

**U. S. International Trade Commission
Report on GTAP Related Activities**

for
The Advisory Board Meeting,
Center for Global Trade Analysis

The United States International Trade Commission (USITC) continues to use GTAP on requests from the United States Trade Representative and Congress to evaluate the potential impacts of prospective trade policy changes. Since June 2006, GTAP-related projects requested by our customers include analyses of bilateral FTAs between the United States and Peru, Colombia, and Korea. Version 6.1 of the GTAP data base was being used to analyze these FTAs. In addition, the ITC has recently completed an environmental review of the Doha Round where the GTAP and the USITC national model (USAGE) were jointly used. This allowed bilateral trade flow implications from the GTAP model to be incorporated in the USAGE model, which is a single-country model with a high degree of sectoral disaggregation.

In collaboration with Monash University, the USITC continues work on the highly detailed dynamic USAGE model with updated parameters, greater labor and household detail, and an important detailed treatment of sweeteners sectors. The team completed the occupational module for USAGE-ITC to enhance labor market analysis. The USAGE-ITC model will be easily linkable to the GTAP model and will offer interested parties an alternative U.S. model with enhanced capabilities. In December 2006, Peter Dixon and Maureen Rimmer gave a second short course at the USITC on the use of the model. Some of these enhancements to the model were applied in the most recent update of the Import Restraints study which was delivered to the U.S. Trade Representative in February 2007. During the next phase of the project, the team aims to disaggregate households in USAGE-ITC to enhance consumer welfare analysis and incorporate the investment/rate-of-return module for use in dynamic policy simulations. Work has begun on redefining sectors in the data base using the NAICs system, permitting the model's data base to continue to be updated. In support of this and other USAGE developments, the ITC has established a working group with other Federal Government users of the USAGE model, principally the Commerce Department and the Economic Research Service of the Department of Agriculture.

The USITC continues its work at improving global NTM measurements for possible inclusion in CGE analyses. Our most recent set of econometric estimates on the effects of goods NTMs, by Judith Dean, Jose Signoret, and colleagues, provides estimates for over 60 countries for fruits and vegetables, bovine meat, processed food, and apparel. These estimates are based on deviations from retail prices in EIU CityData. Our Services division, led by Richard Brown, has generated new econometric estimates of international distortions in banking as they relate to GATS obligations, which have been used to estimate the potential effects of U.S. FTAs on deposit-loan margins. We are also continuing to update the Donnelly-Manifold database of nontariff measures, which underlies the econometric work in goods and has influenced the deliberations of the Multi-Agency Support Team (MAST), led by UNCTAD, which is seeking to design a successor to the UNCTAD-TRAINS database for NTMs.

The China trade project is continuing to examine various issues of U.S.-China bilateral trade, making simultaneous use of highly disaggregated official customs data from China, the United States and Hong Kong. Recent work has included papers by Zhi Wang and Mark Gehlhar (USDA) on a GTAP-consistent set of trade flows for China and Hong Kong, by Judy Dean, Zhi Wang and K.C. Fung (UC Santa Cruz) on measuring vertical specialization in China's trade, and by Michael Ferrantino and Zhi Wang on underlying determinants of the U.S.-China merchandise trade data discrepancy. Zhi Wang has also written with Shang-Jin Wei (IMF) on the sources of increasing Chinese export sophistication. Dean, Ferrantino and Wang are also collaborating with coauthors at Chinese institutions on a series of papers on advanced technology products.

The model validation project is developing a framework to guide and inform the Office's GE modeling efforts. Among its elements are: a comparison of gravity-model estimates of the effect of FTA formation on sectoral trade to CGE-model estimates; an analysis of the goodness of fit for alternative export demand elasticities, to examine the goodness of fit of baseline and liberalization elasticities to see which generates estimates closer to actual values from a historical simulation; and an analysis of model sensitivity to market shares, to examine the sensitivity of model results to alternative values for U.S. production or U.S. market share

The following USITC public studies or papers by USITC economists completed during 2006 and 2007 contain research based on, or relevant to, the GTAP model and database:

Monographs:

USITC *U.S.-Peru Trade Promotion Agreement: Potential Economy-wide and Selected Sectoral Effects*, Investigation TA-2104-20 (June 2006).

USITC *U.S.-Colombia Trade Promotion Agreement: Potential Economy-wide and Selected Sectoral Effects*, Investigation TA-2104-23 (December 2006).

USITC *U.S.-Korea Trade Promotion Agreement: Potential Economy-wide and Selected Sectoral Effects*, Investigation TA-2104-24 (forthcoming).

USITC *The Economic Effects of Significant U.S. Import Restraints: Fifth Update 2007*, Investigation 332-325 (February 2007).

Manuscripts:

Judith M. Dean, K.C. Fung, and Zhi Wang, "Measuring the Vertical Specialization in Chinese Trade," Office of Economics Working Paper (Publication EC2007-01-A, January 2007).

Judith M. Dean, Jose E. Signoret, and Michael Ferrantino, "Estimating the Price Effects of Non-Tariff Measures," Office of Economics Working Paper (Publication EC 200606A, June 2006).

Michael Ferrantino and Zhi Wang, "Accounting for Discrepancies in Bilateral Trade: The Case of China, Hong Kong, and the United States," 10th Annual Conference on Global Economic Analysis, West Lafayette, Indiana (forthcoming).

Elisabetta Gotor and Marinos Tsigas, "The Role of the EU's Economic Partnership Agreements in Development: A General Equilibrium Analysis," 9th Annual Conference on Global Economic Analysis, Addis Ababa, Ethiopia.

Elisabetta Gotor and Marinos Tsigas, "Effects of EU Sugar Trade Reforms on Poor Households in Africa: A General Equilibrium Analysis" 9th Annual Conference on Global Economic Analysis, Addis Ababa, Ethiopia.

Alexander B. Hammer, "The Dynamic Structure of U.S.-China Trade, 1995-2004," Office of Economics Working Paper (Publication EC 200607A, July 2006).

Robert Koopman, Ashley Winston, and Alan Fox, "Decomposing NAFTA: An Application of the USAGE Model and an Approach to Model Validation" 9th Annual Conference on Global Economic Analysis, Addis Ababa, Ethiopia.

Zhi Wang, Mark Gehlhar and Shunli Yao "A Mathematical Programming Model to Estimate Hong Kong Re-export Markups and Reconcile Trade Statistics from China, Hong Kong and Their Major Trading Partners," 9th Annual Conference on Global Economic Analysis, Addis Ababa, Ethiopia.

Zhi Wang, Mark Gehlhar and Shunli Yao, "Reconciling Bilateral Trade Statistics in the Presence of Re-exports via Third Countries: The Case of China, Hong Kong and Their Major Trading Partners," 10th Annual Conference on Global Economic Analysis, West Lafayette, Indiana (forthcoming).

Alan Fox, William Powers, and Ashley Winston, "Barriers and Rules of Origin in a Post-ATC World," 10th Annual Conference on Global Economic Analysis, West Lafayette, Indiana (forthcoming).