

GTAP Advisory Board Meeting, June 2001
United Nations Conference on Trade and Development (UNCTAD)

GTAP-related activities of UNCTAD

Since the last Advisory Board meeting (April 2000), UNCTAD has continued and expanded on its GTAP-related activities, in particular as regards the use of the GTAP database and model in its analytical work on trade and development.

Research

The GTAP model and database (prerelease of v.5) were used to conduct the following UNCTAD studies:

1. A study on the economic impact of China's accession to the WTO was carried out in 2000. The standard model was modified to project the Chinese economy to 2005 under two scenarios: a base case in which China does not liberalise, and an alternative in which China does liberalise and joins the WTO. The following specifications were applied: 23 sectors and 30 regions (25 of which are developing countries); the 1998 applied MFN rates for China; and the preferential rates granted to China by the EU, Japan and Canada. The results of the study are expected to be published as an UNCTAD working paper later this year.
2. Duty-free market access for LDCs was the focus of a major UNCTAD study, which included a CGE analysis using GTAP. The data were aggregated into 22 sectors and 19 regions, including 6 LDC regions and each Quad country as a stand alone region (EU as an aggregate). The database was modified to take account of effective LDC preference margins granted by Quad countries in each sector. Two policy scenarios were simulated: (i) the elimination of tariff and non-tariff barriers against LDCs in the EU, and (ii) the elimination of tariff and non-tariff barriers faced by LDCs in all Quad countries. The results of the study have been published as a joint UNCTAD/Commonwealth Secretariat study, entitled "Duty and Quota Free Market Access for LDCs: An Analysis of Quad initiatives", UNCTAD/DITC/TAB/Misc.7, London and Geneva, 2001.
3. A 6-region, 13-sector aggregation of the standard GTAP model was used to analyse the impact of electronic commerce on the global economy. Two simulations were carried out. The first assumed a cost reduction in services in developed countries due to e-commerce and the use of information and communications technologies, simulated through an increase in productivity in the services sectors (i.e. a technological shock). The second experiment simulated a cost reduction in the developing countries only. A one percent productivity increase in each service sector was simulated to show its effect in the developing countries, vis-à-vis the developed countries. The study is available as a draft working paper entitled "Electronic Commerce and Developing Countries: A Computable General Equilibrium Analysis", by Juan Pizarro.

Database development

The new TRAINS version 8.0 database on protection and tariff data for 119 countries was released in April 2001. The applied MFN rates included in TRAINS have served as a regular input to the GTAP protection database. UNCTAD has also spent a considerable amount of time on the further development of WITS (World Integrated Trade Solution), a new trade information system being developed in close cooperation with the World Bank. WITS is comprised of both a user-friendly software offering a large number of data-retrieval options and a database including trade data dating back to 1962. WITS contains import and export data from the UN Comtrade database and tariff and non-tariff data from TRAINS. A preliminary version of WITS is currently operational, but the programme is still being improved in its functionalities. Among others, WITS will be able to aggregate tariff data according to the GTAP region and sector classifications and will therefore considerably facilitate the provision of data to GTAP. Applied MFN tariff rates are already being supplied through WITS to the GTAP database.

Other database work included UNCTAD's contribution to the inter-agency Agricultural Market Access Database (AMAD) Group (comprising FAO, UNCTAD, OECD, Agriculture and AgriFood Canada, the European Commission and USDA-ERS), which provides data on tariffs, tariff-rate quotas, trade, production, consumption and conversion factors for about 50 WTO member countries. The first version of AMAD was released in September 2000 and can be easily downloaded from the Internet (www.amad.org). AMAD now serves as an important supplier of GTAP agricultural tariff data.