

GTAP-related activities within the WTO

GTAP Advisory Board Report, Chile, June 2009

I. GTAP-related activities

Increasing transparency and understanding of modelling methods for trade policy in general and GTAP in particular

- With the view of diffusing an understanding of modelling techniques and data requirements for models, the WTO has organised a one-week course for its staff on GAMS and Mirage and subscribed a partnership with CEPII on the use of Mirage. The course also covered issues related to the GTAP database and highlighted data needs.
- Discussion at the launch of the GTAP-based study on the impact of the Doha Round on Brazil by ILO and Carnegie Endowment

GTAP-related papers prepared by WTO Staff

A number of GTAP-related studies have been published in the last years by WTO Staff. Some of these studies have been published as WTO discussion papers or WTO working papers. Among these are:

Roberta Piermartini and Robert Teh "Demystifying Modelling Methods for Trade Policy", WTO Discussion Paper (N. 10).

Alexander Keck and Roberta Piermartini (2005) "The Economic Impact of EPAs in SADC Countries", Staff Working Paper Series ERSD-2005-04 The paper assesses the impact of various liberalization scenarios between the EU and Southern African countries in the framework of Economic Partnership Agreements.

Hildegunn Nordas (2004) "The global textile and clothing industry post the Agreement on Textiles and Clothing", WTO Discussion Paper Series No. 5. The paper uses GTAP to assess the impact of the removal of import quotas in the textile and clothing sector.

Lee Ann Jackson of the Agriculture and Commodities Division has used GTAP in a series of papers co-authored with Kim Anderson that examine how the adoption of new agricultural biotechnologies affects the welfare of key groups within both adopting and non-adopting countries, focussing on the implications for Australia, New Zealand and Sub-Saharan Africa. Her works are:

[Global Responses to GM Food Technology: Implications for Australia](#) (2004) RIRDC Publication No. 04/xx, Canberra: Rural Industries Research and Development Corporation, 2004 (forthcoming)

[GM Food Crop Technology: Implications for Sub-Saharan Africa](#) (2004) April 2004 (for presentation at the Conference on African Development and Poverty Reduction: The Macro-Micro Linkage, Somerset West, South Africa, 13-15 October 2004.)

[GM Food Technology Abroad and its Implications for Australia and New Zealand](#) (2004) Paper presented at the Annual Conference of the Australian Agricultural and Resource Economics Society, Melbourne, 11-13 February 2004.

[Standards, Trade and Protection: The Case of GMOs](#) (2003) Presented at seminars at the World Bank in Washington DC, 2 October and the University of Minnesota, 6 November 2003 (revised version being submitted to a journal)

II. Update on WTO work on a comprehensive Protection Database

CAMAD (Consolidated Analytical Market Access Database) is a joint WTO-UNCTAD-ITC project. It aims at providing a single set of tariff data. It covers applied preferential and MFN tariff rates and includes *ad valorem* and AVEs for non-*ad valorem* protection data. The data set matches data from IDB (official MFN applied rates and preferential rates) CTS (bound rates) and TARMAC (preferential collected data) at the tariff line level. The dataset provides tariff information over time (1996 onwards). **Data is available on the web.**

III. Suggested strategy for further work

- **Improve credibility of the current model**

There is a general recognition that credibility of GTAP results could be enhanced through improved transparency and through taking effective steps to encourage the conduct of validation and/or sensitivity analysis in GTAP-related studies. The conduct of validation and/or sensitivity analysis could be a requirement for posting papers on the GTAP website.

- **Improve credibility of current data**

Data on duty collected have not bearing with reality. For China, for example, they are about three times higher than reality. Tariff revenue implications of trade liberalization for developing countries are an important issue.

- **Improve modelling options**

Recent studies on the impact of the Doha round have highlighted that results are very sensitive to the specific assumptions with regard to the labour market and the production function. An important achievement would be to improve GTAP flexibility to work with different assumptions. This would allow modellers to test the sensitivity of their results against different hypotheses and provide policy makers with more informed information.

In particular, most WTO members are developing countries. The possibility of working with hypotheses that better reflect the structure of these countries would be a great improvement.

- **Add new data**

- In order to allow GTAP users to assess the impact of negotiations on their economies, it would be crucial to include bound rates.

- It would be of great importance, especially in the view of the development focus of the Doha Round, to advance in the direction of including data on income distribution in the GTAP Database. In this context, it is essential to improve the quality of the primary factor split (with the exception of 15 developing countries, returns to self-employed labour are included in capital);

- The dataset on environment could be expanded so as to include air pollution, water pollution and energy efficiency. At present, GTAP only focuses on climate change, and this does not allow for an assessment of other environmental issues that are central to the political debate.

- **Issues that may require long-term consideration**

- In the light of the work that has been undertaken on measuring non-tariff barriers and the importance of NTBs in the negotiations, it could be interesting to explore how NTM's could be captured by GTAP models.

- Developing aggregations that more closely reflect the negotiations may provide to be useful (e.g. environmental goods and services);

- There is need to improve the coverage and the quality of data on services trade and protection.

- It would be important to account for export processing zones in order to conduct more accurate trade flow and tariff revenue analyses.