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by

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ABSTRACT

Tariffs for industrial products are a key element of the ongoing WTO negotiations. However, rather than clarifying the issues, the framework text agreed on 1 August 2004 leaves considerable uncertainty about the future direction of the talks. According to one view, the negotiations are back at first base, with little progress in evidence since the Fifth WTO Ministerial Conference, held in Cancún. Others see the texts as the basis for an ambitious approach to tariff cutting. The more ambitious proposals imply increased imports, lower tariff revenues, some labour market adjustments and reduced output in some key sectors in some developing regions. Furthermore, the main proposals do not fully resolve problems of tariff escalation and peaks. Proposals that take greater account of the need for special and differential treatment for developing countries seem less threatening and more likely to satisfy the wishes of the growing number of WTO members from developing countries. A successful outcome requires that the main focus be on high tariffs and market entry conditions in respect of products of export interest to developing countries. In addition, some way needs be found to assist some developing countries in coping with the likely adjustment costs of liberalization.

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1. INTRODUCTION

The WTO negotiations on industrial tariffs raise a number of important development-related issues. A major issue is the extent to which they address barriers that face the key exports of developing countries as they try to expand and diversify their production and trade. This problem has been well documented in the past by the IMF, UNCTAD, the World Bank and the WTO, but much remains to be done to tackle high tariffs and tariff escalation, not to mention non-tariff and market entry barriers.

A second issue arising from the WTO negotiations is the extent to which commitments that are being sought from the developing countries contribute to their economic development. While economists generally agree that, at least in the longer term, trade liberalization is beneficial to economic development, there is considerable controversy about the relative importance of openness and institutions. There is also debate about whether certain forms of intervention may be justified on the basis of protection for infant industries or in the presence of externalities,[1] with Rodrik (2001) in particular noting that the developed countries used such intervention at earlier stages of their own industrialization. There is somewhat less debate - and comparatively little knowledge - regarding the process of adjustment, with citations of cases where rapid adjustment seems to have created few problems while in other cases there have been major disruptions.

From Doha to Hong Kong

WTO Ministers meeting in Doha in 2001 seemed to take these issues on board, declaring "international trade can play a major role in the promotion of economic development and the alleviation of poverty". Ministers also sought "to place...needs and interests [of the developing countries] at the heart of the Work Programme adopted in...[the Doha] Declaration". In relation to industrial tariffs, they agreed "by modalities to be agreed, to reduce or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as non-tariff barriers, in particular on products of export interest to developing countries. Product coverage shall be comprehensive and without a priori exclusions" (Doha Ministerial Declaration, para. 16). Full account was to be taken of the special needs and interests of developing and least-developed country participants, "including through less than full reciprocity in reduction commitments, in accordance with the relevant provisions of Article XXVIII bis of GATT 1994".

The Hong Kong, China, Ministerial Conference in December 2005 confirmed an approach based on the so-called "July Package" adopted by the General Council of WTO in August 2004 (referred to as the "NAMA Framework" in the Hong Kong, China, Ministerial Declaration). In itself the "July Package" in its Annex B of Decision of 1 August 2004 by the WTO General Council (WT/L/579) provides the framework for

[1] Externalities refer to beneficial or harmful effects occurring in production, distribution or consumption of a good or service that are not captured by the buyer or seller. Externalities exist because of high transaction costs or the absence of property rights. This implies that no market exists or that markets function poorly. Smoke from steel production is an example of a negative externality, whereas the building of a road has benefits that are difficult for the owner to capture. The appropriate policy is a tax (or subsidy in the case of positive externalities). However, because of the absence of a market, externalities are difficult to value and the appropriate tax or subsidy is difficult to determine.

future work in the NAMA negotiations that in many respects varies little from the Derbez text presented in Cancún. However, a key modification was the insertion of a new initial paragraph that states that the framework "contains the initial elements for future work on modalities" by the non-agricultural market access (NAMA) negotiating group. The framework also states that additional negotiations are required in order to reach agreement on the specifics of some of these elements, such as the treatment of unbound tariffs, flexibilities for developing countries, participation in the sectoral tariff component and preferences.

For some developing countries, the reference to "initial elements" is taken to mean that the modalities issue is wide open, and that all options are on the table. No doubt others will disagree, and negotiations will continue to be difficult as to the degree of ambition and flexibilities for developing countries.

Given the mandate of the Doha Declaration to reduce or eliminate tariffs, including tariff peaks, high tariffs and tariff escalation, in particular on products of export interest to developing countries, much attention has inevitably focused on harmonizing approaches that cut high rates more than proportionately (to be supplemented by request-and-offer and sectoral negotiations). However, some developing countries see harmonizing approaches as running counter to the Doha requirement of allowing less than full reciprocity for developing countries. Many of these countries feel that they need some policy space to use tariffs for industrial development purposes, to mitigate the impact of liberalization on output and employment in key sectors and to avoid the resort to alternative WTO measures, such as anti-dumping.

While Hong Kong and the July agreement has helped to restore momentum to the Doha Round negotiations, meeting the varied objectives of participants in the NAMA negotiations will not be easy. Among the key issues to be resolved are the following: (i) a formula has yet to be selected; (ii) consensus on participation in sectoral elimination still eludes the group; and (iii) the provisions for special and differential treatment for developing countries need to be clarified.

On the whole, a formula approach has certain advantages in simplifying negotiating procedures, and reducing the advantages that large countries have in bilateral request-and-offer negotiations. However, beyond the overall level of ambition the question remains as to the precise formula and its parameters. If these details are not worked out on a satisfactory basis, some countries may consider supporting alternative approaches, such as request-and-offer, using the phrase "initial elements" in the first paragraph as the basis for starting afresh.

Certain elements of the framework suggest that the aims are ambitious, but much depends on how these elements and the terms for developing countries are elaborated. The agreement provides for further work by the negotiating group on the reduction of tariffs by means of "a non-linear formula applied on a line by line basis". All of the pre-Hong Kong proposals on modalities would still be on the negotiating table. Even proposals such as the Indian one could be broadly described as non-linear since the core linear percentage cuts on individual lines are modulated by limiting rates to no more than three times the national average. Discussion has focused on a Swiss-style formula based on each country's national average, multiplied by another factor (the "B coefficient") that could be more or less than unity and vary by country group.

One problem regarding this approach is that it is relatively difficult for any country to compute what it has to do and to assess what others are doing — that is, it is difficult to compute the balance of concessions. This seems unnecessarily burdensome, since from an economic perspective it is possible to tailor non-linear and linear approaches to achieve very similar results for trade, welfare, output, employment and revenues, while a linear approach would be simpler and more transparent.

Beyond the formula component, the new framework also foresees possibilities for more ambitious tariff cuts/elimination for certain sectors, including those of interest for developing countries (so-called sectoral initiatives), where participation now seems to be voluntary.

Another area of ambition in the text is the proposal for increasing the binding coverage in non-agricultural products. Some developing countries have a high proportion of unbound tariffs. In the framework, it is proposed that Members would bind currently unbound rates at "[two] times the MFN applied rate". (The use of square brackets implies that the precise multiple is to be negotiated.) For countries that have low applied rates, acceptance of this formulation would lock them into a low rate regime.

Some flexibility is provided for countries that currently have a very low binding coverage. Thus, paragraph 6 of the framework states that Members with a binding coverage of less than [35%] would be exempt from making tariff reductions. Instead, they would bind [100%] tariff lines at the average tariffs for all developing countries. However, the text does not state which average would be used under this paragraph. Here the issue is whether this would be the simple or trade-weighted average (as was normally used in earlier GATT negotiations on industrial tariffs). Since the simple average is some 28% and the weighted average 12%, this choice makes a big difference.

LDCs would be exempt from tariff reductions. However, this does not imply that LDCs will have a free round, as they and some others are likely to be negatively affected by the erosion of preferences.

A range of proposals

A large number of proposals have been made in the WTO negotiating Group on Non-agricultural Products, of which six proposals had a formula as a core element. These proposals and their overall economic impact have already been examined in Laird, Fernández de Córdoba and Vanzetti (2003), who estimate that the potential static global annual welfare gains in the current WTO NAMA negotiations are around $30–$40 billion, with perhaps a third of these potential gains accruing to developing countries.[2]

However, our current analysis, which looks in some detail at estimated sectoral changes, shows that the generally modest overall results conceal important changes in trade and output in individual sectors. Some countries will achieve important gains in some key sectors, but in other countries some sectors face important adjustments. Moreover, the estimated tariff revenue losses could have a strong negative impact on government revenues in a number of countries. Finally, while preferences are included in the modified database and would be eroded as a result of MFN liberalization, our estimates do not produce any negative effects on trade for any of the developing regions in the model, although sub-Saharan Africa shows a very small decline in welfare according to some scenarios. Of course, the results in some specific countries within our regional groups could be different and there may also be some variations in specific sectors.

[2] Other studies, which introduce assumptions of imperfect competition and encompass services, generate much larger results (Brown, Deardorff and Stern, 2001). In the present study we also include services and agriculture, as explained below, but we retain the more conservative assumptions of perfect competition and constant returns to scale.

This paper elaborates on our recent analysis (Laird, Fernández de Córdoba and Vanzetti, 2003) by looking in some detail at the main implications for trade flows, tariff revenues, welfare and sectoral output for various countries and regions under proposals currently being considered in the WTO.

In order to assess the potential impact of the various proposals under consideration in the WTO, we have selected four scenarios that do not entirely correspond to specific proposals, but rather have been chosen to highlight the spread of policy options. These four scenarios we call "free trade" (full tariff liberalization in the non-agricultural sector), Hard and Soft WTO and "simple mix". The free trade proposal was presented in December 2002 by the United States in the WTO Working Group on Non-Agriculture Market Access as the second phase of a two-stage implementation process. The second and third scenarios are specific variations of the proposals included in the Framework for Establishing Modalities in Market Access for Non-Agricultural Products (Annex B of the draft Cancún Declaration, a text by the Chairman of the WTO General Council, not agreed by WTO Members), which in turn draws on the draft text by the Chairman of the NAMA Group. This Framework text places the emphasis on a non-linear formula approach to tariff-cutting, to be supplemented by sectoral tariff elimination for products of export interest to developing countries and possibly also by zero-for-zero, sectoral elimination and request-and-offer negotiations. However, the Framework text lacks specific numbers, and here we have analysed some possible variations in the key coefficient (B) in the NAMA Chairman's Draft, including the possibility of different coefficients (and hence different depth of cuts) for different groups of countries. In essence, the Soft scenario introduces important elements of special and differential treatment that are not present in the Hard scenario. The last scenario analysed, "simple mix", draws from a linear cut formula with a capping for tariff peaks and escalation, and also has elements of special and differential treatment similar to those in the Soft scenario, except for the formula component. We have also taken account of proposals for sectoral elimination on a non-voluntary or voluntary (opt-out) basis, exceptions for sensitive products, proposals to extend binding coverage, and proposals to address tariff peaks. This spread of scenarios is intended to give an indication of the development dimensions associated with the kind of ideas that are driving the negotiations, and is intended to help countries determine where their interests lie. At the time of writing, all proposals remain on the table.

The paper is structured as follows. The next section looks at the definition of adjustment costs and the fiscal implications of tariff reform. In section 3 the state of play regarding the WTO trade negotiations is explained and the various proposals on the table are described. Subsequently, the existing level of protection for world trade is analysed. Section 4 also includes some estimates of the implications of the various scenarios for tariff peaks, tariff escalation and binding coverage. In section 5 the four modelling scenarios of trade liberalization are defined in some detail, and their implications for existing bound and applied tariffs are shown in section 6. In section 7 the general equilibrium model is described and the results of the simulations of four scenarios are presented and discussed. The paper concludes with a discussion of the implications of the analysis. Potential gains from bringing the unemployed into the labour force are shown to have an impact far greater than the efficiency gains that result from an improved allocation of resources. Many developing countries might face difficulties in implementing the more ambitious tariff reductions proposed in this round of negotiations. This is something that needs further consideration in order to develop appropriate support measures to facilitate the implementation of the final agreement and to minimize the burden of adjustment.

2. ADJUSTMENT COSTS

Most trade negotiators recognize the desirability of reducing tariffs in the long term, but claim the cost of adjustment following reform is a major impediment. Furthermore, these costs, it is claimed, are likely to be greater in developing countries. This issue is examined in this section.

In trying to assess the significance of such adjustment costs, particularly in developing countries, there is little documented evidence about the scale and nature of these costs or the adjustment process of local economies in the aftermath of trade liberalization.

For informed policy-making, Governments need a better understanding of the costs to their economies following changes in their tariffs. If these are significant, it will be important to put measures in place to help developing countries cope with the real economic adjustment of further reforms so that they can indeed reap the gains from trade. If such assistance is not forthcoming, developing countries may seek to moderate the degree of liberalization and to implement agreed changes at a more moderate pace.

Adjustment costs may be defined as the cost of moving resources from one sector to another, occurring in the period immediately after changes in policies. Changes in relative prices, or regulations, make some firms or sectors uncompetitive, and this leads to a decline in output and, inevitably, use of inputs. In most sectors, labour is the major input, either directly or indirectly through its embodiment in intermediate inputs — that is, output from other sectors. The problems in moving labour from one sector to another involve (i) job search and relocation costs; (ii) retraining to provide the necessary skills; and (iii) temporary loss of income. These costs are mainly a function of the length of unemployment, which may be longer or shorter depending on the capacity of the local economy to adapt to trade liberalization and the ability of the workers to find a new job. Clearly, adjustment costs are likely to vary considerably across countries. It is generally accepted, although evidence is indicative rather than conclusive, that adjustment costs are higher where intra-industry trade is relatively low because in these circumstances labour cannot merely switch within firms or industries (Azhar and Elliott, 2001). Moving capital from one sector to another is more problematic, and it is inevitable that some or all assets will be revalued downwards or written off altogether. It may also be easier to shift capital equipment from one unprofitable line of production to another in the same sector rather than between sectors.

Estimates of these costs of adjustment vary tremendously. Studies by Magee (1972) and Baldwin, Mutti and Richardson (1980) quoted in a WTO review of adjustment costs suggest that they amount to less than 4 per cent of the benefits from trade in the long run and benefits may exceed costs even in the short run (Bacchetta and Jansen, 2003, p. 16). Other estimates, by Melo and Tarr (1990) concerning the heavily protected US textiles, clothing, steel and motor vehicles sectors, suggest that costs would amount to 1.5 per cent of the gains from liberalization even during the adjustment period. The basis for these estimates is the earnings losses of the displaced workers and the duration of unemployment.[3] More recently, a study of the United States–Canada FTA suggests that 15 per cent of the losses in employment in particular sectors in Canada can be attributed to tariff changes (Trefler, 2001).

Unfortunately, empirical evidence from developing countries is scarce, although

[3] Magee assumed a duration of unemployment of 16 weeks, 60 per cent higher than the nationwide average. However, other studies found much higher levels, closer to 40 weeks.

there is plenty of anecdotal evidence about unemployment following liberalization. The most commonly reported case is of the Mozambique cashew-processing industry (Welch, McMillan and Rodrik, 2002). Reforms initiated by the World Bank in the 1990s led to the unemployment of 85 per cent of the 10,000 process workers. Net gains to farmers were estimated to be small, merely a few dollars per year, and these were offset by the increased cost of unemployment in urban areas. While this decline in employment in one sector is dramatic, what is not documented is the fate of these workers and the impact of reforms on other sectors of the economy.

In contrast to the Mozambique example, a World Bank study found that in eight out of nine developing countries undergoing trade reforms employment in the manufacturing sector was higher one year after the initial reforms were implemented (Papageorgiou, Choksi and Michaely, 1990). Harrison and Revenga (1995) observed increasing employment following liberalization in Costa Rica, Peru and Uruguay.

Perhaps the most comprehensive analysis of developing country labour markets following trade liberalization and other forms of globalization has been undertaken by Rama (2003). He surveys over 100 papers and draws a number of conclusions. First, wages increase more in economies that integrate with the global economy, although they may fall in the short run. Openness tends to increase the returns to skilled labour and women, thus increasing inequality but narrowing the gender gap. Both of these effects have social consequences. Second, unemployment tends to be higher following liberalization, but in the long run is no higher in open economies. Third, the major threats to labour come from a financial crisis rather than competition from abroad. If these observations are correct, the policy implications for developing countries stress improving education and macroeconomic stability while integrating into the world economy. Some labour market policies, such as income support and unemployment insurance, have proved beneficial in some countries.

The question arises how best to mitigate these adverse effects. One obvious approach is to phase in policy changes so that labour and capital have more time to adjust. Paying compensation to potential losers may be useful in reducing resistance to reform. Social policies should be established to mitigate these adjustment costs that emerge from the trade liberalization process. Funding education, health and physical infrastructure such as ports, roads and telecommunications will make potential export sectors more productive and better able to compete on the international market. There is no single best approach to these issues and each country needs to understand its local political and economic environment to find the most appropriate policies.

Finally, given the general acceptance, with the usual caveats, of the proposition that there are gains to be made from trade liberalization, it needs to be considered that the decision not to move forward also represents a cost – an opportunity forgone – to be set against the transitional adjustment costs. In other words, existing intervention is not free. Let us note merely that such intervention is essentially justified because it is believed that it can bring about benefits through "kick-starting" industrialization (infant industry/economy, economies of scale, etc., arguments), offsetting declining terms of trade for commodities, and so forth, increasing export earnings, lifting the savings rate, and so on. On the other hand, it is now more frequently considered that such policies may have had a negative impact on the agricultural sector and the rural poor. Moreover, tariffs on raw materials from the minerals, fisheries, agriculture and forestry sectors, or on intermediate goods such as steel or textiles, tend to raise the cost of manufactured products, making them hard to sell overseas, and these effects of such tariffs can only be partly offset by temporary admission or duty-drawback schemes. Thus, to the extent that imports are used in the production of export goods, tariffs are a tax on exports. It is recognition of these potential long-term gains that is driving the reform process in the developing countries and, no doubt, such policies would be pursued more vigorously if institutions and supporting programmes were in place to facilitate the adjustment process.

Fiscal imbalance

Many developing countries are concerned that trade liberalization will have a significant adverse impact on government revenues because tariff revenues represent substantial contribution to public revenue. Many developing countries would have to raise taxes on income, value added, capital gains, property, labour and consumption or raise non-tax revenues to compensate. Broad-based taxes, if applied equally across all sectors, would promote a more efficient allocation of scarce domestic resources (in the absence of externalities which may include various social goals). However, such a move may be costly and the implementation of such a shift often entails the upgrading of the revenue service. Indeed, one of the main reasons for the use of tariffs is the relative ease of collection as goods cross national frontiers. How important are tariff revenues? How important are the distortions caused by this dependence? We look at those questions in this section, and, in a later section, we estimate the revenue losses from particular liberalization scenarios.

World Bank data indicate that the contribution of tariff revenues to total government revenues ranges greatly from virtually nothing in the European Union to over 76 per cent in Guinea (table A1). Less extreme examples are Cameroon and India, where tariff revenues represent some 28 and 18 per cent of government revenues, respectively. Ten countries collect more than half their revenues from tariffs and 43 countries collect more than a quarter. In OECD countries, tariff revenues represent on average 1 per cent or less.

With tariff reforms, the average level of revenue from tariffs worldwide has been declining. Table 1 shows a decline in tariff

Table 1. Collected tariff revenues as percentage of government revenue

	1975 %	1980 %	1985 %	1990 %	1995 %	Latest year %
Region						
All countries	22.4	22.5	22.0	21.0	18.9	16.2
EU	3.2	1.8	1.2	0.5	0.1	0
Japan	2.6	2.4	1.7	1.3	1.3	1.3
USA	1.5	1.4	1.6	1.6	1.4	1.0
Other developed countries	9.2	6.9	5.8	4.0	1.6	1.3
China	n.a.	n.a.	n.a.	13.8	8.8	9.5
India	16.4	22.0	26.7	28.8	24.4	18.5
Indonesia	10.3	7.2	3.2	6.4	4.0	3.1
Other developing countries	24.4	23.5	21.0	20.4	17.9	14.2
LDCs	35.9	36.2	37.4	35.0	33.8	32.0

Source: World Bank (2003).
Note: Latest year is 2001 for most countries.

revenue collected (that is, taking account of preferences) as a share of the value of imports over all regions in the last 25 years, but this is most pronounced in the OECD area. For other regions, there was virtually no change up to 1980, and then all regions show a decline as the pace of liberalization gathers.

Eliminating tariffs altogether implies that tariff revenues would be reduced to zero. To compensate, many developing countries would have to raise taxes on income, profits, capital gains, property, labour and consumption or through non-tax revenues. As we note above, broad-based taxes may be less distortionary (excluding externalities), but they are not as simple to collect as tariff revenues. Moreover, in some small countries, where most goods are imported, imposing, say, a sales or consumption tax (including an excise tax, such as many countries apply to petroleum, tobacco and alcohol) may well in practice operate largely against imports. In this case, the essential difference is that the new, domestic tax would not be subject to WTO negotiations, while revenues would be unchanged and come from the same source.[4]

The main issue here is the cost of raising taxes through tariffs versus alternative measures. Theoretical evidence suggests that reducing trade taxes and replacing them with a consumption tax is generally welfare-enhancing (Keen and Lightart, 1999). This is because trade taxes discriminate between traded and non-traded goods, whereas as consumption taxes applying to domestically produced and imported goods are usually considered to be less distortionary. However, switching the source of tax, even if revenue-neutral, would have distributional effects in favour of consumers of imported goods. Like tariff reform, tax reform more broadly has adjustment costs (such as retraining of officials, new computer equipment and programming after the preparation and passage of new tax laws) and the costs of merely collecting a broad-based tax may be higher than a border tax. These effects are in addition to the distortionary effects.

Estimates using the Global Trade Analysis Project (GTAP)[5] database and UNCTAD tariff data tend to confirm the desirability of switching from trade taxes, although the data say nothing about the cost of making the switch. The data indicate that in 27 out of 34 countries the distortionary costs of tariff revenues, at the margin, exceed the cost of output tax revenue and thus a switch from one source of revenue to another would be beneficial (table 2). A marginal cost of funds of $1.10 means that raising the last dollar of revenue is associated with a net cost of $0.10. Governments have $1 to spend, but taxpayers are $1.10 worse off. For example, in China and the Republic of Korea the cost of raising $1 in tariff revenue was estimated at $1.56 and $1.49, respectively, whereas $1 in output tax costs $1.27 and $1.13, respectively. On the other hand, in Japan the cost of raising $1 of tariff revenue is only $1.12 compared with $1.44 for output taxes, thus reversing the implications. In general, higher taxes are related to the higher cost of raising revenue. High-taxation countries with low tariffs such as Denmark and Sweden tend to be in the top section of table 2, where the costs of raising output, income or consumption taxes exceed the cost of tariff revenue. Developing countries with high tariffs and low, broad-based taxes tend to be in the lower half of the table, where raising tariff revenue is relatively more expensive.

[4] There are of course many wider taxation issues, linked to social policies, which are not the focus of this study. These include the use of progressive taxation (or exemptions) as a means of redistributing wealth (poverty alleviation). Some product-specific taxes are used to discourage consumption. Taxation is also increasingly being used to encourage environmentally friendly production and consumption.

[5] GTAP http://www.gtap.agecon.purdue.edu/.

Table 2. Marginal costs of tariff and output tax revenue for selected countries

Country	Cost of raising $1 in tariff revenue $	Cost of raising $1 in output tax revenue $
Tariffs more efficient		
Canada	0.915	1.000
Denmark	1.013	1.029
Japan	1.125	1.442
Mexico	1.024	1.340
Sri Lanka	1.241	1.337
Sweden	1.176	1.200
United Kingdom	1.016	1.173
Output tax more efficient		
Argentina	1.057	1.035
Botswana	1.099	1.001
Chile	1.083	0.995
China	1.556	1.268
Finland	1.241	1.008
Germany	1.262	1.207
Hungary	1.106	1.005
India	1.311	1.155
Indonesia	1.060	1.001
Malaysia	1.092	1.037
Morocco	1.153	1.002
Mozambique	1.105	1.052
Peru	1.176	1.003
Philippines	1.241	1.001
Poland	1.252	1.001
Republic of Korea	1.488	1.134
Singapore	1.372	1.333
Thailand	1.206	1.122
Turkey	1.270	1.041
Uganda	1.148	1.000
United Republic of Tanzania	1.196	1.010
United States	1.112	0.995
Uruguay	1.200	1.026
Venezuela	1.295	1.273
Viet Nam	1.281	1.078
Zambia	1.255	1.062
Zimbabwe	1.139	1.001

Source: Ebrill (2003), with GTAP 5.3 database.

As a result of the tariff reforms and to offset the decline in revenues, many countries have revised their fiscal systems to shift the burden to domestic taxes. These reforms cover the structure of the customs tariffs and other taxes as well as the reform of administrative machinery. In developing countries with large informal economies, these costs may be a significant impediment. Nonetheless, in addition to removing distortions, several factors may compensate Governments for reductions in tariffs:

- Where tariffs are reduced rather than eliminated and/or where non-tariff barriers are reduced, tariff revenues may rise as a result of increased trade, and this appears to have been the case in a number of countries at the early stage of implementation of World

Bank trade reform programmes. The explanation is related to the responsiveness (elasticity) of imports to tariff changes.

- A reduction in rates may reduce evasion (smuggling) to a significant degree. If tariffs fall, it may no longer be worthwhile evading normal trade procedures.

The conclusion is that while reductions in government revenues are a concern for developing countries in particular and even more so for some countries heavily dependent on this source, there are compensating factors that can partially or in some cases completely offset the revenue reductions for some level of reform. On the other hand, complete tariff elimination necessarily implies the elimination of the tariff revenue source. The main issues then are the speed and cost of implementing new tax laws and the associated changes in fiscal administration.

3. THE STATE OF PLAY IN THE WTO NEGOTIATIONS

Historically, there has been relatively little discussion during trade negotiations of the adjustment process and the fiscal effects of tariff liberalization, in part because, prior to the Uruguay Round, few demands were made on developing countries. However, the Uruguay Round saw increased active participation in the negotiations by the developing countries as demandeurs, and they were also asked to make substantial contributions. To some extent, the developing countries felt that they had not made much progress in opening up markets for their key exports by simply relying on special and differential treatment. In addition, they had also been making considerable strides towards the liberalization of their own economies, usually under World Bank/IMF lending programmes, and they felt that there was an opportunity to "cash in" on these reforms by active participation in the negotiations. On the other hand, the developed countries started to take a tougher line on seeking developing country reforms, both because they felt that this was good for the developing countries and because they saw that some developing countries were emerging as important markets.

In the aftermath of the Uruguay Round, developing countries began again to question the value of the efforts they had been making on trade reform. They felt that they had not benefited from the promises of big trade and welfare gains from the Uruguay Round, while they were taking on increasing and costly commitments. Moreover, in the wake of the economic crises of 1997-1998, many developing countries suffered serious setbacks with falling output and rising unemployment – even "de-industrialization" - some of which was attributed to the trade reforms. In addition, economists such as Rodrik and Stiglitz started to challenge the linkage between trade openness and economic growth, emphasizing institutional factors as a key to development.

Accordingly, in the current WTO negotiations, which are supposed to have a strong development component, the accumulation of disillusion and concern has led developing countries right from the start to seek some leeway or policy space regarding any new commitments that they may be required to undertake.

The WTO's Cancún Ministerial Conference was unsuccessful in finding consensus on non-agricultural market access, although the lack of success may have reflected other issues that are cross-linked through the "single undertaking" ("nothing is agreed until all is agreed"). Despite the intensive negotiations in the two years following Doha and the various proposals on the negotiating table, no agreement was achieved in Cancún on the modality or