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# SMOKE AND MIRRORS: MAKING SENSE OF THE WTO INDUSTRIAL TARIFF NEGOTIATIONS

## POLICY ISSUES IN INTERNATIONAL TRADE AND COMMODITIES
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## 2. Adjustment costs

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## 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.

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[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