countries that is equivalent to international norms varies considerably.⁶⁶ This has led to the accusation, often by developing countries, that such measures are being used to restrict access for their exports.⁶⁷ They also argue that multiple testing requirements for different markets and the complexity of conformity assessment requirements, makes the costs associated with these procedures prohibitive for them. This is especially true for LDCs that often simply do not have the technical or financial means to upgrade their production facilities to meet such requirements.

The Doha Ministerial Conference called for technical and financial assistance from Members to ease such problems faced by LDCs and some efforts have been made to this effect.⁶⁸ The move towards adopting new and harmonizing current standards with international norms is also a step in the right direction, although difficulties will continue to be posed by those standards for which no international equivalent exists.

⁶⁶ Recent Trade Policy Reviews of WTO Members for example, indicate that among the Quad countries, harmonization ranges from 40 per cent and 80 per cent for the EU's standards setting organizations CEN and CENELAC, respectively, and 90 per cent for Japan; however, no data are available for Canada and the US although the US has been criticized as having a "low" percentage of standards that are harmonized with international standards. Among other industrialized countries, some 80 per cent and one third of Australian and New Zealand standards, respectively, are equivalent to international standards.

⁶⁷ Among the developing countries reviewed in recent TPRs, the extent of harmonization varies: 42 per cent for Indian standards issued during 1998-2001; 60 per cent at least partial concordance for Mexico; over half for Pakistan; 31 per cent overall, and 80 per cent for standards issued in 1998 and 1999 for Malaysia; and generally equivalent for South Africa.

⁶⁸ In the SPS area, for example, the Standards and Trade Development Facility was established in partnership between the FAO, the World Animal Health Organization (OE), the World Bank, the WHO and the WTO to assist developing countries to build capacity in standards and to helping them meet international standards.

VII. MARKET ACCESS FOR SERVICES

Services is the largest and most rapidly expanding sector in most economies, accounting for well over 60 per cent of world GDP (WTO, 2001a). Moreover, trade in services has grown more rapidly than merchandise trade since 1985, with developing countries increasing their share during this period (World Bank, 2002). While services themselves account for an important share of world GDP, the efficiency of the services sector often determines economic performance in other sectors to which services are an input.⁶⁹ Regulatory and supply bottlenecks in key sectors such as telecommunications, transportation, financial services and utilities may seriously hamper economic performance in other sectors of the economy. Thus, current measures of the contribution of services to GDP and world trade may in fact be significant underestimates. In recognition of their importance, a growing number of services previously subject to monopoly are gradually being exposed to competition; telecommunications together with other infrastructural services, not least road transport, and banking are cases in point. Reforms in such sectors have introduced greater efficiency not only in the supply of the services concerned, but generated economy-wide productivity gains.

Notwithstanding the benefits of more liberalized trade in services, the current WTO services negotiations under the General Agreement on Trade in Services (GATS) have prompted fears among developing countries (and some NGOs) that the extension of negotiations to sectors generally considered "public" and "social", and therefore excluded from previous negotiations, could lead to an erosion of government control and therefore jeopardise the provision of these basic services to the general population and especially the poor. In particular, it is sometimes alleged that Members are being forced to make commitments in health, education and water services, which could lead to a takeover of these services by private foreign

⁶⁹ Inefficient services that are an input into other economic activities often raise the cost of production for these economic activities, thereby reducing their competitiveness.

providers and reduce the poor's access to them. However, such fears are largely groundless.

While the objective of the GATS is progressive liberalization of trade in services, it does not compel WTO Members to make sector specific commitments; it merely gives them the opportunity to do so, if they wish. All Members are obliged to submit a Schedule of Specific Commitments. This Schedule specifies the sectors or sub-sectors in which the Member undertakes market access and national treatment obligations, together with any limitations, for four modes of supply, namely cross-border supply (Mode 1), consumption abroad (Mode 2), commercial presence (Mode 3) and temporary presence of natural persons (Mode 4). Specific commitments (comparable to tariff bindings under the GATT) guarantee minimum conditions of market entry and participation in the sectors and modes concerned. However, there is no common blueprint across Members. While services provided in the exercise of government authority⁷⁰ as well as air traffic and directly related services are excluded from the Agreement, Members are free to select the other sectors, in which they wish to bind market access and national treatment. Once a specific sector commitment has been made, however, it must be extended to all other WTO Members on a most-favoured-nation (MFN) basis.⁷¹ A modification or withdrawal of any scheduled commitment can only take place once compensation with affected Members has been agreed, making commitments in the GATS, in effect, largely irreversible.⁷²

⁷⁰ Services provided in the exercise of governmental authority are defined as any services supplied neither on a commercial basis nor in competition with one or more service suppliers.

⁷¹ The MFN clause, which forms the basis of the WTO Agreements is a powerful instrument to protect the fairness of the system, ensuring that small countries are not unfairly treated by larger more economically powerful Members. In the GATS negotiations, exceptions to MFN were permitted for a ten year period (in principle) provided they were scheduled when the GATS came into effect.

⁷² Article XXI of the GATS allows Members to modify or withdraw any commitment in their Schedule at any time after 3 years from the date of entry into force of the commitment. If the

Reflecting the flexibility of the GATS, the number of sectors in which Members have made commitments varies widely. Such variations may be due to many factors, including differences in economic development, policy orientation, or institutional conditions among Members. The spread is particularly large among developing and transition economies. Governments acceding to the WTO in recent years have scheduled significantly more commitments than initial Members at comparable levels of national income. There is also a similar variation across sectors with the largest number of commitments being made in tourism-related services, where some 130 Members scheduled at least one of four sub-sectors,⁷³ followed by financial services, business services, communication and transport services. Fewer commitments were made in social services, such as health and education, which in many countries are provided by governments.

The classification of government services is relatively clear for some public services, such as defence. Furthermore, in several countries, education and health services as well as utilities, such as energy and water, are also provided only by the government. In recent years, however, there has been increasing pressure on governments to relax their monopolies over these and other essential services, or even to privatise some of them, for various reasons, including fiscal consolidation, improved efficiency and the alleviation of supply bottlenecks that prevent these services from reaching businesses and households at the lowest possible prices. For example, in most developed and several developing countries, the

parties are unable to agree an appropriate level of compensation, arbitration can be requested; if the Member does not agree with the compensation amount set by the arbitrator, the Member requesting arbitration may withdraw or modify substantially equivalent benefits in conformity with the arbitrator's findings.

⁷³ The four sub-sectors are: hotels and restaurants; travel agencies and tour operators; tourist guides; and other.

incumbent public sector supplier of telecommunications services, if not privatised, has gradually been exposed to competition from private sector suppliers. The resulting competition has, in part, helped to push down prices and reduce supply bottlenecks. In the case of other public services, such as healthcare, for many countries that have aging populations and thus face increased pressure on public health care systems, the provision of health services is often mixed, with both public and private sector involvement. As a consequence of greater private involvement, the definition of governmental services has, of late, become rather more blurred.

Fears that inclusion in the GATS of other sectors considered to provide basic social services, such as water and electricity, would lead to their privatization, and therefore put them out of the reach of the poorer sections of society, are also unfounded. Again, the GATS does not advocate privatization; it merely offers the possibility of negotiating sector-specific market access and national treatment to other WTO Members.

Nor does making commitments in the GATS imply that Members can no longer regulate the service so as to maintain certain standards, supply or access through the appropriate regulatory and other policies.⁷⁴ Appropriate regulatory and competition policies can ensure that service providers, whether state-owned or private, do not take advantage of their possibly dominant market positions to engage in unfair competition, exploit consumers, or deny service in remote areas where turnover in relation to required infrastructure is too low to permit an economic return. This is especially true in the case of so-called "natural" monopolies, such as electricity, gas and water, where distribution is characterised by economies of scale, therefore requiring national grids for efficient distribution.

⁷⁴ In the case of telecommunications, for example, most evidence gathered from recent WTO Trade Policy Reviews, shows that rather than worsening services, reform in the sector has led to improved access to telecommunication services and reduced user charges. Moreover, the Telecommunications Reference Paper gives Members the flexibility to decide on appropriate policy mechanisms to ensure, *inter alia*, universal services, etc.

Indeed, liberalization of services has often been accompanied by increased, rather than decreased, regulation, especially where such liberalization includes privatisation.⁷⁵ In particular, recent Trade Policy Reviews have found that most countries that have undertaken liberalization of telecommunications services tend to have a universal service obligation, often funded by contributions from all or the main telecommunication operators.⁷⁶

The GATS makes a clear distinction between domestic regulation and trade liberalization and while recognizing the right of Members to achieve domestic policy objectives through regulation, it calls for progressive liberalization. Regulations that are not intended to be restrictive in nature may, nevertheless, restrict trade. Because of their potential impact on trade in services,⁷⁷ the Council for Trade in Services was mandated to develop necessary disciplines to prevent domestic regulations from constituting unnecessary barriers to trade; this is being done in the Working Party on Domestic Regulation (WPDR).

Frequently, Members have liberalized services more rapidly than their commitments in the WTO under the General Agreement on Trade in Services (GATS); the WTO's Trade Policy Reviews conducted since 1995, for example, show numerous examples of unilateral liberalization that go well beyond commitments made under the GATS. With the possible exception of financial and telecommunication services, which have been subject to extended negotiations, the vast majority of current commitments reflect market conditions

at the time of entry into force of the GATS in 1995. Thus, they tend to be more restrictive than current regimes.

Commercial presence (mode 3), involving foreign direct investment, is estimated to account for around 56 per cent of total world trade in services. Given the relative abundance of capital in developed countries, this would appear to be their preferred mode of trading in services. Cross-border supply accounts for a further 28 per cent (and consumption abroad for 14 per cent). Recently, one aspect of cross-border supply, namely so-called offshore "outsourcing" (whereby firms relocate their labour-intensive service functions to another country often using telecommunications) has aroused considerable controversy, especially in the US, over fears that it is resulting in a loss of jobs, and may even partly explain the largely jobless recovery there, given the continuing strong growth in productivity.⁷⁸ These fears have prompted a proposal in the US Senate to ban outsourcing to developing countries of some types of federal government work;⁷⁹ some Senators have also argued for regulations and tax measures to make such business practices less profitable. These moves, have, in turn, raised concerns, particularly in major providers of such services such as India, that they are intended to deny developing countries the gains from trade presented by their comparative advantage in providing certain types of services. After all, "outsourcing" is merely another mode of engaging in international trade in services, which should be beneficial to developed and developing countries alike. When a service can be produced more cheaply abroad, it undoubtedly makes more sense to import it than to provide it domestically. While creating jobs in the services sector of developing countries exporting such services, insofar as these services are used as inputs, "outsourcing" reduces the costs of producing goods and services in the importing countries, thereby

⁷⁵ The need for regulation of services markets is discussed, *inter alia*, in a recent joint study by the WHO and the WTO Secretariats (WHO/WTO, 2002, p. 121).

⁷⁶ This is true for developing and industrialized countries alike. In 2002-03 (September to June) most of the countries reviewed (Australia; Barbados; Dominican Republic; Hong Kong, China; Japan; Mauritania; Venezuela and Zambia in 2002 and Burundi; Canada; El Salvador; Indonesia; Maldives; Morocco; New Zealand and SACU in 2003) had universal service obligations. A number of countries also require their airlines to service certain less profitable routes.

⁷⁷ For example, qualification requirements, technical standards and licensing.

⁷⁸ During the past three years, whereas the US economy has grown at an annual rate of just over 2 per cent, annual growth in output per hour in the non-farm business sector has been 4 per cent. Not surprisingly, therefore, employment in the sector has fallen.

⁷⁹ Similar proposals have reportedly been made by some US states.

increasing the productivity, and thus competitiveness, of their producers. Interestingly, according to Mann (2003), employment in the US in many white collar occupations thought to be particularly at risk to offshore outsourcing operations has been expanding, not contracting. Moreover, the international competitiveness of US services is such that net exports have remained in substantial surplus despite the appreciation of the US dollar from 1995 to 2002 and slow growth in the United States' major markets. Indeed, the trade surplus in other private services (OPS) increased from US\$42 billion in 1997 to about US\$50 billion in the first quarter of 2003. This is of special interest because such services include financial, business, professional and technical services that might be particularly vulnerable to offshore outsourcing. The types of information technology (IT) services jobs thought to be candidates for offshore outsourcing tend to be at the low-wage, low-skill end of the job spectrum that currently demands IT skills. Globalisation of IT production is perhaps a model for the global evolution of IT services and software. Although technological change is the most important driving force behind IT price declines, globalised production and international trade rendered IT hardware some 10 per cent to 30 per cent less expensive than it would otherwise have been. These lower prices translated into higher productivity growth and added an

estimated 0.3 of a percentage point to real annual GDP growth in the US during the period 1995-2002. Clearly, the adjustment challenges posed by freer trade and the associated re-allocation of domestic resources need to be addressed, but these are broadly similar to those posed by efforts to raise productivity.

Another issue of concern to developing countries, given their abundant supplies of relatively cheap labour, is the lack of market access through Mode 4, whose share of all services trade is a mere 1.4 per cent, suggesting that there is considerable scope for liberalization of this mode of supply. Of the four modes of supply in the GATS, Members made the fewest commitments, and the commitments that were made are generally subject to market access and national treatment restrictions.⁸⁰ Liberalization in this mode would also be particularly beneficial to small and least developed countries, for whom workers' remittances form an important and growing source of foreign exchange.⁸¹ Much will, however, depend on countries agreeing on several essentially domestic regulations currently being debated, such as recognition of qualifications and training, immigration policies for short term labour and tax policies for domestic and foreign workers. Some of these issues, such as immigration and taxation, fall outside the scope of the GATS.

⁸⁰ Market access commitments frequently specify the kind of professional who can enter the market (such as managers or others associated with the establishment of commercial presence), while national treatment exemptions include restrictions on labour from certain source countries or regions.

⁸¹ In 2001, it is estimated workers remittances were over US\$72 billion and have exceeded official development assistance for most of the 1990s (World Bank, 2003, pp. 157-8).

VIII. CONCLUSION

The breakdown in efforts by Members to agree to a broad negotiating framework concerning the foregoing (and other) matters at the Ministerial Conference in Cancún constituted a setback for those who see trade liberalization as one of the principle ways of promoting growth, development and poverty reduction. At stake is a deal that, according to the World Bank, could add more than US\$500 billion a year to global incomes by 2015, lifting 144 million people out of poverty. The breakdown highlights the sensitivity of several of these issues for developed and developing countries alike. The main stumbling blocks were agriculture and "new issues", with major developed Members not inclined to liberalise their agricultural sectors anywhere near as much as developing countries wish and the latter reluctant to enter into negotiations on "new issues", especially investment and competition. Perhaps a more general obstacle to negotiations is the reluctance of some major developing country Members to agree to reductions in their barriers to trade commensurate with those they are demanding of developed countries, partly on grounds of their belief that they need special and differential treatment. Fortunately, Members agreed in July 2004 to put the DDA back on track. In particular, they put into place framework agreements on agriculture and non-agricultural market access; they also agreed to a package on development and decided to begin negotiations on one of the "new issues", namely trade facilitation.

Nevertheless, the danger remains that if sufficient progress is not made on these negotiations, some major WTO Members may turn their backs on multilateralism and instead seek to intensify their pursuit of a perhaps more viable alternative involving regional and bilateral agreements.⁸² But with such arrangements being poorly policed by existing WTO rules, they run the risk not only of

⁸² This has already happened in the US, which, although remaining engaged in the WTO, has recently concluded four such agreements (with Australia, Chile, Singapore and Central America), is currently conducting negotiations with two others (Morocco and the South African Customs Union), and has committed to begin negotiations with five others (Dominican Republic, Bahrain, Thailand, Panama, and the Andean region) as well as the 34 nation Free Trade Area of the Americas.

distorting and diverting international trade and investment, but also placing an additional burden on many developing countries' already scarce institutional capacity to undertake effective negotiations. Furthermore, the very countries likely to be excluded from such arrangements are precisely those that need the support of the multilateral system in order to integrate themselves into the global economy. However, it may be very difficult to dismantle some trade distorting measures on a purely bilateral basis; this is especially true of agricultural support, including subsidies, and contingency measures.

Needless to say, neither the setback in Cancún nor the subsequent agreement by the General Council of the WTO in July 2004 to put the DDA back on track should prevent Members from opening up their markets further in the context of domestic reforms. As some Members (for example, Australia; Hong Kong, China; India; New Zealand and Singapore) have shown, unilateral liberalization is also in their national interest. Unilateral liberalization in services has been especially noteworthy recently in financial services and telecommunications. Moreover, studies show that the potential economic benefits from further unilateral trade liberalization could be significant. Still, these benefits are easier to reap in the context of concurrent, supportive multilateral liberalization. In particular, to the extent that negotiations at the WTO involve reciprocity, they give exporters a stake in trade liberalization, thereby broadening the political support for governments who wish to dismantle trade barriers against those sectors wishing to maintain such barriers, thus adding emphasis to the importance of success of the DDA.⁸³ In the case of countries that are sufficiently large as to be able to use trade barriers to shift the terms of trade in their favour, multilateral trade liberalization in accordance with the principle of reciprocity is especially important, as such large countries may be less inclined to reduce tariff barriers if smaller countries were unwilling to do so as well.

⁸³ Other sources of support for trade liberalization are domestic consumers as well as producers for which imports constitute important inputs.

IX. REFERENCES

- Bhagwati, J. (1958) 'Immiserizing Growth: A Geometrical Note', *Review of Economic Studies* 25, pp.201-205.
- Brenton, P. (2003) 'Integrating the Least Developed Countries into the World Trading System: The Current Impact of EU Preferences under Everything But Arms', *World Bank Policy Research Working Paper* 3018, April.
- Corden, W. M.(1971) *The Theory of Protection*, London: Oxford University Press.
- Council of Economic Advisers (2004) *Economic Report of the President*, U.S. Government Printing Office, Washington, D.C.
- Daly, M. and Kuwahara, H. (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.
- European Central Bank (2004) *Monthly Bulletin*, February 2004.
- Fung, K.C. et al. (2002) 'The Political Economy of the Japanese Yen and the U.S. Japan Conflict', mimeo.
- Gale, W. and Orszag, P. (2002) 'The Economic Effects of Long-Term Fiscal Discipline'. Available online www.brook.edu/dybdocroot/views/papers/gale/200221217.pdf.
- Gilberts, C., and Varangis, P. (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.
- Hoekman, B., Ng, F. and Olarreaga, M. (2002) 'Reducing Agriculture Tariffs Versus Domestic Support: What's More Important to Developing Countries?', *CEPR Discussion Paper* No. 3576.
- IMF and World Bank (2002) *Market Access for Developing Country Exports – Selected Issues*, Washington, D.C.
- IMF (2002) *World Economic Outlook*, Washington, D.C.
- Mann, C. L. (2003) 'Globalisation of IT Services and White Collar Jobs: The Next Wave of Productivity Growth', *International Economic Policy Briefs*, Number PB03-11, December, International Institute of Economics, Washington, D.C.
- Mattoo, A., Roy D. and Subramaniam, A. (2002) 'African Growth and Opportunity Act and Its Rules of Origin: Generosity Undermined?', *World Bank Research Working Paper* 2908, October.
- Mckinnon, R. I. and Ohno, K.(1997) *Dollar and Yen: Resolving Economic Conflict between the United States and Japan*, Cambridge: MIT Press.
- OECD (2002a) 'Agricultural Policies in OECD Countries: A Positive Reform Agenda', 6 November 2002 (COM/AGR/TD/WP(2002)19/FINAL).
- (2002b) 'Farm household income issues in OECD countries: a synthesis report' AGR/CA/APM(2002)FINAL, Paris.

- (2002c) 'A Synthesis of Empirical Studies of SPS Regulations and a Proposal for Future work' (COM/AGR/TD/WP(2002)72, 27 August 2002, Paris.

- (2003) *Agricultural Policies in OECD Countries—Monitoring and Evaluation*, Paris.

Olarreaga, M. and Ng, F. (2002) 'Tariff Peaks and Preferences' in B. Hoekman, A. Mattoo and P. English (editors), *Development, Trade and the WTO* (The World Bank).

Ozden and Reinhardt (2003) 'The Perversity of Preferences: GSP and Developing Country Trade Policies 1976-2000', *World Bank Working Paper 2955*, January.

Page, S. and Hewitt, A. (2002) 'The New European Trade Preferences: Does 'Everything but Arms' (EBA) Help the Poor?', *Development Policy Review*, 20 (1), pp. 1-13.

Productivity Commission (2002) *Removing Tariffs on Goods Originating from Least Developed Countries*, Research Report, October.

United States International Trade Commission (2002) *The Economic Effects of Significant U.S. Import Restraints*, Third Update 2002, Investigation No. 332-325, June 2002, Publication 3519, Washington, D.C.

- (2004) *Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market*, Investigation 332-448, January 2004, Publication 3671, Washington, D.C.

WHO/WTO (2002) *WTO Agreements and Public Health: A Joint Study by the WHO and the WTO Secretariat*, Geneva.

World Bank (2003) *Global Development Finance 2003*, Washington, D.C.

- (2004) *Global Economic Prospects*, Washington, D.C.

WTO (2001a) *Market Access: Unfinished Business*, Special Study 6, Geneva.

- (2003) *Trade Policy Review – Japan 2002*, Geneva.

- (2004) *Trade Policy Review – European Communities 2004*, Geneva.

Box 1: Accounting for a country's current account deficit

In an open economy, national income is the sum of domestic and net foreign expenditure on goods and services produced by domestic factors of production plus net income from abroad. The national income identity in an open economy is therefore:

$$\text{GNP} \equiv C + I + G + X - M + \text{NIA}, \quad (1)$$

where C, I, G, X and M, respectively, denote consumption, investment, government expenditure, exports and imports, and NIA denotes net income from abroad; the latter consists of interest and investment earnings received on foreign assets (net of payments on foreign liabilities) plus net unilateral transfers abroad. Thus, whereas exports add to the GNP of an economy, imports do not do so directly; imports add instead to the GNPs of foreign countries.

The net trade position of a country can be summarized by the current account (CA), which is the difference between export and imports of goods and services (X-M) plus net income from abroad (NIA); that is

$$\text{CA} \equiv X - M + \text{NIA}. \quad (2)$$

When imports exceed exports plus NIA, a country has what is known as a current account deficit (CA-). By contrast, when exports plus NIA exceed imports it has a current account surplus (CA+).

The difference between government purchases of goods and services (G) and taxes (T) is known as the government budget (or fiscal) balance; a budget deficit arises when G exceeds T, while a budget surplus, or government saving, occurs when T exceeds G.

As GNP is, by definition, equal to disposable income (DI), which can be either consumed or saved, plus taxes (T) collected from households and firms,

$$\text{GNP} \equiv C + S + T. \quad (3)$$

It follows from the identities (1), (2) and (3) that:

$$\text{CA} \equiv X - M + \text{NIA} = S + (T - G) - I \text{ or } \text{CA} = \text{NS} - I, \quad (4)$$

where national saving (NS) is the sum of private saving (S) plus government saving (T-G). In other words, the current account deficit (CA-) must be equal to the amount by which investment exceeds national saving. This fundamental equation highlights the close relation between the current account deficit and the gap between investment and national saving.

As the current and capital account deficits must sum to zero under floating exchange rates,

$$\text{CA-} + \text{Net Capital Inflow} = 0, \quad (5)$$

which, when substituted into equation (4) gives:

$$I - \text{NS} = \text{Net Capital Inflow}. \quad (6)$$

The last equation demonstrates that if national savers (including government) do not save enough to meet domestic investment needs, then the gap must be bridged by foreign savers. The resulting inflow of capital into the economy tends to drive up the exchange rate leading to a current account deficit. If government runs an overall budget deficit, the fundamental causes of the current account deficit are the government's budget deficit and the fact that domestic investment exceeds private saving. It follows that the adoption of protectionist trade measures is not an appropriate way to reduce the current account deficit, which is a macro-economic issue.

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

	United States ^a			European Union			Japan			Canada		
	1996	2002	F.B. ^{b,c}	1995 ^d	2002	F.B. ^{b,e}	1996 ^f	2002 ^f	F.B. ^{b,g}	1995 ^d	2002	F.B. ^{b,h}
1 Bound tariff lines (per cent of all tariff lines)	100 ⁱ	100 ⁱ	100 ⁱ	..	100	100	98.9	98.9	98.9	..	99.8	99.7
2 Duty free tariff lines (per cent of all tariff lines)	18.2	31.2	37.6	9.4	21.5	28.0	34.9	36.7	40.6	18.2	49.0	29.6
3 Non- <i>ad valorem</i> tariffs (per cent of all tariff lines)	14.1	12.2	10.8	10.2	9.7	10.1	7.1	7.2	6.2	7.4	3.9	5.1
4 Tariff quotas (per cent of all tariff lines)	1.9	1.9	1.9	3.3	3.1	3.3	1.6	1.7	1.7	2.2	2.2	2.2
5 Non- <i>ad valorem</i> tariffs with no AVEs (per cent of all tariff lines)	3.1	0.0	0.2	2.0	2.6	3.5	..	1.2	0.8	5.8	0.5	1.4
6 Simple average bound rate	..	..	4.6	..	6.5	6.3	10.3	8.5	8.4	..	..	8.4
Agricultural products (HS01-24)	..	..	8.1	..	16.2	16.3	..	26.6	26.5	..	..	23.1
Industrial products (HS25-97)	..	..	4	..	3.8	3.6	..	4.1	3.9	..	..	5.8
WTO agricultural products	..	..	8.3	..	16.1	16.3	..	28.9	28.9	..	..	24.4
WTO non-agricultural products	..	..	4.0	..	4.2	4.0	..	3.9	3.8	..	..	5.7
Textile and clothing	..	..	9.0	..	8.4	8.0	9.8	7.1	6.7	..	..	12.2
7 Nuisance bound rates (per cent of all tariff lines) ^j	..	..	6.7	..	12.9	6.4	..	6.7	1.1	..	..	1.1
8 Simple average applied rate	6.4	5.1	..	10.2	6.4	..	9.0	6.9	..	13.2	6.8	..
Agricultural products (HS01-24)	10.0	9.5	..	23.7	15.9	..	..	18.6	..	28.6	21.2	..
Industrial products (HS25-97)	5.7	4.2	..	6.6	3.8	..	..	3.9	..	10.5	4.2	..
WTO agricultural products	10.3	9.8	..	24.5	16.1	..	..	20.0	..	30.3	21.7	..
WTO non-agricultural products	5.7	4.2	..	6.9	4.1	..	..	3.9	..	10.4	4.2	..
Textile and clothing	11.5	9.7	..	10.4	8.4	..	8.7	7.0	..	18.4	9.9	..
9 Domestic tariff "peaks" (per cent of all tariff lines) ^k	4.0	5.3	..	4.0	5.2	..	..	6.0	..	1.4	1.6	..
10 International tariff "peaks" (per cent of all tariff lines) ^l	8.9	6.3	..	11.0	7.7	..	..	7.6	..	17.0	9.8	..
11 Overall standard deviation of tariff rates	13.4	12.3	..	16.5	11.3	..	40.8	32.6	..	30.0	24.4	..
12 Coefficient of variation of tariff rates	2.1	2.4	..	1.6	1.8	..	..	4.7	..	2.3	3.6	..
13 Nuisance applied rates (per cent of all tariff lines) ^j	8.9	12.6	..	1.0	12.9	..	..	6.1	..	1.2	2.2	..

.. Not available.

F.B. Final bound.

a. The United States levies its *ad valorem* duties on the basis of the "f.o.b." ("free on board") price, thereby excluding the costs of insurance and freight. By contrast, most other WTO Members, including the EU, Japan and Canada, levy *ad valorem* import duties on the "c.i.f." price, which includes these costs. As the c.i.f. price exceeds the f.o.b. price by the amount of insurance and freight costs, 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. Including ITA.

c. Based on 1998 tariff schedule.

d. Pre-Uruguay Round tariff.

e. Based on 1999 tariff schedule.

f. Fiscal year.

g. Based on 2002 tariff schedule.

h. Based on 2000 tariff schedule.

i. Two lines, applying to crude petroleum, are not bound.

j. Nuisance rates are those greater than zero, but less than or equal to 2 per cent.

k. Domestic tariff peaks are defined as those exceeding three times the overall simple average applied rate (indicator 8).

l. International tariff peaks are defined as those exceeding 15 per cent.

Note: All calculations exclude "in quota" rates. *Ad valorem* equivalents (AVEs) of non-*ad valorem* duties are used insofar as they are available. Where AVEs are not available, the *ad valorem* tariff component is used for compound and alternate rates.

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

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

	China			India			Brazil			South Africa		
	1996	2002	F.B. ^a	1997/98	2001/02	F.B. ^{b,c}	2000	2003	F.B. ^d	1997	2002	F.B. ^e
1 Bound tariff lines (per cent of all tariff lines) ^f	n.a.	100	100	67.0	73.3	73.3	100	100	100	96.3	96.2	96.3
2 Duty free tariff lines (per cent of all tariff lines)	1.9	4.8	7.6	1.4	1.1	0.3	1.5	11.3	0.7	42.4	43.4	9.9
3 Non- <i>ad valorem</i> tariffs (per cent of all tariff lines)	0.0	0.7	0.0	0.2	5.3	4.6	0.0	0.0	0.0	25.6	25.0	0.0
4 Tariff quotas (per cent of all tariff lines)	..	0.8	0.8	..	..	..	0.0	0.0	0.0	4.2	3.8	3.8
5 Non- <i>ad valorem</i> tariffs with no AVEs (per cent of all tariff lines)	0.0	0.7	0.0	0.2	5.3	4.6	0.0	0.0	0.0	25.6	25.0	0.0
6 Simple average bound rate	..	12.4	9.9	..	..	50.6	..	..	30.2	..	..	20.9
Agricultural products (HS01-24)	..	17.9	14.5	..	..	115.7	..	..	35.8	..	..	46.8
Industrial products (HS25-97)	..	11.4	9.1	..	..	37.7	..	..	29.5	..	..	18.1
WTO agricultural products	..	18.2	15.2	..	..	114.7	..	..	35.3	..	..	43.5
WTO non-agricultural products	..	11.5	9.0	..	..	36.2	..	..	29.6	..	..	18.1
Textiles and clothing	..	17.6	11.5	..	..	29.9	..	..	34.8	..	..	26.8
7 Nuisance bound rates (per cent of all tariff lines) ^g	..	1.9	2.4	..	..	0.0	..	..	0.0 [*]	0.0
8 Simple average applied rate	23.6	12.3	..	35.3	32.3	..	13.7	11.4	..	15.0	11.4	..
Agricultural products (HS01-24)	35.4	18.0	..	33.8	41.7	..	12.9	11.7	..	11.3	11.5	..
Industrial products (HS25-97)	21.7	11.3	..	35.6	30.8	..	13.8	11.4	..	15.4	11.4	..
WTO agricultural products	33.8	18.2	..	35.2	40.7	..	12.6	11.6	..	9.4	9.6	..
WTO non-agricultural products	22.1	11.3	..	35.4	31.0	..	13.8	11.4	..	15.7	11.6	..
Textiles and clothing	32.8	17.5	..	43.7	31.3	..	20.3	17.3	..	35.1	24.4	..
9 Domestic tariff "peaks" (per cent of all tariff lines) ^h	1.1	1.8	..	0.2	1.3	..	0.0	0.6	..	4.0	3.9	..
10 International tariff "peaks" (per cent of all tariff lines) ⁱ	55.2	17.2	..	90.5	96.8	..	41.3	36.0	..	39.4	34.9	..
11 Overall standard deviation of tariff rates	17.4	9.1	..	14.5	13.0	..	6.7	7.0	..	17.8	12.6	..
12 Coefficient of variation of tariff rates	0.7	0.7	..	0.4	0.4	..	0.5	0.6	..	1.2	1.1	..
13 Nuisance applied rates (per cent of all tariff lines) ^g	1.0	1.9	..	0.0	0.0	..	0.8	2.0	..	0.2	0.0 [*]	..

.. Not available.

n.a. Not applicable.

* Negligible.

F.B. Final bound.

a. Based on 2002 tariff schedule

b. Averages do not include lines where different parts of the HS six-digit line were bound at different rates.

c. Based on 2001/02 tariff schedule.

d. Based on 2000 tariff schedule.

e. Based on 2001 tariff schedule.

f. Including fully bound and partially bound rates.

g. Nuisance rates are those greater than zero, but less than or equal to 2 per cent.

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 per cent.

Note: All calculations exclude "in quota" rates, *Ad valorem* equivalents (AVEs) of non-*ad valorem* duties are used insofar as they are available. Where AVEs are not available, the *ad valorem* tariff component is used for compound and alternate rate. For India, the tariff analysis is based on "standard" tariff rates.

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

Table 3: Tariff escalation in the "Quad" by 2-digit ISIC industry

		United States 2002	EU15 2002	Japan 2002/03	Canada 2002
Food beverages and tobacco	First stage of processing	3.6	13.2	23.6	10.2
	Semi-processed	8.8	19.1	20.3	6.8
	Fully processed	12.5	18.7	22.6	34.1
Textiles, clothing and leather	First stage of processing	3.8	1.0	10.2	1.1
	Semi-processed	9.3	6.7	6.8	6.9
	Fully processed	10.1	9.8	12.0	13.5
Wood and furniture	First stage of processing	0.1	0.0	0.0	0.0
	Semi-processed	2.1	3.0	4.3	2.1
	Fully processed	2.2	2.1	2.0	5.1
Paper, printing and publishing	First stage of processing	0.0	0.0	0.0	0.0
	Semi-processed	0.5	2.1	0.5	0.4
	Fully processed	0.6	1.5	0.3	1.0
Chemicals	First stage of processing	1.9	1.7	2.4	1.5
	Semi-processed	4.3	4.5	2.8	3.0
	Fully processed	3.9	3.8	2.0	4.8
Non-metallic mineral products	First stage of processing	1.2	0.0	0.4	0.0
	Semi-processed	2.2	2.9	1.5	0.7
	Fully processed	5.6	4.0	1.1	3.8
Basic metal	First stage of processing	0.4	0.0	0.4	0.0
	Semi-processed	1.8	1.9	1.1	0.9
	Fully processed	2.3	2.4	0.5	3.7
Fabricated metal products and machinery	Semi-processed	3.0	1.9	1.8	1.5
	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	0.4	1.8	0.1	0.0
	Fully processed	3.6	3.0	2.8	4.8
Total	First stage of processing	4.4	8.1	14.5	5.0
	Semi-processed	4.8	4.9	4.9	3.9
	Fully processed	5.5	7.0	7.8	8.9

Note: Excluding in-quota rates. 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. Averages differ from those in the DG's Overview 2002, due to changes in concordance between HS and ISIC.

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

Table 4: Tariff escalation in selected developing countries by 2-digit ISIC industry

		China 2002	India 2001/02	Brazil 2003	South Africa 2002
Food beverages and tobacco	First stage of processing	15.3	36.3	9.4	10.7
	Semi-processed	28.1	36.6	12.6	10.3
	Fully processed	21.5	48.2	15.0	15.4
Textiles, clothing and leather	First stage of processing	13.0	25.9	9.1	5.0
	Semi-processed	15.1	28.4	15.8	22.1
	Fully processed	20.4	34.2	19.3	32.4
Wood and furniture	First stage of processing	0.0	12.5	3.5	0.0
	Semi-processed	5.7	31.1	8.8	6.2
	Fully processed	11.8	34.8	16.2	15.5
Paper, printing and publishing	First stage of processing	0.0	7.1	5.1	0.0
	Semi-processed	8.4	34.7	13.5	5.9
	Fully processed	11.5	29.4	13.3	7.7
Chemicals	First stage of processing	7.1	25.8	7.4	3.7
	Semi-processed	7.2	33.6	7.6	3.5
	Fully processed	10.7	33.5	7.4	7.9
Non-metallic mineral products	First stage of processing	2.3	33.0	7.5	0.0
	Semi-processed	10.7	34.1	8.8	4.9
	Fully processed	15.1	34.1	12.7	7.1
Basic metal	First stage of processing	2.8	23.8	3.9	0.0
	Semi-processed	5.3	33.0	10.6	3.2
	Fully processed	13.1	35.0	17.5	2.9
Fabricated metal products and machinery	Semi-processed	6.8	19.0	15.2	1.7
	Fully processed	11.2	29.1	13.9	5.2
Other	First stage of processing	14.5	35.0	10.1	2.5
	Semi-processed	8.9	35.0	13.5	4.3
	Fully processed	17.1	33.4	18.7	7.3
Total	First stage of processing	11.3	28.6	7.9	5.5
	Semi-processed	9.7	32.3	9.6	12.9
	Fully processed	14.0	33.0	13.4	11.5

Note: Excluding in-quota rates. Calculations exclude specific rates and include the *ad valorem* part for compound and alternate rates. Averages differ from those in the DG's Overview 2002, due to changes in concordance between HS and ISIC.

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

Table 5: MFN and developing country preferential tariffs (per cent)

	MFN	GSP ^a	LDC ^b
United States 2002	5.2	4.2	2.8
WTO agricultural products	10.4	9.3	6.5
Textiles and clothing	9.7	9.4	9.4
EU 2002 ^c	6.4	4.5	1.7
WTO agricultural products	16.1	14.5	9.0
Textiles and clothing	8.4	7.2	0.0
Japan 2002/03	6.9	5.7	3.6
WTO agricultural products	20.0	19.3	18.3
Textiles and clothing	7.0	5.4	0.1
Canada 2002 ^d	6.8	5.4	4.1
WTO agricultural products	21.7	20.8	18.2
Textiles and clothing	9.9	8.9	7.1
Australia 2001/02 ^e	4.3	3.9	1.8
WTO agricultural products	1.3	1.0	0.0
Textiles and clothing	12.3	12.3	8.6
New Zealand 2002	4.1	3.5	0.0
WTO agricultural products	2.1	1.6	0.0
Textiles and clothing	9.5	9.0	0.0
Czech Republic 2001	6.1	5.1	..
WTO agricultural products	13.4	13.2	..
Textiles and clothing	6.6	6.2	..
Slovak Republic 2001	6.1	5.2	4.6
WTO agricultural products	13.2	13.0	13.0
Textiles and clothing	6.7	6.2	5.9

.. Not available.

a Generalized System of Preferences.

b Least-Developed Countries Preferences.

c Data for the EU's GSP and LDC rates is based on the 2001 tariff nomenclature.

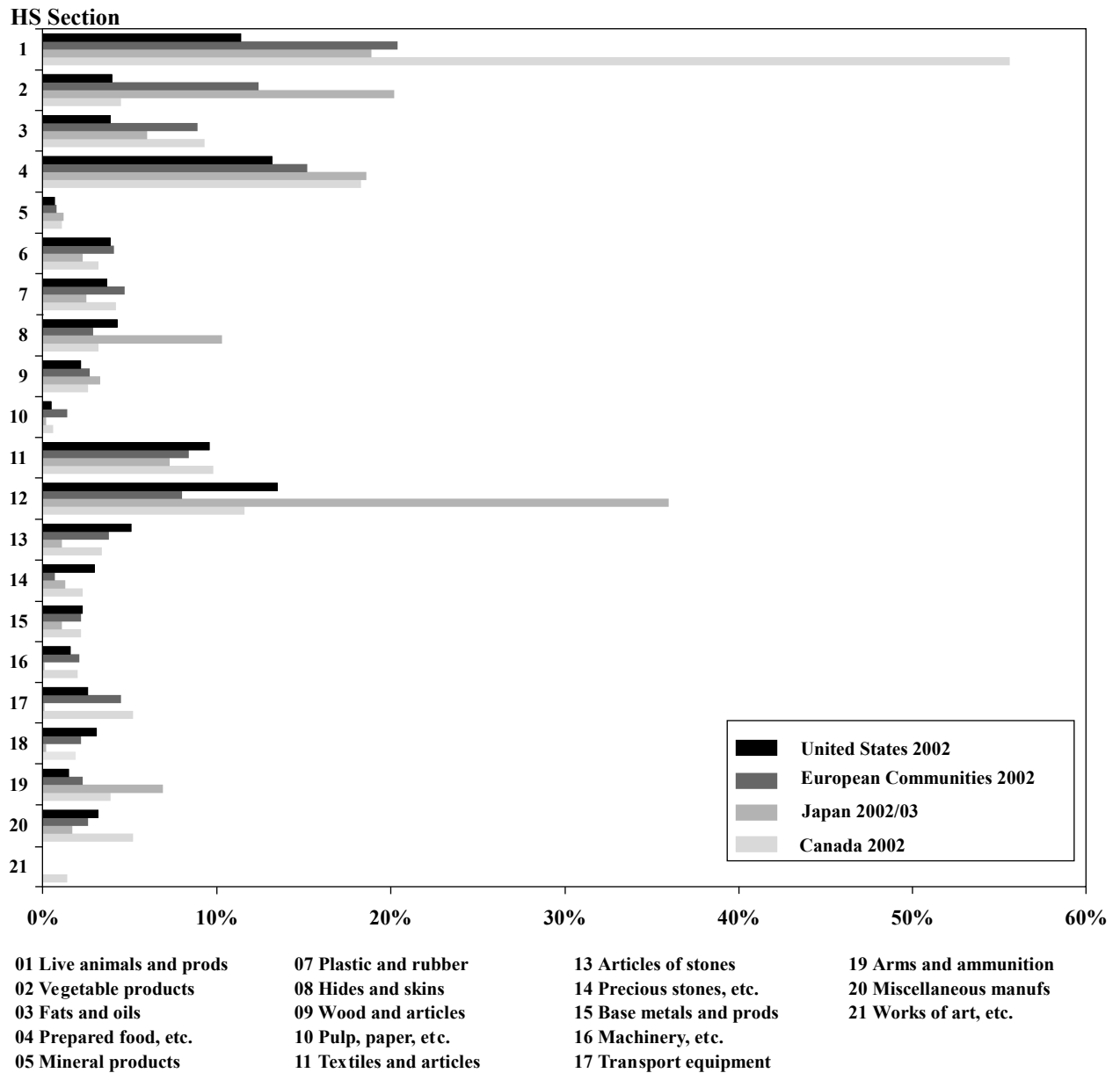
d Canada has provided duty and quota free access to imports of textiles and clothing products from LDCs as of 1 January 2003.

e As of 1 July 2003, Australia has removed all tariffs on LDCs.

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

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

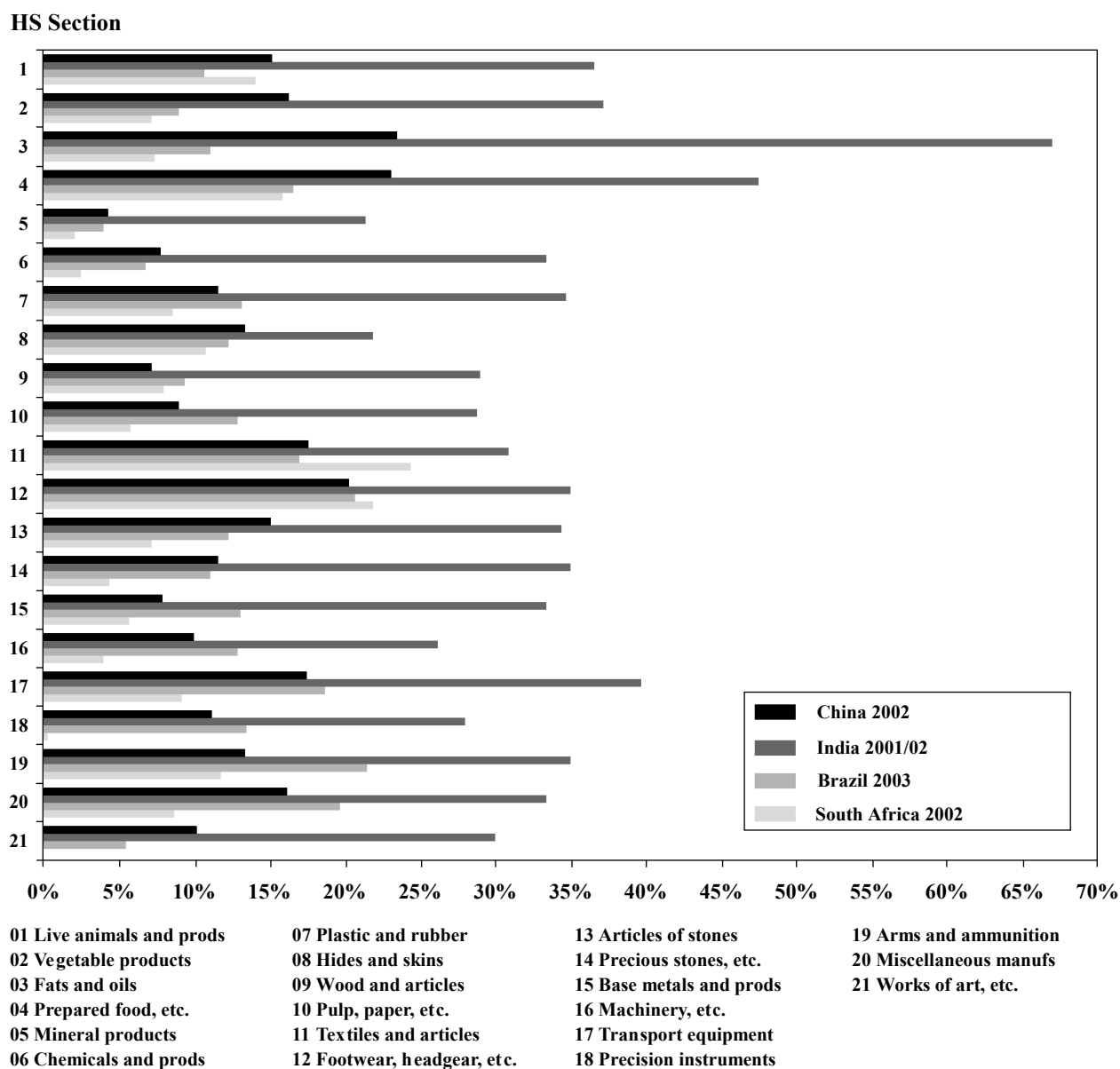
Chart 1: Simple average MFN tariff rates for the "Quad", by HS Section



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



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

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

OTHER WTO DISCUSSION PAPERS

- N° 1 "Industrial Tariff Liberalization and the Doha Development Agenda" (February 2003)
By Marc Bacchetta and Bijit Bora
- N° 2 "Improving the Availability of Trade Finance during Financial Crises" (November 2003)
By Marc Auboin and Moritz Meier-Ewert
- N° 3 "Income Volatility in Small and Developing Economies: Export Concentration Matters" (February 2004)
By Marion Jansen
- N° 4 "The Role of Export Taxes in the Field of Primary Commodities" (July 2004)
By Roberta Piermartini
- N° 5 "The Global Textile and Clothing Industry post the Agreement on Textiles and Clothing" (July 2004)
By Hildegunn Kyvik Nordås
- N° 6 "The Trade, Debt and Finance Nexus: at the Cross-roads of Micro- and Macroeconomics" (November 2004)
By Marc Auboin