

2015 Agency Report

Inter-American Development Bank (IDB)

The Integration and Trade Sector of the (INT) is responsible for coordinating and carrying out the CGE modeling activities of the IDB. It coordinates with other Divisions and Sectors, as needed, including the Infrastructure and Natural Resources Sector (INE) and the Research Department (RES).

During 2014 and 2015 the IDB areas of intervention in this area have been: 1) upgrade of IDB CGE models and databases; 2) Contributions to the GTAP database; and 3) Research network strengthening.

(1) Upgrade of IDB CGE models and databases

During 2014 the demand for CGE modeling to the IDB has been subdued.

Most of the focus has been on the assessment of the so-called mega-regional trade agreements: a) the Trans-Pacific Partnership (TPP); b) Transatlantic Trade and Investment Partnership (TTIP); and c) the Pacific Alliance (Mexico-Chile-Colombia-Peru). In each of these cases, the key policy issue characteristic is one of convergence: superimposing a trade integration architecture on a group of countries that have FTAs already in place among subsets of participants. Full evaluations for each trade agreement were made from the viewpoint of Latin America, using IDB-INT's trade-focused model (recursive dynamic), with 15 sectors, 32 regions (17 countries and regions for LAC). The 2007 SAM database was fully constructed on the basis of GTAP database version 8.2 (2007 base year). In order to examine comprehensive packages of trade agreements, the model accommodates five policy variables: (i) applied tariffs; (ii) NTBs for merchandise trade; (iii) ad valorem equivalents for services trade barriers; (iv) trade facilitation; and (v) rules of origin (tentative). The results have been used for policy advice to governments and have not been published.

The Research Department (RES) continues to work on the development and use of single countries CGE models for LAC countries, in particular to explore the effects of climate change policies. In this context two papers were published: (i) Chisari, O. and S. Miller "Does Firm Heterogeneity Impact the Effectiveness of Carbon Taxes? CGE Experiments in Argentina and Mexico", IDB-WP-524, Inter-American Development Bank; and (ii) Chisari, O. and S. Miller "CGE Modeling: The Relevance of Alternative Structural Specifications for the Evaluation of Carbon Taxes' Impact and for the Integrated Assessment of Climate Change Effects: Simulations for Economies of Latin America and the Caribbean" IDB-TN-740, Inter-American Development Bank,

Within the Infrastructure and Natural Resources Sector (INE), the Agriculture, Rural Development, and Disaster Risk Management Division (INE/RND) is leading a regional initiative for the integration of the UN System of Environmental-Economic Accounts (SEEA) data into a SAM database and dynamic CGE modelling framework. This Integrated Economic-Environmental Modelling framework (IEEM) will enable evaluation of policy and investment impacts on standard economic indicators as well as on the stocks and flows of environmental resources used in productive processes. IEEM will thus have the power to describe policy impacts on the underlying natural capital/wealth of a region/nation. IEEM is being piloted in Guatemala which is the most advanced country in LAC in accounting under SEEA. The project is carried out in collaboration with CEDLAS (Universidad Nacional de la Plata, Argentina), CoPS (Victoria University, Australia), and the World Bank.

In the sector work related to tourism, the following country models have been or are being constructed: (i) Haiti dynamic CGE linked with a microsimulation model for poverty analysis, base year 2013 (status: completed). This is the first CGE model for Haiti, and the underlying databases could readily be reformatted to meet GTAP requirements. The opportunity to do so is being explored. Results are forthcoming in Banerjee, O., Cicowiez, M. and Gachot, S. A Quantitative Framework for Assessing Public Investment in Tourism- An Application to Haiti. Tourism Management; (ii) Belize dynamic CGE, base year 2011 (status: in progress). This model is based on an extract from the GTAP 8 database, and (iii) Dominican Republic CGE, base year 2010 (status: in progress). This model is based on supply and use and integrated economic accounts for 2010 and therefore constitutes an update to the Dominican Republic's current representation in GTAP.

(2) Contributions to the GTAP database

IDB financed the update of Paraguay in the GTAP database and updated it for version 9. As of 2015, the number of LAC countries represented in the GTAP database has reached its maximum coverage with a total of 21 countries.

During 2014 a consistent database of 16 LAC countries was generated to be included with the GTAP-POV model and database. It is expected that during 2015, preliminary results will be obtained, looking into the poverty impacts of climate change in LAC. Based on those results, the GTAP Technical Paper No. 31 "GTAP-POV: A Framework for Assessing the National Poverty Impacts of Global Economic and Environmental Policies" will be updated during 2015.

(4) Research network strengthening

The Fifth Regional Conference on General Equilibrium Models was held in Bogota, Colombia in October 2014. The meeting brought together 30 researchers and experts from international organizations and universities from LAC countries, as well as a number of CGE modelers working on LAC. The Regional Meeting covered areas related to development policies, fiscal policies, international trade, climate change and environment, as well as methodological approaches to modeling. The event was organized by the IDB and the Economic Commission for Latin America and the Caribbean (ECLAC), in collaboration with local universities and Government institutions.