

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
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**SMOKE AND MIRRORS:
MAKING SENSE OF THE WTO INDUSTRIAL
TARIFF NEGOTIATIONS**

**POLICY ISSUES IN INTERNATIONAL TRADE
AND COMMODITIES
Study Series No. 30**

7. Simulating alternative scenarios



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Table 8. Tariff escalation: Impact of partial liberalization on trade-weighted applied tariffs

	Primary	Intermediate	Final
	%	%	%
Developed countries			
Initial rate	0.4	3.0	3.4
Free trade	0.0	0.0	0.0
Hard	0.1	0.5	0.4
Soft	0.1	0.8	0.7
Simple	0.3	1.5	1.9
Developing countries			
Initial rate	6.0	9.1	8.0
Free trade	0.0	0.0	0.0
Hard	2.8	3.3	2.4
Soft	4.9	6.7	5.9
Simple	5.1	6.9	6.2
Least developed countries			
Initial rate	6.9	18.0	12.0
Free trade	0.0	0.0	0.0
Hard	6.9	18.0	12.0
Soft	6.9	18.0	12.0
Simple	6.9	18.0	12.0

Source: derived from UNCTAD TRAINS database and UN COMTRADE database. Tariffs are trade-weighted applied tariffs.

7. SIMULATING ALTERNATIVE SCENARIOS

Simulations are undertaken using the GTAP 5.3b database, modified by the authors to take greater account of preferences and the percentage or *ad valorem* equivalent of specific rates of duty (mainly affecting the agricultural sector, which is treated as a single sector in this paper). The original database has 78 countries and regions and 65 sectors that are aggregated as shown in the Appendix tables for the present study. GTAP is a general equilibrium model that includes linkages between economies and between sectors within economies. Industries are assumed to

be perfectly competitive and are characterized by constant returns to scale. Imports are distinct from domestically produced goods as are imports from alternative sources. Primary factors (capital, labour and land) are available in fixed amounts and are fully utilized; that is, there is no unemployment and the labour market adjusts through changes in wages (although we vary this assumption later). Labour and capital can move between all sectors, whereas land is mobile only within the agricultural sectors. The database includes tariffs, export subsidies and taxes, and subsidies on output and on inputs such as capital, labour and land. Border measures are specified bilaterally, so

that the impact of preference erosion can be ascertained. UNCTAD has modified the bilateral tariff data to better reflect existing preferences.

In this type of model, the results are driven by improvements in the terms of trade (e.g. export prices rising faster than import prices) and the efficiency effects of improvements in the allocation of resources between different activities. The results are based on a comparative static analysis, comparing a pre- and post-liberalization situation, without taking account of transition periods or adjustment costs, such as we discussed earlier. As we shall see, while the overall adjustments may be minor, the effects on specific sectors may be quite significant. We have no information that would allow us to take account of any social benefits or externalities – divergences between social costs and benefits (some of which are so-called non-trade concerns) that derive from current intervention in favour of the industrial sector. These factors need to be properly evaluated and taken into account in policy design in the context of any trade or sectoral policy changes resulting from the WTO negotiations or another process.

The quantitative analysis presented in the paper is also limited in that it is not able to take account of all distortions in production and trade. For example, SPS and TBT barriers appear to be of increasing importance, especially in the agricultural sector. Similarly, the paper is unable to address concerns about market entry, which is not always assured even when formal barriers are lifted. In some instances, large marketing companies have a dominant position in the trade of certain products and may capture some of the benefits that would otherwise be passed to producers in the developing countries. Furthermore, in the services sector, our estimates of impediments to trade may not necessarily reflect the actual situation.

8. THE IMPACT OF TRADE LIBERALIZATION

Trade negotiators obviously have a number of objectives in WTO negotiations and these have evolved to take greater account of broader economic and social objectives, as indicated by the Doha Declaration. Nevertheless, the immediate interest of negotiators is in trade flows. Changes in export revenues are a guide to the potential benefits from the negotiations. Although the main reason for exporting goods and services is to purchase imports, an increase in imports is commonly seen as a negative impact because it displaces domestic production. This is a problem if the displaced production is in politically sensitive sectors, by virtue of location, culture or dependence. A third concern is tariff revenues. Many Governments rely heavily on tariffs for government revenues, and the need to replace tariff revenue with alternative sources can be a costly burden for Governments with limited administrative capacity. A final concern is the labour market. A flood of imports may cause an increase in unemployment or a fall in the wage rate, with undesirable social and political consequences. For these reasons we assess each scenario in terms of export revenues, imports, government revenues, welfare, sectoral output and real wages.

Export revenues

The estimated effects on export revenues from the implementation of the four scenarios outlined earlier are shown in terms of percentage increases in table 9. In general, the degree of ambition can be assessed by the global change in revenues, with more ambitious scenarios generating a greater change in revenues. However, this does not necessarily apply for individual sectors or countries. There are increases in exports in all regions in all partial liberalisation scenarios.¹⁵ Under the less ambitious Simple

¹⁵ There are also increases in global export revenues in all sectors, with the exception of the resources sector (coal, oil, gas and minerals).