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, including the Climate Change and Sustainability Division at the Infrastructure and Environment Sector (INE/CCS) and the Research Department (RES).

During 2013 and 2014 the IDB areas of intervention related to CGE have been: 1) upgrade of IBD-INT’s CGE model and databases; 2) Support of GTAP database I-O Tables for LAC; 3) Poverty analysis database and modeling; and 4) Capacity building program; and 5) Research network strengthening.

(1) Upgrade of IDB-INT CGE model, other models and database update

As part of the technical assistance in evaluating trade and integration policies that IDB-INT provides to LAC countries, there are three geographic groups where CGE simulations can shed light on the potential impact of major policy developments, namely: a) the Trans-Pacific Partnership (TPP); b) Transatlantic Trade and Investment Partnership (TTIP); and c) 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).

Data sources for each policy variable are: (i) GTAP database for tariffs; (ii) NTBs estimations are based on World Banks’ NTB dataset for merchandise (Looi Kee, H., Nicita, A. and Olarreaga, M. (2009)); (iii) Services barriers estimations are based on CEPII working paper (Lionel Fontagné, L., Guillin A., and Mitaritonna, C., (2011) (iv) GTAP database for trade wedges between CIF and FOB; and (v) Petri et al. (2011) or compliance cost approach, which is under consideration.

The Research Department (RES) has also continued to work on single country CGE models with a focus on climate change issues. In particular during 2013 work was done to look at the effects of environmental taxes in different countries in the region. In addition to this work was undertaken to look at topics that are of particular interest for the region such as informality and the interaction of carbon taxes in the context of economies with high informality.

(2) Support of GTAP database I-O Tables for LAC

During 2013, IDB supported the inclusion of four new countries into the GTAP database: Jamaica, Trinidad and Tobago, Dominican Republic and Puerto Rico. These four countries correspond to the main economies in the Caribbean where I-O data in available. With the inclusion of these countries, almost all countries from Latin America and the Caribbean where data is available has been included in the GTAP database. The four Caribbean countries were included in the intermediate release 8.2 of the GTAP database and will be included
in the new version 9. The data processing was done by Mark Horridge from Monash University, funded by the Climate Change and Sustainability Division (INE/CCS) of IDB.

The data characteristics of these countries are: Trinidad and Tobago had 43 sectors with a base year of 2000; Dominican Republic had 30 sectors with a base year of 2005; Jamaica had 35 sectors with a base year of 2007; and Puerto Rico had 38 sectors with a base year of 2000.

(3) Poverty database and analysis

During 2013 and early 2014, the INE/CCS supported the inclusion and update of 18 Latin American and Caribbean countries into the GTAP-POV database. The 18 LAC countries are: Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela. An updated version of the GTAP-POV technical paper describing the data processing and lessons learned from this process will be completed in 2014. Also in 2014, the goal is to complete an updated application of the GTAP-POV, as well as an analysis of the poverty impacts of climate change.

(4) Research network strengthening

The Fifth Regional Conference on General Equilibrium Models will be held in Bogota, Colombia in September 2014. The meeting will bring together researchers and experts from international organizations and universities from various countries in LAC, as well as those working in LAC. The Regional Meeting will cover the areas of international trade, regional integration, climate change and environment, as well as methodological approaches to modeling. The event is organized by IDB and the Economic Commission for Latin America and the Caribbean (ECLAC), in collaboration with the local universities and Government institutions.

(5) Capacity building program

During 2013, IDB-INT provided technical assistance to fifteen officials from the Ministry of Promotion, Industry, and Trade of Nicaragua to build institutional capacity to perform quantitative evaluations of the economic and poverty effects of trade reforms. This activity represents the third phase of the program.