

The Doha Development Agenda:

What's on the Table?

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Abstract

The outlines of a potential agreement, emerging after seven years of negotiations, imply that Doha offers three key benefits: reduced uncertainty of market access in goods and services; improved market access in agriculture and manufacturing; and the mobilization of resources to deal with the trade problems of least developed countries. WTO Members have offered to make large reductions in legally bound levels of protection in goods and services. The reductions in currently applied levels of

protection are smaller. For the least developed countries, the proposed “duty free and quota free” access will only add significantly to their access under existing preferential access arrangements if industrial and developing country members include vital tariff lines. The initiatives on trade facilitation and aid for trade can play a valuable catalytic role in promoting reform and mobilizing assistance, but substantial effort is still needed to translate notional benefits into actual gain

This paper—a product of the Trade Team, Development Research Group—is part of a larger effort in the department to assess the implications of trade policy reforms for developing countries. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The authors may be contacted at wmartin1@worldbank.org and amattoo@worldbank.org.

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The Doha Development Agenda: What's on the Table?

Negotiations under the Doha Development Agenda have now been under way for almost seven years. In the areas where negotiations are most advanced, they have generated complex and detailed proposals which seek to balance the interests of the 152 WTO members. But this complexity and detail makes it difficult to judge what precisely Doha offers. Drawing on the results of a recent research project, this paper takes stock of what is currently on the table in goods and services, access for least developed countries, aid-for-trade and trade facilitation¹.

The outlines of a potential agreement (WTO 2008a,b,c), emerging after seven years of negotiations, imply that Doha offers three key benefits: enhanced security of market access in goods and services; improved market access in agriculture and manufacturing; and the mobilization of resources to deal with the trade problems of least developed countries. WTO Members have offered to make large reductions in legally bound levels of protection in goods and services. These reductions cover tariffs on all goods, export subsidies and domestic support in agriculture, and market access and national treatment restrictions in services. However, given the large gaps today in all areas between legally bound and actually applied levels of protection, the reductions in bound levels of protection will lead to much smaller reductions in currently applied levels of protection.

For the least developed countries, the proposed “duty-free, quota-free” access will add significantly to the access they already enjoy under existing preferential access arrangements only if industrial countries do not exclude vital tariff lines. The initiatives on trade facilitation and aid for trade both play a valuable catalytic role in promoting reform and mobilizing assistance, but substantial effort is still needed to translate notional benefits into actual gain.

This paper does not attempt to be comprehensive. Rather the focus is on issues where analysis can improve our understanding. The main findings are presented in the text with supporting information in the annexes. Section I examines market access in goods, Section II agricultural export subsidies and domestic support, and Section III trade in services. Section IV assesses market access for Least Developed Countries (LDCs) and Section V the Aid-for-Trade initiative. Section VI covers trade facilitation.

I. Market access in goods

A central goal of the WTO process is to improve the market access opportunities and the security of market access of its members. In this section, we first consider the reductions

¹ This paper draws heavily on research by Blandford and Josling (2008); Bouët, Laborde and Mevel (2008); Gootiiz and Mattoo (2008); Laborde, Martin and van der Mensbrugge (2008); Newfarmer (2008); and Wilson (2008). Support from the British-Swedish Multi-Donor Trust Fund for Trade is gratefully acknowledged.

in tariffs levied by broad groups of WTO members, and then turn to the implications for their access to partner markets.

The key implications of the Doha Agenda negotiations for the tariffs levied by four major groups of countries are presented in Table 1. These are given for total trade, for agricultural market access, and for non-agricultural market access (NAMA). The first three columns refer to the applied rates that influence actual market outcomes. The last three show the bound rates that are negotiated in the WTO. In each set of three columns, the first refers to the base rates in the absence of a Round; the second (“Formula”) shows the rate if the market access formulae being negotiated were implemented without exceptions, and the third (“Formula plus flex”) the rate after allowing for country exceptions, such as those for small and vulnerable economies (SVEs) and for product flexibilities such as those for sensitive and special products in agriculture.

Table 1. Weighted Average Applied and Bound Rates Levied by WTO members

| | Applied Rates | | | Bound rates | | |
|-----------------------|---------------|---------|-------------------|-------------|---------|-------------------|
| | Base | Formula | Formula plus flex | Base | Formula | Formula plus flex |
| Total | % | % | % | % | % | % |
| All countries | 3.7 | 2.5 | 2.9 | 9.9 | 5.7 | 6.9 |
| High income countries | 2.5 | 1.4 | 1.7 | 5.2 | 3.1 | 3.8 |
| Developing - non LDC | 6.9 | 5.3 | 6.2 | 21.8 | 12.6 | 14.4 |
| LDCs | 11.1 | 8.7 | 11.1 | na | na | na |
| Agriculture | | | | | | |
| All countries | 14.5 | 8.9 | 11.8 | 40.3 | 20.7 | 29.9 |
| High income countries | 15.0 | 7.5 | 11.0 | 31.9 | 13.5 | 20.2 |
| Developing- non LDC | 13.4 | 11.5 | 13.3 | 53.9 | 33.0 | 45.4 |
| LDCs | 12.5 | 12.2 | 12.5 | 94.1 | 51.6 | 94.1 |
| NAMA | | | | | | |
| All countries | 2.9 | 2.1 | 2.3 | 7.8 | 4.7 | 5.3 |
| High income countries | 1.7 | 1.1 | 1.1 | 3.5 | 2.5 | 2.7 |
| Developing- non LDC | 6.4 | 4.8 | 5.6 | 19.1 | 10.9 | 11.8 |
| LDCs | 10.9 | 8.0 | 10.9 | na | na | na |

Source: Laborde, Martin and van der Mensbrugge (2008). Note: Country groups defined using World Bank and UN definitions.

From the first row of Table 1, we see that the average tariff applying in the absence of a Doha agreement would be 3.7 percent, while the average bound tariff would be 9.9 percent. If the formulae for agriculture and NAMA were applied without exceptions, the average applied tariff would fall to 2.5 percent and the average bound rate to 5.7 percent. The exceptions and flexibilities reduce these cuts, so that the average tariff falls to 2.9 percent (a reduction of 27 percent), while the average bound tariff falls to 6.9 percent (a reduction of 30 percent).

In the high-income country group, the average applied tariff is cut by 32 percent from 2.5 percent to 1.7 percent, with bound tariffs falling from 5.2 percent to 3.8 percent. In developing countries other than LDCs, the cut in applied rates is similar in absolute value to that in the high-income countries at 0.7 percentage points, but smaller as a percentage of its initial level at 10 percent. In the developing country group, the reduction in bound rates is much larger than the corresponding reduction in applied rates, largely because of the substantial initial gap (binding overhang) between bound and applied rates in this group.

In agriculture, tariffs are much higher than the average tariff rates for all goods, partly reflecting the fact that this is only the second multilateral round in which these tariffs have been negotiated at all. Table 1 shows that the “tiered” formula being used in the negotiations would reduce average bound agricultural tariffs by nearly half, from 40.3 to 20.7. World average applied tariffs would be cut by nearly 40 percent, from 14.5 to 8.9 percent. These cuts are sharply reduced by the presence of country exceptions, and particularly by the flexibilities for sensitive and special products. With these exceptions, the reduction in the world average bound rate drops to just over a quarter, and the average applied tariff falls by one-fifth, from 14.5 percent to 11.8 percent.

In the high income country group, the formulae without flexibilities would lead to extremely large cuts in agricultural tariffs, with average bound tariffs falling by 58 percent from their initial level and applied tariffs by half. The sensitive product flexibilities reduce the size of the cut in average tariffs, but still leave a cut of four percentage points in applied tariffs, from 15 to 11 percent (a cut of nearly 27 percent). In developing countries, the cut in bound tariffs implied by the formula is substantial, at almost 40 percent of the initial 54 percent. The flexibilities for sensitive and special products reduce this sharply, to 16 percent. Because of the initial gap between bound and applied rates (40.5 percentage points on average), the resulting cuts in developing country applied tariffs would be much smaller — a cut of 1.9 percentage points (or 14 percent) in applied agricultural rates. The flexibilities allowed to developing countries for sensitive and special” products almost completely eliminate reductions in applied agricultural tariffs. The cuts in applied agricultural tariffs in LDCs would be small because of binding overhang and are eliminated by their exemption from tariff cutting requirements.

The Modalities reflect agreement to eliminate or sharply reduce the use of the Special Safeguard (SSG) which currently permits many developed countries to impose duties above their Uruguay Round bindings. Use of this measure has increased over time, and it has been used to provide sustained protection for some commodities (Hallaert 2005). Its elimination should increase access, and reduce the extent to which domestic prices in the industrial countries are insulated from world market prices, thereby reducing the instability of world market prices.

A new Special Safeguard Mechanism (SSM) with both price and quantity triggers is envisaged for developing countries. Such a safeguard provides protection and insulation to domestic markets, while reducing market access and increasing the

instability of world markets if used by importers accounting for a significant fraction of imports.

The current Modalities envisage an SSM with a volume and a price trigger available on all agricultural products. Import duties of up to 25 percentage points could be imposed when imports exceeded 110 percent of a three year moving average—which could arise from import growth rate of 5 percent per year with a moving average centered two years previously. A price-based measure could be invoked if the price of imports falls below 85 percent of a three-year moving average of import prices, with a duty up to 85 percent of the gap between current import prices and the three year moving average. The combination of the duty and the applied tariff rate could not exceed the pre-Doha bound rate unless a bracketed option is accepted to allow members to breach this barrier for a few products.

In Non-Agriculture (NAMA), the initial tariff levels are much lower than in agriculture, with a world average applied rate of only 2.9 percent, and an average bound rate of 7.8 percent. While these average rates are low, they conceal many tariff peaks, particularly on exports of particular interest to developing countries. The Swiss formula for NAMA brings down the highest tariff rates by the most and imposes a cap on tariffs. It would lower the average bound tariff by nearly 40 percent, from its initial rate of 7.8 percent to 4.7 percent. The estimated reduction after inclusion of the flexibilities for developing countries is a still-substantial cut of 31 percent, to 5.3 percent.

In the high-income countries, the reduction in the average bound rate resulting from the formula would be 28 percent, from 3.5 to 2.5 percent. Flexibilities would have a relatively minor impact on this group as only WTO members that self-declare themselves to be developing countries can use these flexibilities. The average applied NAMA tariff in the industrial countries would fall from 1.7 percent to 1.1 percent, a reduction of 35 percent from the initial tariff level. In the non-LDC developing country group, the initial tariff is 19.1 percent and application of the formula without flexibilities would result in a cut in the average tariff of 43 percentage points. Use of the flexibilities for developing members results in a 38 percent cut in bound tariffs in this group, from 19.1 percent to 11.8 percent. Turning to applied rates, application of the formulae would result in a 25 percent cut. Once flexibilities are allowed for, the average applied rate is reduced by 0.8 percentage points from 6.4 percent to 5.6 percent—a cut in the average of 25 percent.

One key feature of the potential agreement is its impact on the tariffs that countries face, and hence their market access. Results for the average tariffs facing each country group are presented in Table 2. A striking feature of Table 2 is the much higher tariffs faced in agriculture than in NAMA. The average applied tariff facing developing country agricultural exporters is five times as high as that on NAMA exports. Another key feature is that average bound rates are six percentage points higher than applied rates for industrial and developing countries, and almost twice that for LDCs. In agriculture, this “binding overhang” is much greater, being over 25 percentage points for both developing and high-income countries, and almost 50 percentage points for LDCs.

Table 2. Weighted Average Applied and Bound Rates Faced by WTO members

| | Applied Rates | | | Bound rates | | |
|-----------------------|---------------|---------|-------------------|-------------|---------|-------------------|
| | Base | Formula | Formula plus flex | Base | Formula | Formula plus flex |
| Total | % | % | % | % | % | % |
| All countries | 3.7 | 2.5 | 2.9 | 9.7 | 5.7 | 6.9 |
| High income countries | 3.6 | 2.5 | 2.9 | 9.6 | 5.6 | 6.7 |
| Developing - non LDC | 3.9 | 2.4 | 2.9 | 10.0 | 5.9 | 7.3 |
| LDCs | 3.3 | 2.1 | 2.4 | 14.5 | 8.0 | 10.6 |
| Agriculture | | | | | | |
| All countries | 14.5 | 8.9 | 11.8 | 40.4 | 20.7 | 29.9 |
| High income countries | 14.9 | 9.2 | 12.1 | 40.3 | 20.3 | 29.1 |
| Developing- non LDC | 14.2 | 8.6 | 11.5 | 39.8 | 20.8 | 30.4 |
| LDCs | 7.4 | 6.5 | 7.1 | 56.8 | 32.1 | 45.7 |
| NAMA | | | | | | |
| All countries | 2.9 | 2.1 | 2.3 | 7.7 | 4.7 | 5.3 |
| High income countries | 3.0 | 2.2 | 2.4 | 7.9 | 4.8 | 5.5 |
| Developing- non LDC | 2.9 | 1.9 | 2.1 | 7.2 | 4.4 | 5.1 |
| LDCs | 2.8 | 1.5 | 1.8 | 8.9 | 4.8 | 5.9 |

Source: Laborde, Martin and van der Mensbrugge (2008). Note: Country groups defined using World Bank and UN definitions.

The “formula” columns show that the formulae being discussed are extremely ambitious. In agriculture, the tiered formula without exceptions would cut bound tariffs by roughly half, and applied tariffs by roughly a third. In NAMA, the cut in bound rates would be roughly three-eighths, and in applied rates roughly a quarter. The formula plus flexibility column shows that the flexibilities—which were essential in securing agreement on the formulas—reduce the size of the cuts in tariffs, but still leave progress in reducing both average bound and applied rates.

While only some of the reductions in bound tariffs translate into reductions in applied rates, the entire reduction has value in constraining potential future increases in tariffs (Francois and Martin 2004). While applied tariffs are now low by historical standards, and have fallen particularly sharply in developing countries, historical studies by Gardner and Kimbrough (1999) and Rama (1992) show that reductions in applied protection that are not locked-in through international agreements are frequently reversed (see Appendix). This suggests that the reductions in bound rates shown in Table 2 may have substantial long-run value even in cases where the bound rates are above current applied rates.

II. Agricultural export subsidies and domestic support

Substantial reforms are envisaged in the agricultural negotiations not just on market access, but also on export competition and domestic support.

Export Subsidies

The draft agreement involves abolition of all export subsidies. While it will have very little impact in the short run—because current export subsidy levels are negligible—it rules out a return to the disruptive situation of the 1980s, when world prices were severely depressed by high levels of export subsidies that displaced efficient producers. This reduces the uncertainty faced by producers in developing countries, and should help promote needed investment.

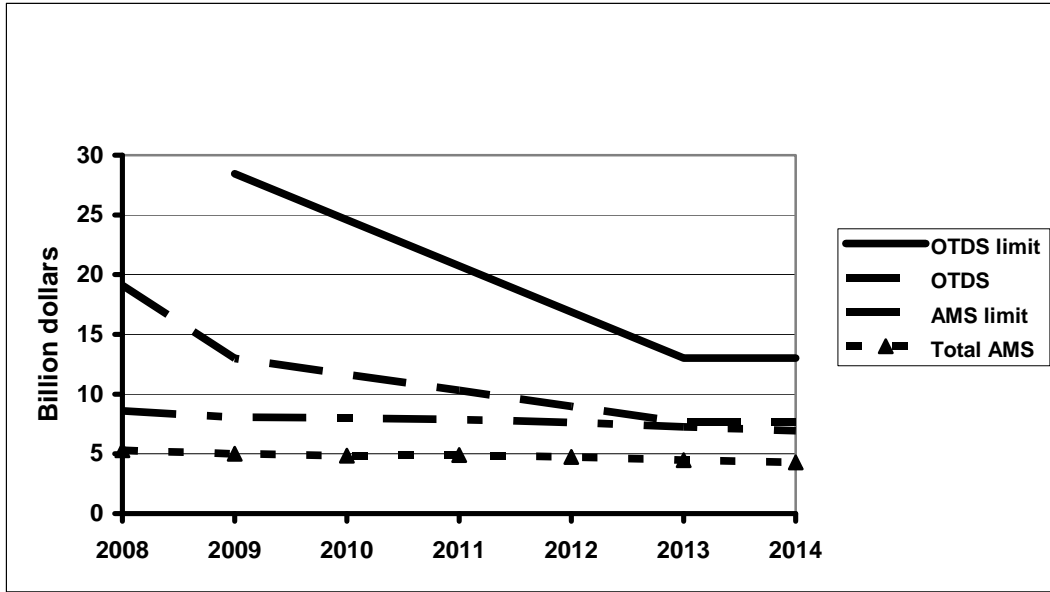
Domestic Support

The proposed rules on domestic support involve introduction of a number of additional constraints on this support, and sharp reductions in bound levels of support. The traditional Aggregate Measure of Support (AMS) is to be reduced using a tiered formula that imposes cuts of 70 percent in the EU; 60 percent in members with intermediate amounts of support (including the USA); and 45 percent in other members. Developing countries make cuts two thirds as large. An additional constraint will be applied on Overall Trade Distorting Support (OTDS), defined as the total of AMS, *de Minimis*, and Blue Box² support. OTDS limits are to be cut by between 75 and 85 percent in the EU; 66 to 73 percent in the USA and 50 to 60 percent in smaller industrial economies. Blue box support will be limited to 2.5 percent (5 percent) of the value of agricultural production for developed (developing) members. Product-specific limits will be introduced on AMS and on the blue box, with the cap on support to cotton being lowered very sharply and under an accelerated timetable.

Domestic support is of relatively minor importance in most developing countries and most attention is focused on implications for the USA and for Europe. Projections by Blandford and Josling (2008) of actual support and the reduction commitments in the draft Modalities suggest that even the larger cuts considered under the draft Modalities would not constrain total AMS or OTDS in the United States under current (very high) price projections (Figure 1). However, even under these price projections, the product-specific AMS and blue box commitments would likely constrain support for sugar, peanuts and cotton—products of particular importance to many developing countries.

² Support provided under production-limiting programs.

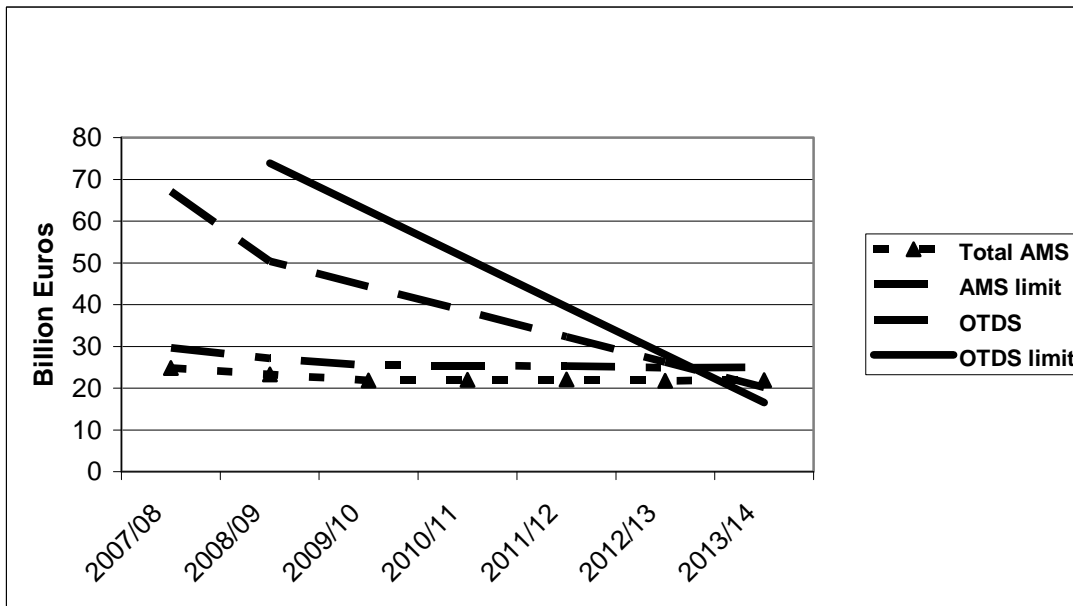
Figure 1. Limits and projected support measures in the USA, ambitious cuts



Source: Blandford and Josling (2008)

In Europe, the most rigorous reduction formulae for OTDS considered in the Modalities seem likely to bring the overall trade distorting support below both its AMS subcomponent and the projected levels of support, as shown in Figure 2.

Figure 2. Limits and projected support measures in the EU, ambitious cuts



Source: Blandford and Josling (2008)

Any projections of this type need to be treated cautiously, as world prices for agricultural commodities can change rapidly, and the current projections are very high by historical standards. While the US support measures do not appear likely to be binding under

current projections, they would likely constrain the distorting support that could be provided in the event that world prices prove to be lower than projected. These constraints are particularly important for trading partners, since these support measures generate much greater concern during periods of low prices than of high.

III. Trade in Services

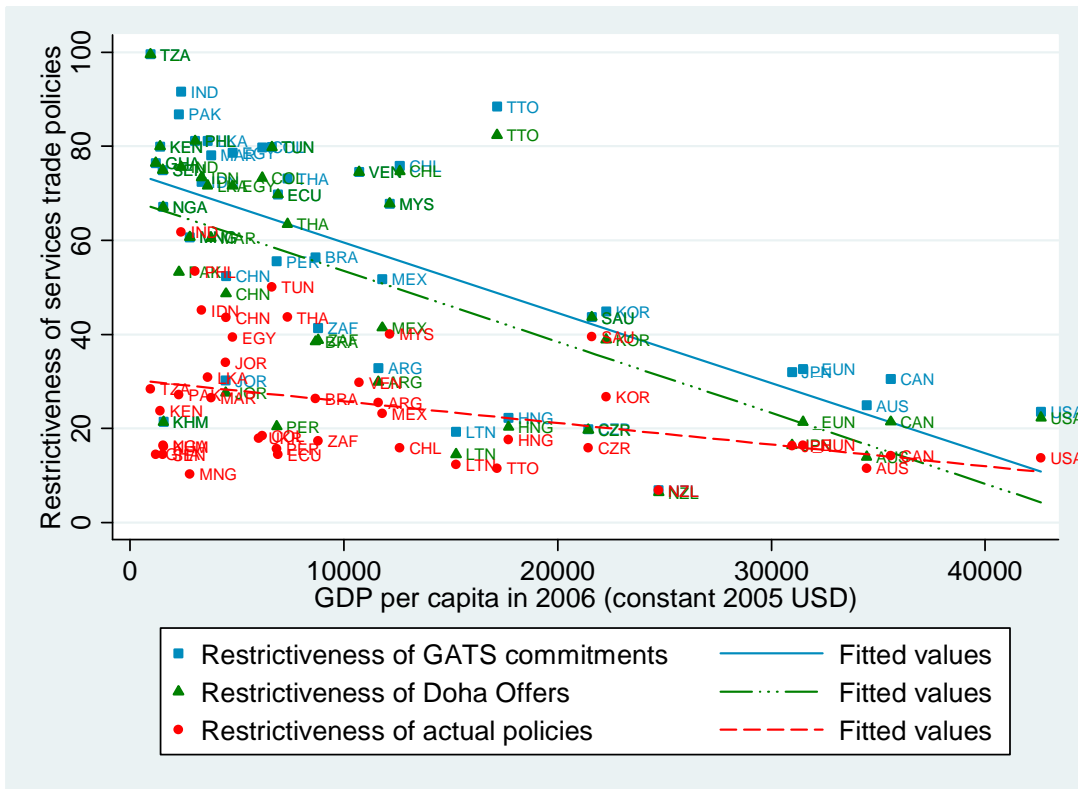
Most services liberalization all around the world has so far been undertaken unilaterally. Multilateral negotiations on services began in the Uruguay Round. These negotiations reduced policy uncertainty by inducing countries to begin to lock-in unilateral liberalization, but produced little additional market-opening (Hoekman, 2006). The same is true for most regional agreements on services, with a few exceptions.

What is currently on the table in Doha? Consider first what is not. Doha offers as they stand today do not offer any liberalization of actual policy (Gootiiz and Mattoo, 2008, examine a range of services sectors and modes of supply). Ironically, two of the currently most protected sectors, transport and professional services, are either not being negotiated at all or not with any degree of seriousness. The Annex to the GATS on Air Transport Services excludes from the scope of the GATS all measures affecting air traffic rights and services directly related to the exercise of air traffic rights. The maritime negotiations are notionally on (with offers from some countries) but have never really got off the ground because the United States is unwilling to accept GATS disciplines (particularly the MFN principle) on maritime transport and has not made any commitments or offers in this area.³ As far as professional services are concerned, a vital mode of supply, the presence of natural persons, faces almost insurmountable barriers in most countries because trade negotiators have had little liberalizing influence either on immigration policy or on domestic regulations such as licensing and qualification requirements.

Given that liberalization is not on the table, the question is whether the current Doha offers involve any greater security of access than the Uruguay Round (UR) commitments under the GATS. What has so far been accomplished in this respect can be assessed by comparing actual policy with UR Commitments and the offers submitted so far as part of the Doha negotiations. First of all, as Figures 3, 4 and 5 show, in all regions of the world, actual policy is substantially more liberal than the UR commitments. Uruguay Round commitments are on average 84 per cent more restrictive than current policies. As Figure 3 shows, the poorer countries have on average bigger gaps between commitments and actual policy. Secondly, Doha offers improve on UR commitments, but the gap between offers and actual policy is still large. Doha offers are on average still 43 per cent more restrictive than actual policies. Interestingly, as Figure 3 shows, the absolute improvement in offers is on average the same at all levels of income. At present, Doha offers not greater access to markets but rather some reassurance that access will not get worse.

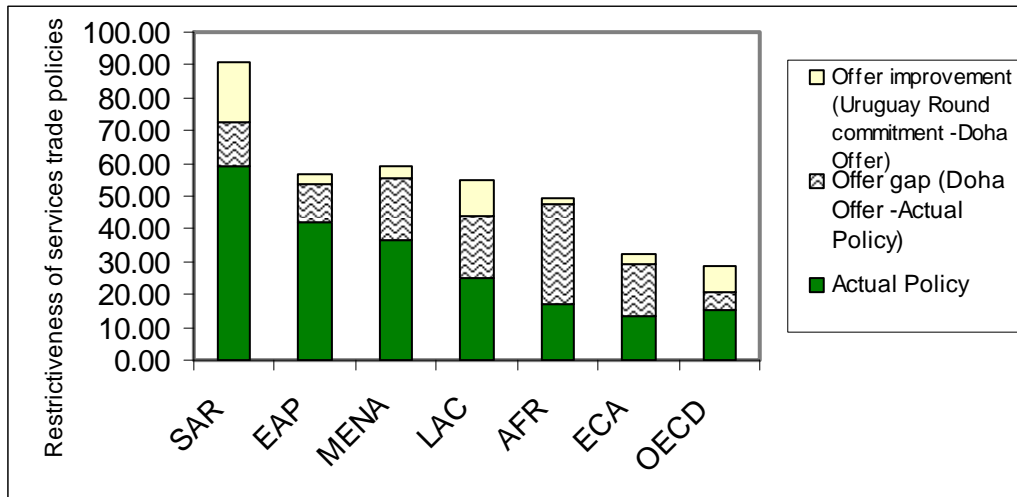
³ In any case, liberalization of the most protected segment, cabotage, is not being negotiated.

Figure 3: Restrictiveness of GATS (UR) commitments, Doha offers and actual policy by country



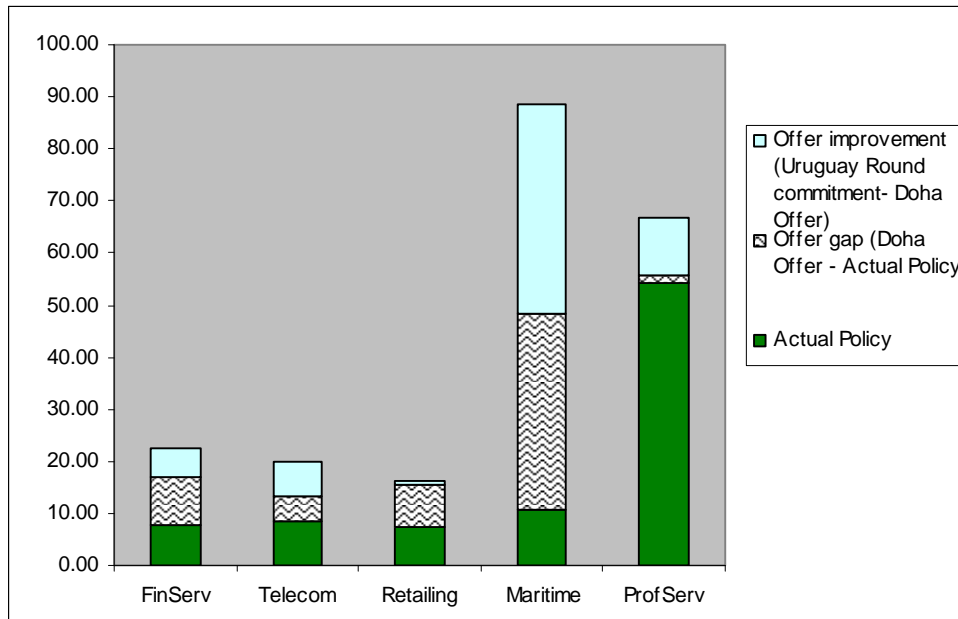
Source: Gootiiz and Mattoo (2008)

Figure 4: Uruguay Round commitments, Doha offer and actual policy by region



Source: Gootiiz and Mattoo (2008). Note: Where countries did not make a Doha offer, their Uruguay Round commitment is treated as their offer.

Figure 5: Uruguay Round commitments, Doha offer and actual policy by sector



Source: Gootiiz and Mattoo (2008)

There is a reasonable prospect that offers will be improved. The report on the status of the services negotiations (WTO 2008a) noted that further discussion was needed on issues relating to participants' level of ambition, their willingness to bind existing and improved levels of market access and national treatment, as well as specific reference to Modes 1 and 4 with respect to the treatment of sectors and modes of supply of export interest to developing countries. A “signaling exercise” among a group of Ministers is being used to seek improved offers on services in parallel with discussions on “modalities” in agriculture and non-agricultural market access (NAMA). It remains to be seen how far these improvements will bridge the gap between what is currently on the table and a more ambitious outcome (Mattoo, 2005).

IV. LDCs and the Doha Agenda

The Least Developed Countries are in an unusual situation in the Doha Agenda negotiations. This is a Round for Free for the least developed countries, so they are not required to reduce their own applied tariffs. As a consequence, the economic impacts of these negotiations on the LDCs will depend more on what other countries do than on economic reforms undertaken in the LDCs.

For most developing countries, reductions in their trading partners' trade barriers would likely bring about gains through improvements in market access. For two reasons, the LDCs are in a more vulnerable position. The first is that they already have tariff preferences for development in a number of their trading partners, and especially in the European Union. The second reason is that many LDCs are net importers of agricultural products, whose prices might be expected to rise slightly as a consequence of global trade liberalization in agriculture (Anderson, Martin and van der Mensbrugge 2006).

Where LDCs face preferential tariffs in a particular market, reductions in MFN tariffs lower the barriers facing non-LDC members, causing the LDCs to suffer from preference erosion. Where LDCs have complete duty-free access, this preference erosion cannot be overcome by increasing the depth of the preference in that market. Recognizing this, the WTO has proposed instead a broadening of these preferences to cover all developed countries and a locking-in of these preferences under the Duty-Free-Quota-Free proposal (WTO 2005, 2008c). Another direct trade policy option that might reduce the barriers facing LDCs is liberalization of rules of origin (ROOs), something that is encouraged in proposals for the LDCs (WTO 2008c).

The Hong Kong Ministerial Declaration provided for duty-free-quota-free market access for the LDCs in the industrial countries and in those developing countries able to do so (WTO 2005, Annex F). It sought this access for all products, but for at least 97 percent of products in those countries unable to provide full access initially. In terms of potential gains from improved market access, the US market is critical because all LDCs already have duty-free-quota-free access in the EU market (Hoekman, Martin and Braga 2008).

Research indicates that 97 percent may be very far from 100 percent, Carrère and de Melo (2008) and Bouët, Laborde and Mevel (2008) show that 97 percent access is very far from 100 percent. Part of the reason is that many items of export interest to LDCs are subject to zero duties. In the United States, 40 percent of these exports are subject to zero duties (Carrère and de Melo 2008, p17). A second is that some countries already offer extensive preferences on a wide range of products, leaving relatively few subject to duties. A third reason is that exports by LDCs are strongly concentrated in a few products. The export concentration of many LDCs is equivalent to exporting fewer than 10 products (Bouët, Laborde and Mevel 2008). The sharp differences in importance of MFN duty-free and preferential duty-free tariffs—and in the overall importance of dutiable imports— in influencing the shape of the Lorenz curve are indicated in Table 3.

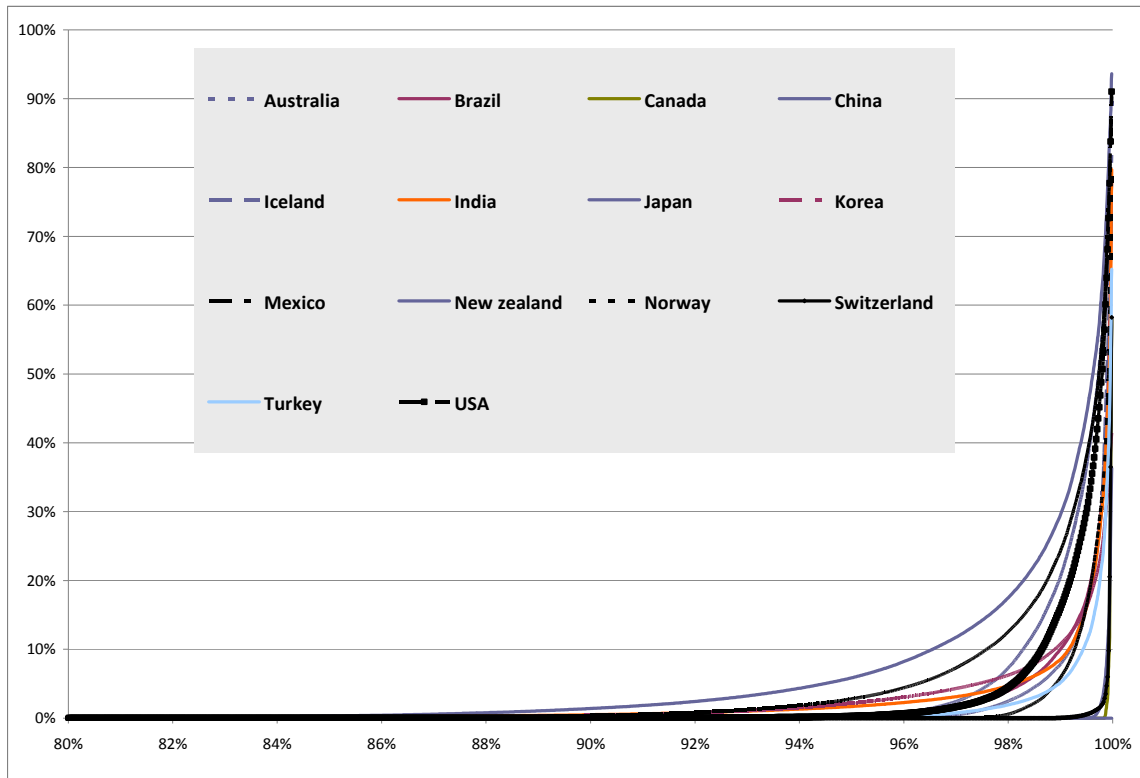
Table 3. Dutiable LDC exports

| | Non dutiable – MFN | Non dutiable – Preferential | Dutiable |
|---------------------------|-------------------------------|--|-----------------|
| Canada | 16.3 | 83.6 | 0.06 |
| Japan | 54.2 | 44.5 | 1.2 |
| Norway | 27.3 | 63.0 | 9.7 |
| Switzerland | 66.9 | 32.2 | 0.9 |
| USA | 6.1 | 48.8 | 45.0 |
| Brazil | 16.5 | 0.00 | 83.4 |
| China | 85.9 | 5.9 | 8.2 |
| India | 0.44 | 29.5 | 70.1 |
| Korea | 17.5 | 18.1 | 64.4 |
| Mexico | 6.9 | 0.00 | 93.1 |
| <i>Total (with EU)</i> | 30.4 | 51.5 | 18.1 |
| <i>Total (without EU)</i> | 27.0 | 38.3 | 34.8 |

Source: Laborde (2008) using MAcMapHS6v2 1 data.

In most of the potential markets considered, the 3 percent of tariff lines with the highest burden of tariffs accounts for 90 percent of the tariffs paid by LDCs. Figure 6 shows the share of tariffs levied on exports from LDCs for three economies in which duty-free-quota-free access might be particularly important. The figure makes clear that duties paid are extremely concentrated in many markets. In China, the 97 percent of LDC exports which yield the lowest tariff revenues account for 12.8 percent of the total burden imposed by duties. In the United States, this 97 percent of imports accounts for 2.2 percent of duties paid. In Japan this 97 percent accounts for a minuscule fraction of imports. Clearly, this high concentration of duty payments means that a 97 percent DFQF might bring about a much smaller improvement in market access than its nominal coverage of 97 percent might suggest.

Figure 6. Distribution of Tariffs Paid on Imports from LDCs



Source: Bouët, Laborde and Mevel (2008)

The binding commitment to provide duty-free-quota-free access to LDCs reduces the uncertainty about market access that has historically discouraged investment to take advantage of preferences. Developed country members will be required to provide a list of products consistent with allowing 97 percent of products originating in LDCs to enter duty free. If products cannot be deleted from this list, the longer-term benefits might be greater than suggested by Figure 6, as LDCs develop the ability to competitively produce products on the DFQF list. If, on the other hand, products can be deleted as LDCs develop the ability to compete, this advantage could be reduced, greatly eroding the value of the DFQF proposal since most developing countries—including much higher income countries than the LDCs—tend to specialize in a relatively small set of products.

Another potentially important remedy for the market access problems facing the least developed countries might be to reduce the restrictiveness and costs associated with rules-of-origin. The favorable experience of the African Growth and Opportunity Act (AGOA) LDCs with their more liberal rules of origin for textiles and clothing provides strong evidence of the important liberalizing potential of such changes for textiles and clothing. The proposals for improvements in the rules of origin for LDCs appear to be “best-endeavors” in nature, rather than providing binding commitments for improvement, although industrial country members will have to notify the WTO of their progress in implementing both duty free quota free access and rules of origin.

V. Aid for Trade⁴

Since the Hong Kong ministerial in December 2005, Doha negotiators have endeavored to increase commitments on aid for trade. The purpose was to help developing countries: (a) overcome supply side constraints that would otherwise impede many from taking advantage of new Doha-associated market access, (b) implement any Doha commitments by providing technical assistance and finance; and (c) provide assistance for domestic adjustment. Ministers expressed strong support for the Least Developed Countries, highlighting the prominent role of the Enhanced Integrated Framework to provide technical assistance and catalyze further external support.

Though measurement of aid for trade is complex, the WTO/OECD monitoring program indicates that these efforts are paying some dividends: aid for trade has increased in volume to about \$24 billion in 2006. Perhaps more important, the reported level of trade-related technical assistance has increased. At the same time, the Enhanced Integrated Framework for LDCs is slowly taking shape, and donors have earmarked some \$240 million in 2007 for its programs of technical assistance.

Second, the Aid for Trade initiative has raised the mutual awareness of the trade and development communities of the problems of the other. WTO negotiators have come to grasp that they cannot negotiate increases in aid for trade in Geneva because aggregate numeric results are the sum of country-level strategies and of decisions to deploy scarce development assistance resources among competing needs. At the same time, Ministers of Finance and development practitioners have demonstrated increasing awareness of the importance of competitiveness to economic growth, and that increased market access or trade liberalization alone is insufficient to deal with binding supply-side constraints that impinge on growth.

The pipeline of activities in the multilateral development banks and donors indicate that trade-related assistance may well increase. However, new demands are emerging in developing countries associated with the food crisis, and urgent needs for social programs may crowd out some aid for trade activities. These new demands can only be accommodated if overall official development assistance increases on a path that would allow donors to achieve the ODA levels they have set as their goal by 2010.

VI. Trade Facilitation⁵

The Doha negotiations on trade facilitation center on revisions to GATT Article V (basic rules for freedom of transit), Article VIII (regulations on fees and formalities for imports and exports) and Article X (basic rules on the publication and administration of trade regulations).

What may be included in an agreement?⁶

⁴ This Section is based on Newfarmer (2008).

⁵ This Section is based on Wilson (2008).

- Establishment of enquiry points for information on import and export regulations, customs clearance rules, and other border measures. This could include provisions for advance notice and comment on new border measures prior to adoption.
- Requirement to provide advance rulings on tariff classification and valuation for traders.
- Requirement to publish and make available on the internet trade rules and procedures for imports and exports.
- Creation of formal border agency “cooperation mechanism” for the exchange of information among members.
- Limits on inspection of goods in transit and elimination proscribed transit routes.

These are useful steps towards ensuring greater transparency in the trading system. An agreement may also play a catalytic role by creating additional incentives to improve border management systems by countries through technical support and capacity building funds from sources such as the World Bank, regional Banks, and bilateral donors. Among the major issues remaining are what manner of technical assistance will be provided and the link to commitments undertaken in the WTO with special and differential treatment for developing countries

The much larger agenda and benefits to transparency in the trading system go beyond these steps at the WTO, however. Sustained progress in a broader context requires reform at the national level in ensuring the rule of law, increasing the transparency of trade, investing in regulatory reform, and upgrading infrastructure to lower trade costs. New Bank research suggests that action in this type of broad and dynamic longer-term agenda could have a significant positive impact on world trade.⁷

⁶ This list is illustrative and does not include all items under discussion. See “Needs, Priorities, and Costs Associated with Technical Assistance of a WTO Trade Facilitation Agreement: A Comparative Study Based on Six Developing Countries, World Bank Trade Department, November 2006 and WTO Negotiations on Trade Facilitation: Compilation of Members Textual Proposals,” WTO, TN/TF/W/43/Rev.14, March 12, 2008.

⁷ “Governance, Corruption, and Trade in the Asia Pacific,” Abe and Wilson (2008, mimeo).

Annex: More Details on Assessment of the Modalities

*I: Agricultural Market Access*⁸

Agricultural market access uses a tiered formula for tariff cutting, which specifies proportional cuts in tariffs which increase when moving between each of four progressively higher bands. The four bands for developed and developing countries shown in Annex Table 1, together with the cuts to be made in bound agricultural tariffs in each band.

Annex Table 1. Tiered formulae for agricultural tariff cuts, %

| <i>Band</i> | Developed | | Developing | |
|--------------------|------------------|------------|-------------------|------------|
| | <i>Range</i> | <i>Cut</i> | <i>Range</i> | <i>Cut</i> |
| A | 0-20 | 50 | 0-30 | 33.3 |
| B | 20-50 | 57 | 30-80 | 38 |
| C | 50-75 | 64 | 80-130 | 42.7 |
| D | >75 | 66-73 | >130 | 44-48.6 |
| Average cut | Min | 54% | Max | 36% |

The Doha tariff-cutting formulae have the economically desirable feature of making larger cuts in the higher—and hence more costly—tariffs. Developing country cuts in each band are two-thirds those of the industrial countries and the bands are wider to allow for the fact that many developing countries would otherwise have more tariffs included in the higher bands.

The average-cut provision in the final row of the table is intended to cross-check the outcome of the formula against the average-cut measure of tariff liberalization used in the Uruguay Round. In the context of the Uruguay Round, this measure notoriously over-estimated the extent of liberalization—since countries could choose which tariffs to cut subject to an average-cut constraint of 36% in industrial countries or 24% in developing countries, they had an incentive to make the largest cuts on the lowest tariffs. Under the tiered formula, their largest cuts are on the highest tariffs, making the Doha formula much more ambitious than the Uruguay Round formula. The average-cut provision in the Modalities requires developing countries to increase their tariffs in all bands if they fail to meet a 54% average-cut and allows developing countries to reduce all of their cuts if their average-cut exceeds 36%.

Special provisions apply to two sets of products. Tariff escalation provisions impose higher cuts on processed products. If their tariffs are higher than their raw or intermediate products they are moved into the next higher band. If they are in the highest band, the cut imposed is raised by 6 percentage points. Tropical and diversification products will be subjected to deeper-than-formula cuts. Under one proposal, tariffs below 25% will be reduced to zero, and no sensitive product treatment will be permitted. Under a second option, tariffs below 10% will be reduced to zero, while higher tariffs will be reduced by

⁸ This section and the following section are based on Laborde, Martin and van der Mensbrugge (2008).

the cut in the top tier of the formula, except for products already in the top tier, which will be cut by an additional 8 percentage points.

Several groups of developing countries are allowed smaller tariff reductions. Least Developed Countries are not required to make any reductions. Small and Vulnerable Economies (SVEs)⁹ can make reductions 10% smaller in each band than other developing members, or may make an average-cut of 24%. Recently-acceded members (RAMs) are allowed to: make cuts reduced by 5 percentage points in the first two bands and 10 percentage points otherwise. A group of very recently acceded members (VRAMs) and transition economies is not required to make any cuts.

All countries are permitted to make smaller cuts on “sensitive” products subject to a limit on the number of sensitive products, and provisions for increases in market access under Tariff-Rate-Quotas (TRQs). Industrial countries can classify [4-6]% of tariff lines as sensitive. If the formula cut is reduced by 2/3, then TRQ access must be increased by [4-6]% of domestic consumption. Developing countries have the right to one third more sensitive products than developed countries.

Developing countries will be able to self-designate a set of special products guided by indicators and to make smaller-than-formula cuts on these products. The number of these products is to be negotiated between 8 and 20% of agricultural tariff lines. Either forty% or no Special Products would be subject to zero cuts with the remainder cut by an average of 15% with a minimum cut of 12% and a maximum of 20%.

The approach used to assess the implications of the draft Modalities for weighted average applied tariffs is set out in Annex Table 2, derived from Laborde, Martin and van der Mensbrugge (2008) using the MAcMapHS6v2 database that incorporates *ad valorem* equivalents of specific tariffs. A key feature of the analysis is that sensitive products are selected taking into account both the political support for their protection, as indicated by the share of the good in domestic expenditures, and the level of the tariff imposed, rather than by assuming the highest tariffs (which are frequently on very minor products, or not subject to cutting because of binding overhang) are selected.

The TRQ increases associated with sensitive product designation in the industrial countries were incorporated only indirectly. It seems likely that most industrial country members will opt for a reduction of two-thirds of the formula since the penalty in terms of higher TRQ expansion for making smaller cuts is relatively small¹⁰. To account for the potential liberalization resulting from TRQ expansion, the two-thirds reduction in the tariff cut was treated as a one-third reduction from the formula cut.

The estimated cuts in weighted average applied tariffs resulting from Implementation of the Modalities are given in Annex Table 3 for selected major groups of traders. The

⁹ Defined in general as countries with less than 0.1% of world trade, with some countries such as Congo, Côte d’Ivoire and Nigeria treated on the same basis in agriculture.

¹⁰ If a one third reduction from the formula is chosen, the TRQ expansion increases by 1 percentage point from [4-6]% of domestic consumption.

formulae applied without exceptions would result in a decline from 14.6 to 9% in average applied agricultural tariffs worldwide (Annex Table 3). In the WTO developed countries, the result is a cut of over 50% in applied rates, from 15.1 to 6.9%. In WTO developing countries other than the LDCs, the reduction is from 14% to 11.4%, a cut which is smaller than in the industrial countries partly because of key features of the formula—the smaller cuts and higher tier boundaries laid out in Table 1 in the text—and because of the greater binding overhang in many developing countries.

Annex Table 2. Assumptions used to assess Agricultural Market Access Modalities

| | Developed | Developing | LDCs | SVEs | RAMS |
|---|---|--|--------|--------|---|
| Bands | 0/20/50/75 | 0/30/80/130 | no lib | no lib | |
| Proportional cut | 50/57/64/70 | 33.3/38/42.7/48.7 | | | -5% pts in bands 1 & 2; -10% pts if in bands 3,4 |
| | Scaled proportionately if the average-cut (including sensitive, tropical & tariff escalation products) <54% in industrial countries; if > 36% in developing | | | | |
| Sensitive products | 5% of lines | 6.7% of lines | | | |
| | If >30% in top tier, 2%pts more | | | | |
| Special products | | 14% lines; 40% no cut & 60% with 15% cut | | | |
| Tariff Escalation Products | Cut from next higher tier applied. In top tier add 6 percentage points to the cut | | | | |
| Tropical products | t ≤ 10, Cut to zero; 10 <t≤ 75, 70% cut; t>75, 78% | | | | |
| Cotton | Cut to zero if originating in LDCs | | | | |
| Notes: Republic of Korea treated as a developing country for agriculture; a developed country for NAMA. Economies treated as Small and Vulnerable: Antigua & Barbuda, Barbados, Belize, Bolivia, Botswana, Brunei Darussalam, Cameroon, Congo, Côte d'Ivoire, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Fiji, Gabon, Georgia, Ghana, Grenada, Guatemala, Guyana, Honduras, Jamaica, Jordan, Kenya, Macau, Mauritius, Mongolia, Namibia, Nicaragua, Nigeria, Panama, Papua New Guinea, Paraguay, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sri Lanka, Trinidad and Tobago, Uruguay and Zimbabwe. Paragraph 6 economies (those with less than 35% tariff bindings) were identified as Cameroon; Congo, Cuba, Ghana, Kenya, Macau, China; Mauritius; Nigeria; Sri Lanka; Suriname; Zimbabwe. RAM treatment: China, Croatia, Ecuador, Georgia (NAMA only) Jordan, Mongolia, Oman, Panama, and Chinese Taipei. VRAM treatment in agriculture (no cuts). Albania, Armenia, Georgia, Kyrgyz Republic, Moldova, Former Yugoslav Republic of Macedonia, Saudi Arabia, Tonga, Ukraine, Vietnam. . | | | | | |

Without exceptions, the cut in the EU 27 applied agricultural tariff is from 15.2 to 6.2%—a cut of almost sixty percent of its initial value. In the United States, the corresponding cut is from 4.8 to 2.1%—a reduction of 56% from its initial value. The cut in Japan's average applied agricultural tariff is almost 16 percentage points, from 29.8% to 14%—a reduction of over 50%. In Canada, the cut would be from 10.7 to 5.1%, a reduction of more than 53%. The impact of the basic developing country formula on applied rates differs considerably depending upon the initial level of binding overhang. In India, the formula would reduce average tariffs by almost 10% of their initial level while, in China, the reduction would be from 7.8% to 5.3, a cut of 32%. In Cambodia, another recently-acceded member, the cut in average agricultural tariffs from the basic developing-country formula would be from 16.5 to 12.7, a cut of roughly a quarter. By contrast, in many former GATT Contracting Parties, such as Brazil and Nigeria, binding

overhang means that the full formula, without exceptions, would result in very small cuts in average applied rates.

Annex Table 3. Implications of the Modalities for applied agricultural tariffs, %

| | Base | Formula | Formula plus flexibility |
|----------------------------------|------|---------|--------------------------|
| Australia NZ | 2.5 | 1.5 | 1.9 |
| Argentina | 4.2 | 4.1 | 4.2 |
| Bangladesh | 16.5 | 16.4 | 16.5 |
| Brazil | 4.8 | 4.7 | 4.8 |
| Canada | 10.7 | 5.1 | 8.6 |
| China | 7.8 | 5.3 | 7.5 |
| EU-27 | 15.2 | 6.2 | 9.6 |
| Korea and Taiwan Pr. | 27.8 | 18.5 | 27.1 |
| HK & Singapore | 0.2 | 0.2 | 0.2 |
| India | 59.2 | 54.6 | 59.2 |
| Japan | 29.8 | 14.0 | 20.4 |
| Cambodia | 16.5 | 12.7 | 16.5 |
| Mexico | 3.9 | 3.3 | 3.9 |
| M.E. & N. Africa | 15.5 | 12.9 | 15.5 |
| Nigeria | 24.0 | 24.0 | 24.0 |
| Pakistan | 20.9 | 20.7 | 20.9 |
| Selected LDCs | 9.7 | 9.7 | 9.7 |
| South Africa | 6.7 | 6.1 | 6.7 |
| Sri Lanka | 18.4 | 16.2 | 18.4 |
| Thailand | 20.6 | 15.3 | 19.6 |
| Turkey | 13.6 | 11.2 | 13.4 |
| United States of America | 4.8 | 2.1 | 3.0 |
| World Bank Classification | | | |
| All countries | 14.6 | 9.0 | 11.9 |
| High income countries | 15.0 | 7.5 | 11.0 |
| Developing countries, non LDC | 13.7 | 11.8 | 13.6 |
| LDCs | 12.5 | 12.2 | 12.5 |
| WTO Classification | | | |
| Developed WTO | 15.1 | 6.9 | 10.2 |
| Developing WTO non LDCs | 14.0 | 11.4 | 13.9 |
| <i>Normal Developing WTO</i> | 15.1 | 12.3 | 15.0 |
| <i>RAM WTO</i> | 10.1 | 6.7 | 9.8 |
| <i>SVE WTO</i> | 14.0 | 12.5 | 14.0 |

The flexibilities for particular countries and commodities more than halve the estimated worldwide cut in tariffs, from 5.6% with country flexibilities to 2.7%. Interestingly, it is in the industrial countries that the tariff cut is reduced the most by flexibilities—with the tariff after incorporating the effects of sensitive products declining from 7.5 percentage points to 4 percentage points. In developing non-LDCs, these flexibilities reduce the cut from 1.5% to 0.1 percentage points—a large proportional reduction in the cut than for high income countries, but a smaller one in percentage point terms. The flexibilities have much less impact in percentage point terms because they are used in a context where the formula requires much small cuts in protection.

As noted earlier in the paper, estimates of the implications of the Modalities formulae for the tariffs facing individual members are probably more important for policy than estimates of the tariffs levied. Evaluating the former is quite straightforward for an individual country, while estimating the implications for barriers faced requires an assessment for all other countries.

Annex Table 4. Implications of the Modalities for agricultural tariffs faced, %

| | Base | Formula | Formula plus flexibility |
|----------------------------------|------|---------|--------------------------|
| Australia NZ | 17.0 | 10.0 | 13.6 |
| Argentina | 9.0 | 6.2 | 7.8 |
| Bangladesh | 14.8 | 12.6 | 14.5 |
| Brazil | 18.9 | 10.0 | 13.9 |
| Canada | 9.0 | 5.2 | 6.8 |
| China | 16.7 | 9.7 | 13.7 |
| EU-27 | 16.9 | 10.9 | 13.9 |
| Korea and Taiwan Pr. | 16.0 | 10.8 | 12.8 |
| HK & Singapore | 18.4 | 12.6 | 17.2 |
| India | 10.1 | 7.2 | 8.9 |
| Japan | 14.0 | 9.9 | 12.7 |
| Cambodia | 12.8 | 8.5 | 12.2 |
| Mexico | 4.2 | 2.3 | 3.1 |
| M.E. & N. Africa | 9.7 | 5.9 | 7.8 |
| Nigeria | 2.6 | 2.4 | 2.5 |
| Pakistan | 13.2 | 8.5 | 11.8 |
| Selected LDCs | 5.9 | 4.7 | 5.4 |
| South Africa | 10.8 | 8.0 | 9.2 |
| Sri Lanka | 12.9 | 9.4 | 11.0 |
| Thailand | 23.7 | 13.3 | 19.3 |
| Turkey | 9.0 | 5.6 | 6.9 |
| United States of America | 14.0 | 8.5 | 11.4 |
| World Bank Classification | | | |
| All countries | 14.6 | 9.0 | 11.9 |
| High income countries | 15.0 | 9.3 | 12.2 |
| Developing countries, non LDC | 14.3 | 8.7 | 11.6 |
| LDCs | 7.4 | 6.5 | 7.1 |
| WTO Classification | | | |
| Developed WTO | 15.0 | 9.2 | 12.2 |
| Developing WTO non LDCs | 14.3 | 8.7 | 11.7 |
| <i>Normal Developing WTO</i> | 13.7 | 8.8 | 11.2 |
| <i>RAM WTO</i> | 15.8 | 9.2 | 13.1 |
| <i>SVE WTO</i> | 15.6 | 8.0 | 12.6 |

Annex Table 4 shows some quite substantial reductions in the tariffs facing WTO members. The average tariff facing agricultural exporters would decline by more than one-third—from 14.6 to 9.0%—through application of the formula without exceptions. The reduction in the tariff facing industrial countries is quite similar to that facing developing countries—5.6 percentage points in the former and 5.6 in the latter. Even in

the LDCs, for whom preference erosion imposes constraints on the gains from market access, the average tariff barrier faced falls from 7.4% to 6.5%. Under this scenario, the RAMs and SVEs would benefit from particularly large reductions in the unusually high tariff barriers they face. In some specific cases, such as Australia, Brazil, China, Pakistan and Thailand the benefits from reductions in tariffs faced would be even larger. For Thailand, the reduction in agricultural tariffs faced would be over 10 percentage points.

When flexibilities for sensitive and special products, and for particular groups of countries, are introduced the reductions in tariffs are much smaller, with the reduction in global agricultural tariffs declining from a potential 5.6 to 2.7 percentage points.

2. Non-Agricultural Market Access (NAMA)

The draft modalities for NAMA (WTO 2008b) also involve a tariff formula with exceptions. The tariff formula in this case is the highly nonlinear Swiss formula, which reduces the highest tariffs by the most. The Swiss formula requires tariffs in *ad valorem* terms, and all tariffs are to be converted into *ad valorem* terms and bound in those terms.

The Swiss formula is:

$$(1) \quad t_1 = \frac{a_i \cdot t_0}{a_i + t_0}$$

where t_1 is the tariff after application of the formula; t_0 is the tariff rate before application of the formula, and a_i is a coefficient for group i .

The coefficient a_i in equation (1) will be [7-9] for industrial countries, with no flexibility for individual products. For developing countries, the coefficient is to be based on a sliding-scale with a coefficient of x =[19-21], y =[21-23] or z =[23-26] depending upon the extent of flexibility to deviate from the formula chosen. Countries choosing x =[19-21] coefficient could choose to keep [6-7]% of tariffs unbound on products covering no more than [6-9]% of imports or to make half-of-formula cuts in [12-14]% of lines on products covering no more than [12-19]% of imports. With a y =[21-23] coefficient, 5/5% of lines/imports would be allowed no cuts, or 10/10% of lines/imports with half-of-formula cuts. With z =[23-26] no flexibilities would be available.

Unbound tariffs are to be bound above 2001 applied rates, and then subjected to the Swiss formula cuts.

RAMs receive a grace period of [2-3] years and an extended implementation period of [2-5] years. In contrast with agriculture, they do not receive smaller cuts in tariffs. Very Recently Acceded Members (VRAMs) need make no further cuts. Ta

Several groups of developing countries are not required to use the Swiss formula. Least-Developed-Countries are expected to increase their levels of binding coverage. Countries

with binding coverage below 35%¹¹ are required to bind [70-90]% of lines if their binding coverage is currently below [12]%; [75-90]% if their binding coverage is between [12] and [25]%; and [80-90]% if their binding coverage is between [25] and 35%.

One group of small and vulnerable economies (SVEs), with average bound tariffs of 50% or higher, is to bind at an average level not exceeding [22-23]%, or to cut average bound tariffs by an average of 40%. The second group, with an average bound tariff between 30 and 50%, bind at [18-28]% or reduce average bound tariffs by 30%. A third group, with average bound tariffs below 30%, binds at an average level of [14-20]% and applies a minimum line-by-line reduction of [5-10]% on [90-95]% of tariffs.

The NAMA proposal includes provision for Sectoral Initiatives, for which participation is not mandatory, but agreement is to be reached when 90% of world trade is included. In most cases, it is proposed to move to zero tariffs on these products.

The assumptions used to assess the implications of the Modalities for NAMA are set out in Annex Table 5.

Annex Table 5. Assumptions made in assessing the NAMA Modalities

| | Developed | Developing | LDCs | SVEs | Para 6 |
|-------------|--|--|---------|---------|---------|
| NAMA | | | | | |
| Formula | Swiss 8 | x (i) Swiss 20+0 cuts on 6.5 8% of lines/imports x (ii) Swiss 20+ ½ cuts on 13/15.5% of lines/ imports y (i) Swiss 22+ no cuts on 5/5% of lines/imports y (ii) Swiss 22+ ½ cuts on 10/10% of lines/imports z Swiss 24.5% with no flexibilities | No libn | No libn | No Libn |
| Flexibility | None | | | | |
| Unbound | MFN 2001 + 30 % if the tariff is below half the coefficient; +20% if the tariff is above half the coefficient | | | | |

The political welfare costs associated with each of the potential five choices of formula (x(i), x(ii), y(i), y(ii) or z) were evaluated using the Jean, Laborde and Martin (2008) methodology. Based on these results, each of the 22 developing countries undertaking tariff reduction under the standard Swiss formula (i.e. non SVE, RAM or low binding coverage members) was assigned to the regime that minimized the political “pain” of tariff changes. Economies with high and uniform bindings, such as Singapore and Hong Kong chose regime z, and other countries were distributed widely across the other four regimes, suggesting that their boundaries have been placed in a way that offers useful choices for countries with different tariff regimes.

¹¹ Frequently called Paragraph 6 countries because of the paragraph in the 2004 Framework Agreement that introduced this provision.

NAMA Tariffs Levied

If the formulae were applied without exceptions¹² we estimate that average tariffs levied would fall from 2.9 to 2.1%. In the high income countries, the reduction is from 1.7% to 1.1%, a reduction of 0.6 percentage points. In developing non-LDC countries, the reduction is estimated to be from 6.4% to 4.8%, a cut of 1.6 percentage points or one quarter of the original tariff. In some developing countries, such as Bangladesh, Pakistan and Thailand application of the formula alone would appear to result in substantial cuts in average tariffs. When we consider the group of countries that would apply the standard developing country formula, the reduction in tariffs is from 3.9 to 3.1%, a cut of 0.8 percentage points—a much smaller cut than would apply were this formula also applied to the RAMs and SVEs.

Allowing the exceptions for countries and products is found to reduce the size of the cut for non-LDC developing countries from 1.6 percentage points to 0.8 percentage points. This is just above the 0.6 percentage point reduction in industrial country applied tariffs. Annex Table 6 shows that the reductions in weighted average tariffs are relatively modest in most developing countries with, for instance, Argentina reducing its average NAMA tariff by 0.7 percentage points and China by 1.2 percentage points.

¹² Under this no-flexibilities scenario, coefficient z is chosen for all developing countries.

Annex Table 6. NAMA tariffs levied, %

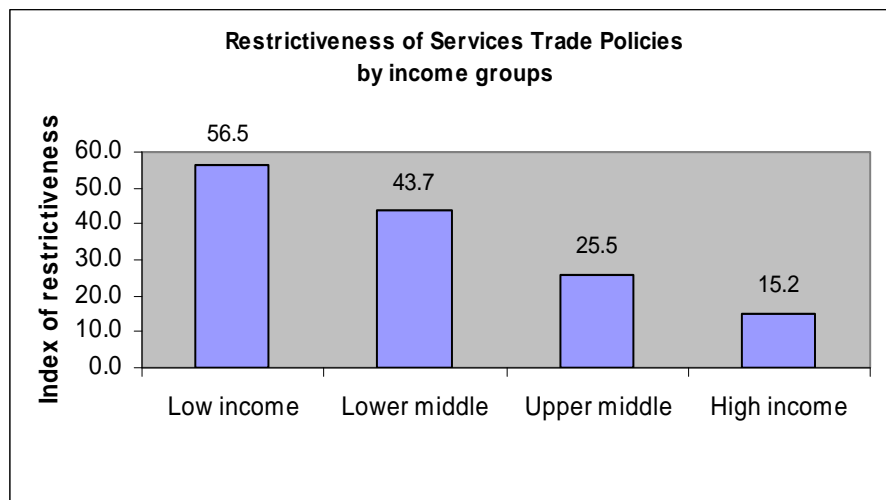
| | Base | Formula | Formula plus flexibility |
|----------------------------------|------|---------|--------------------------|
| Australia NZ | 3.6 | 2.4 | 2.4 |
| Argentina | 6.1 | 5.2 | 5.4 |
| Bangladesh | 18.3 | 12.3 | 18.3 |
| Brazil | 8.5 | 7.4 | 7.8 |
| Canada | 0.9 | 0.5 | 0.5 |
| China | 5.6 | 3.9 | 4.4 |
| EU-27 | 1.8 | 1.0 | 1.0 |
| Korea and Taiwan Pr. | 4.0 | 2.9 | 3.1 |
| HK & Singapore | 0.0 | 0.0 | 0.0 |
| India | 12.9 | 11.7 | 12.0 |
| Japan | 1.3 | 0.7 | 0.7 |
| Cambodia | 14.8 | 9.4 | 14.8 |
| Mexico | 3.0 | 2.5 | 2.5 |
| M.E. & N. Africa | 5.8 | 4.5 | 5.0 |
| Nigeria | 21.4 | 12.8 | 21.4 |
| Pakistan | 15.3 | 10.8 | 15.3 |
| Selected LDCs | 7.3 | 6.3 | 7.3 |
| South Africa | 4.9 | 4.9 | 4.9 |
| Sri Lanka | 5.3 | 4.8 | 5.3 |
| Thailand | 8.1 | 5.4 | 6.7 |
| Turkey | 1.1 | 1.0 | 1.1 |
| United States of America | 1.5 | 0.8 | 0.8 |
| World Bank Classification | | | |
| All countries | 2.9 | 2.1 | 2.3 |
| High income countries | 1.7 | 1.1 | 1.1 |
| Developing countries, non LDC | 6.4 | 4.8 | 5.6 |
| LDCs | 10.9 | 8.0 | 10.9 |
| WTO Classification | | | |
| Developed WTO | 1.7 | 1.0 | 1.0 |
| Developing WTO non LDCs | 4.8 | 3.7 | 4.3 |
| <i>Normal Developing WTO</i> | 3.9 | 3.1 | 3.4 |
| <i>RAM WTO</i> | 4.9 | 3.5 | 3.9 |
| <i>SVE WTO</i> | 8.9 | 6.7 | 8.9 |

3: Trade in Services

An evaluation of what is on the table in services is much harder than in goods. First, there is no database of actual trade policies in specific services sectors –the counterpart of “applied” tariffs. Second, the Doha negotiations in services are not based on an agreed formula for cuts in protection but on offers by each member of market access (and national treatment) in specific sectors. Third, it is hard to quantify services trade policies, which are akin to non-tariff barriers and include prohibitions, quotas, and discriminatory regulation. We describe here efforts to overcome these difficulties and construct a picture of what Doha offers in services.

An ongoing research project by the World Bank is compiling data on *actual* trade policies in services. To date surveys have been conducted in 32 developing countries and comparable information obtained for 24 OECD countries, covering five key sectors: financial services (banking and insurance), telecommunications, retail distribution, transportation, and professional services (Gootiz and Mattoo, 2008).¹³ In each sector, the survey covered the most relevant modes of supplying that service: cross border trade in services (mode 1 in WTO parlance) in financial, transportation and professional services; commercial presence or FDI (mode 3) in each services sector; and the presence of service supplying individuals (mode 4) in professional services. Survey results to date are summarized in Annex Figure 1.¹⁴

Annex Figure 1: Restrictiveness of services trade policies by income group, 2007

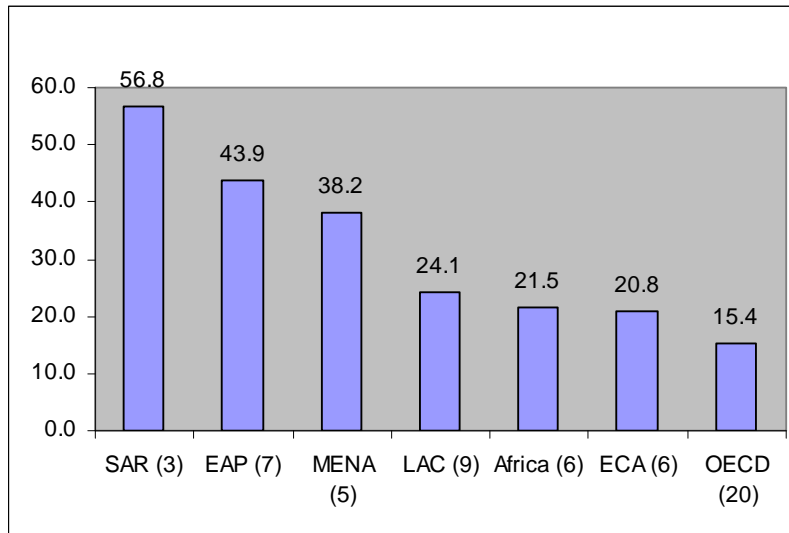


Source: Gootiz and Mattoo (2008)

¹³ The sectors are further disaggregated into banking (retail and merchant), insurance (life, non-life, and reinsurance), road transport, railway shipping, maritime shipping and auxiliary services, air transport (freight and passengers), accounting, auditing, and legal services.

¹⁴ Results of the survey are summarized in an index of restrictiveness. For each sector and mode of supply the openness of policy towards foreign suppliers is mapped on a 5-point scale ranging from 0 (for no restrictions) to 1 (very restricted), with three intermediate levels of restrictiveness (0.25, 0.50 and 0.75). Sectoral results are aggregated across modes of supply using weights that reflect judgments of the relative importance of the different modes for a sector. For example, mode 4 (temporary movement of suppliers) is important for professional services, but not for telecommunications, where mode 3 is the dominant mode of contesting a market. Sectoral restrictiveness indices are aggregated using sectoral GDP shares as weights. The country income group indices are derived using GDP weights for the countries in the sample.

Annex Figure 2: Restrictiveness of services trade policies by region, 2007

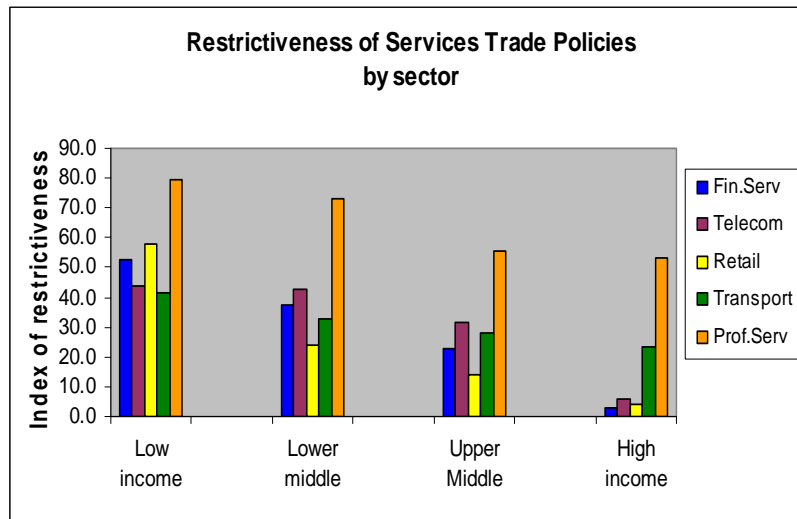


Source: Gootiiz and Mattoo (2008)

The survey reveals that developing countries have significantly liberalized a range of service sectors over the last couple of decades, but in some areas protection persists. In fact, the overall pattern of policies across sectors is increasingly similar in developing and industrial countries. In telecommunications, public monopolies seem in most countries a relic of history, with at least some measure of competition introduced in both mobile and fixed services. In banking too, domination by state-owned banks has given way to increased openness to the presence of foreign and private banks. Very few countries restrict foreign investment in retail. However, even though the markets for these services are now more competitive, they are in most countries some distance from being truly contestable. In telecommunications, governments continue to limit the number of providers and, particularly in Asia, the extent of foreign ownership. In both banking and insurance, the allocation of new licenses remains opaque and highly discretionary. In retail, a range of domestic regulations, such as zoning laws, severely impede entry in both developing and industrial countries.

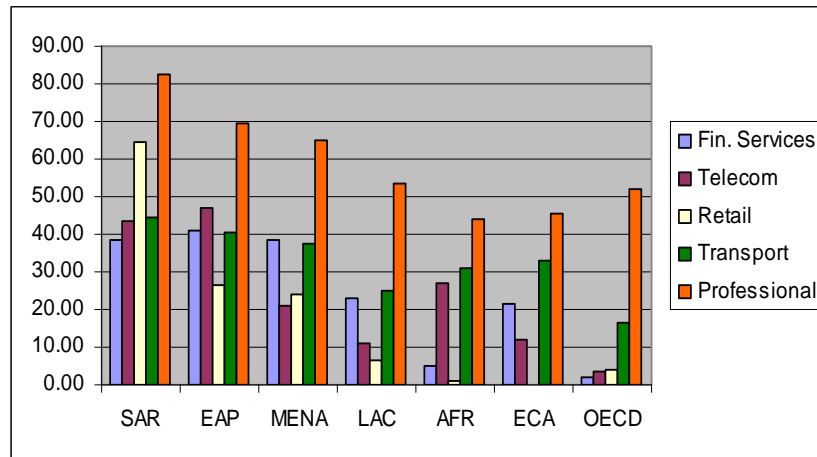
Transport and professional services remain a bastion of protectionism in high-income countries and are also subject to high barriers in developing countries (Annex Figure 2). In maritime transport, even though international shipping is today quite open, entry into cabotage and auxiliary services such as cargo handling is in many countries restricted. In air transport, restrictions on foreign investment co-exist with limitations on cabotage and cross-border trade – though conditions for freight transport are much more liberal than those for passenger transport. In professional services, even though there is increased scope for international trade through electronic means, there remain restrictions on foreign presence. In general, accounting and the practice of international law tend to be more open than auditing and the practice of domestic law. The restrictions on foreign investment are far less stringent than the restrictions on the presence of foreign professionals.

Annex Figure 3: Services trade restrictiveness indices by income group and sector



Source: Gootiiz and Mattoo (2008)

Annex Figure 4: Services trade restrictiveness indices by region/sector



Source: Gootiiz and Mattoo (2008)

Annex Tables 7-9 present measures of restrictiveness of UR Commitments, Doha offers and Actual Policy. At the regional level:

- The ECA and AFRICA regions have actual policies that are significantly more open than their UR (or accession) commitments, and comparable to those of OECD countries. But their Doha offers do not improve significantly their UR commitments and are on average much more restrictive than their actual policies.
- The OECD countries and those in the LAC region also have actual policies that are more liberal than their Uruguay Round commitments. But their Doha offers improve somewhat their UR commitments and narrow the gap with actual policies.
- Countries belonging to the MENA, EAP and SAR regions have relatively restrictive policies that do not differ greatly from their Uruguay Round binding commitments. Their Doha offers improve to some extent on the Uruguay Round

commitments, and the “offer gaps” of these countries are similar to those of the OECD and LAC regions.

Annex Table 7: Restrictiveness index of Uruguay Round Commitments

| | Financial | Telecommunications | Retail | Maritime | Professional | Aggregate |
|------------|-----------|--------------------|--------|----------|--------------|-----------|
| SAR (3) | 82 | 67 | 100 | 100 | 100 | 91 |
| EAP (7) | 53 | 51 | 61 | 24 | 70 | 58 |
| MENA (5) | 49 | 36 | 71 | 47 | 71 | 59 |
| LAC (9) | 34 | 50 | 38 | 87 | 72 | 49 |
| AFR (6) | 56 | 57 | 26 | 96 | 77 | 55 |
| ECA (4) | 43 | 29 | 0 | 63 | 53 | 32 |
| OECD (20) | 14 | 12 | 8 | 95 | 65 | 29 |
| WORLD (54) | 23 | 20 | 16 | 89 | 67 | 35 |

Note: Numbers in parentheses indicate the number of countries surveyed (2007) per region

Source: Gootiiz and Mattoo (2008)

Annex Table 8: Restrictiveness index of Doha Offers

| | Financial | Telecommunications | Retail | Maritime | Professional | Aggregate |
|------------|-----------|--------------------|--------|----------|--------------|-----------|
| SAR (3) | 55 | 43 | 94 | 54 | 88 | 73 |
| EAP (7) | 45 | 51 | 60 | 21 | 67 | 54 |
| MENA (5) | 46 | 25 | 67 | 42 | 71 | 55 |
| LAC (9) | 33 | 50 | 38 | 87 | 66 | 48 |
| AFR (6) | 48 | 25 | 17 | 65 | 75 | 44 |
| ECA (4) | 43 | 29 | 0 | 10 | 53 | 29 |
| OECD (20) | 10 | 7 | 8 | 50 | 52 | 21 |
| WORLD (54) | 17 | 13 | 15 | 48 | 56 | 27 |

Note: Numbers in parentheses indicate the number of countries surveyed (2007) per region

Source: Gootiiz and Mattoo (2008)

Annex Table 9: Restrictiveness Index of Actual Policies in Services Trade

| | Financial | Telecommunications | Retail | Maritime | Professional | Aggregate |
|------------|-----------|--------------------|--------|----------|--------------|-----------|
| SAR (3) | 39 | 43 | 65 | 39 | 82 | 57 |
| EAP (7) | 41 | 47 | 26 | 19 | 67 | 42 |
| MENA (5) | 38 | 21 | 24 | 27 | 65 | 38 |
| LAC (9) | 5 | 27 | 1 | 8 | 44 | 16 |
| AFR (6) | 23 | 11 | 7 | 16 | 54 | 24 |
| ECA (4) | 7 | 0 | 0 | 9 | 42 | 12 |
| OECD (20) | 2 | 3 | 4 | 8 | 52 | 15 |
| WORLD (54) | 8 | 9 | 7 | 11 | 54 | 19 |

Note: Numbers in parentheses indicate the number of countries surveyed (2007) per region.

Note: Completely open = 0; completely closed = 100.

Source: Gootiiz and Mattoo (2008)

At the sector level:

- Financial and telecommunications services are relatively open, and the Doha offers have significantly improved on the Uruguay Round commitments but still do not reflect actual policy.
- Retail is also quite open, but offers do not improve significantly on the UR commitments.

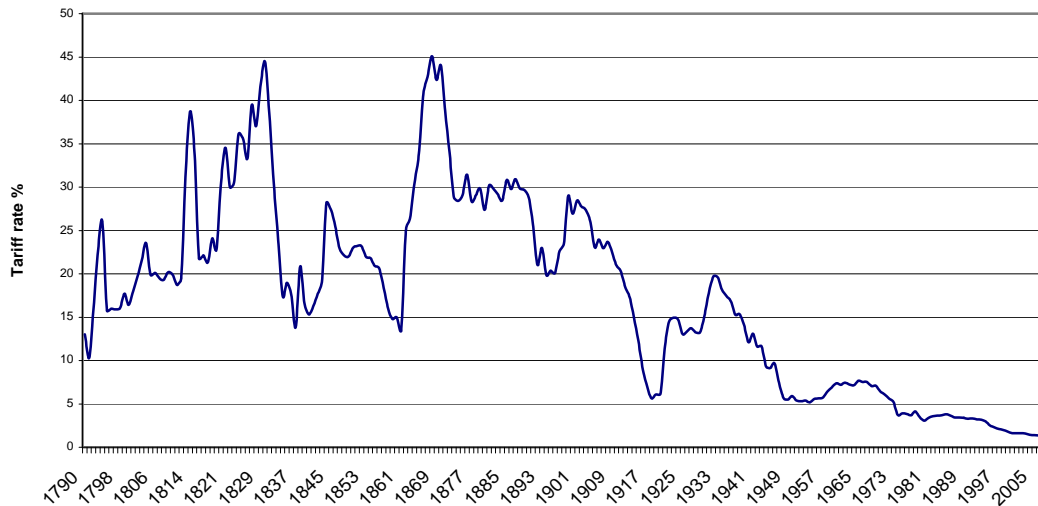
- In maritime transport, there is a huge gap between UR commitments (or the lack of them) and actual policy, which Doha offers have narrowed but only by about half.
- In professional services, actual policies are highly restrictive (especially for the presence of natural persons), and Doha offers have narrowed the gap between UR commitments and actual policy.

Appendix:

Historical Variations in Protection over Time and the Value of Bindings

Assessing the value of a binding at or above the initial applied rate requires information on the variation that would otherwise occur in the tariff over time (Francois and Martin 2004). The higher the variability of protection for any given average tariff rate, the higher will be the cost of protection because the cost of protection rises with the square of the tariff. A doubling of protection increases the cost of protection by a factor of four. Tariffs vary substantially over time in response to a range of factors, including changes in intellectual fashions regarding the desirability of liberal trade policy and responses to changes in the trade policy of trading partners. The great volatility of unrestrained protection in the United States is evident in Figure A.1 which shows average tariffs on imports into the United States between 1790 and 2007.

Figure A.1 Average import tariff collections: United States, 1791-2007, %



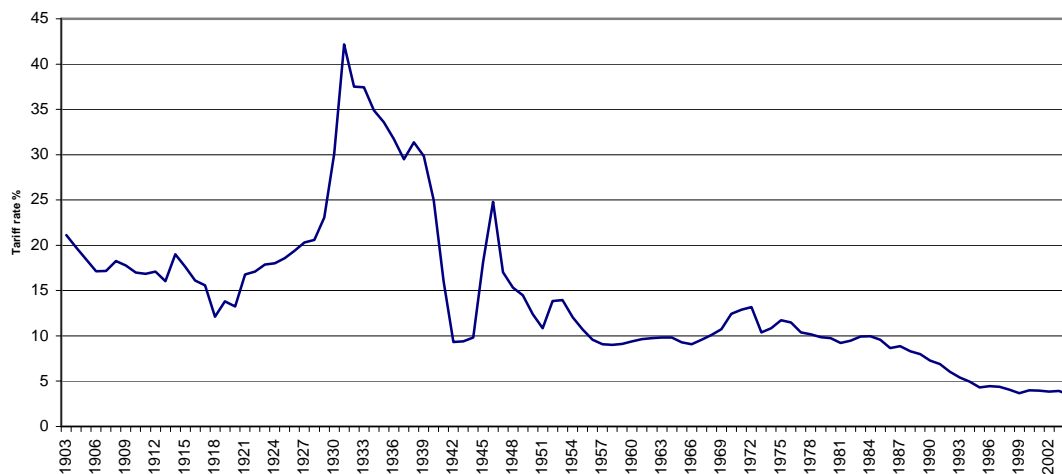
Source: US Dept of Commerce (2008).

Gardner and Kimbrough (1989) suggest that the US customs tariff series should be divided into the period before full implementation of the income tax in 1918, and the subsequent period in which tariffs were much less important as a revenue source. A key feature of the graph is the extraordinary variation in the tariff rates within both of those periods, and particularly prior to the implementation of Kennedy and Tokyo Round commitments from the late 1960s. The variability of the tariff in the 19th century was substantial, with tariffs trending upwards between 1790 and the late 1820s, oscillating around a lower average level for the next forty years, and peaking again in the late 1860s. What the graph makes clear is that—in the absence of tariff bindings—what comes down can quickly go back up again. After the diminution of the revenue imperative in 1918, for instance, average tariffs more than tripled by 1934. Worse, this increase took place in the context of rising tariffs in other major trading countries, with disastrous consequences for

world trade and economic performance. The increase in US tariffs between 1950 and 1968 was also substantial.

Another country for which a relatively long time series of data is available is Australia (Lloyd 2008). The average tariff series presented in Figure A.2 also shows very high variability. Using the Francois and Martin (2004) approach, we estimate that the variability of the tariff increased its cost by roughly one-third. In addition, the tariffs in the United States and Australia were quite highly correlated, with a correlation coefficient of 0.72. This is almost three times the critical value for statistical significance and implies that, during periods of high protection in one country, the domestic efficiency losses associated with high tariffs are likely to be compounded by losses in market access resulting from high tariffs in partner countries.

Figure A.2 Average import tariff collections: Australia, 1903-4 to 2004-5 %



Rama (1992, Figure 2) points to strong variations over time in trade policy—as proxied by the number of regulations introduced—in Uruguay between 1925 and 1983. Like the US series, his series adjusted for the size of the economy rises from 1925 to 1934, but the Uruguayan series continues rising until the mid 1940s. From then, the trend is downwards until around 1968, but then begins to rise, more than tripling by 1975.

Francois and Martin (2004) provide a simple decomposition of the welfare costs of tariffs between their mean level and their intertemporal variance. This allows the cost of protection to be identified as a linear function of the sum of the square of the mean protection rate and its variance. Based on this decomposition, the variability of US tariffs over the 220 year period for which we have data increased their social cost by over 40 percent. They also show that the value of bindings—even bindings that are initially well above applied tariff rates—may have substantial value by ruling out higher incidents of protection. Over the long historical period shown in Figure A.1, a binding at the mean value of protection—a binding to which standard non-stochastic procedures would give a zero value—would have reduced the expected value of protection by 52 percent. A

binding at 21 percent—that is 20 percent above the long run average—would have reduced the expected rate of protection by 38 percent.

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