The GTAP 7.1 Data Base:  
How the EU IO tables were incorporated into the GTAP 7.1 Data Base  

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The GTAP Project developed as a result of limited use of AGE Analysis by non-AGE modelers due to the high barriers to entry in data, software, and experience. AGE was therefore limited to large organizations with the resources to build large databases and models. The Project was therefore developed to provide a continually updated data base and standard model which are fully documented, easy to use, and publicly available for others to build on; thereby permitting more emphasis on the economics, and less on modeling.

The GTAP Data Base consists of bilateral trade, transport, and protection matrices that link individual country/regional economic data bases. The regional data bases are derived from individual country input-output tables, from varying years. The GTAP Data Base was first released in 1993 by the Australian Productivity Commission with 15 regions and 37 sectors. In 2008 the 7th version was released containing 113 regions and 57 sectors (Narayanan and Walmsley, 2008). In addition to the increase in country and sectoral coverage, the trade, tariff, services and energy data are other examples of where improvements have been made to the GTAP Data Base.

The production of the GTAP Data Base relies on contributions from individuals and organizations throughout the world. Our philosophy is that “if you don’t like it, help us fix it”. The Center for Global Trade Analysis employs just 7 individual and a number of graduate students. The Center staff cannot be experts in every aspect of the database. We believe that quality data is best ensured through collaboration between those many individuals and institutions who work directly with the best data sources available. These inputs are then combined into a globally consistent database using entropy-theoretic methods.

Ensuring quality is the number one concern in the construction of the GTAP Data Base. To ensure quality the Center undertakes a number of comparisons of both the initial datasets (e.g., IO tables (McDougall and Walmsley, 2007) and trade data) and the resulting versions of the GTAP Data Bases. These comparisons, like the database construction, are done using entropy theoretic methods and were developed by Robert Mc Dougall.

This paper will draw on a number of papers and internal documents by Robert McDougall, Csilla Lakatos, Badri Narayanan, Angel Aguiar and Terrie Walmsley that follow the inclusion of the EU IO tables (Mueller, Dominquez and Gay, 2009) into the GTAP 7.1 Data Base after their contribution by Marc Mueller (IPTS), Scott McDonald (Oxford Brooks University) and Csilla Lakatos (Purdue University) (Lakatos, McDonald and Mueller, 2008). This will include: first, outlining the process we undertake to check the IO tables, including comparing them with a typical representative table; second, outlining the methods used to combine the EU tables with other external macro and trade data collected for inclusion in the GTAP Data Base; and finally comparing the pre- and post-EU inclusion GTAP Data Bases. As we outline the process we will also include some of the issues that have been raised over time and the design decisions made.

¹ With contributions from Robert McDougall, Csilla Lakatos, Badri Narayanan and Angel Aguiar.
Finally, I’ll wrap up the presentation by discussing some of the current data issues that the GTAP network is currently examining in order to further improve the GTAP Data Base.


Lakatos, C., S. McDonald and M. Mueller, 2008: “Chapter 7Z: Europe” in Narayanan and Walmsley (eds), *Global Trade, Assistance, and Production: The GTAP 7 Data Base*, Center for Global Trade Analysis, Purdue University.
