

ERS Contributions to GTAP: An Activity Report

Articles and Presentations

- S. MacDonald, S. Pan, A. Somwaru and F. Tuan. “China’s role in World Cotton and Textile Markets: a joint Computable General Equilibrium/Partial Equilibrium Approach,” *Applied Economics*, Issue 1, 2008.
- T. Roe, A. Somwaru, and X. Diao. “Agricultural Trade Barriers and the Role of Institutions in African Development,” *Tools of the Trade: Models for Trade Policy*, edited by C. McDaniel, K. Reinert, and K. Hughes, Woodrow Wilson International Center for Scholars, Jan. 2008.
- T. Roe, A. Somwaru and X. Diao. “Globalization: Welfare Distribution and Costs Among Developed and Developing Countries,” *Review of Agricultural Economics*, Vol. 28, Number 3: 399-408, Fall 2006.
- X. Diao, F. Tuan, and A. Somwaru. “Agricultural Policy Developments After China’s Accession to the WTO,” *China and the Challenge of Economic Globalization, The Impact of WTO Membership*, edited by Fung, Pei, and Zhang, An East Gate Book, M.E. Sharpe, Inc., 2006.
- F. Tuan, X. Diao and A. Somwaru. “Regional and National Perspectives of China’s Integration into the WTO: A CGE Inquiry with Emphasis on the Agricultural Sector,” in the *Computable General Equilibrium Approached in Urban and Regional Studies*, edited by M. Doi, published by World Scientific, 2006.
- E. Tsakiridou, K. Mattas and A. Somwaru. “Middle East and North Africa Countries’ Agricultural Export Potentials under Trade Reforms (forthcoming *Applied Economics*).
- A. Somwaru and W. Edmondson. “Evaluating Tariff Reduction Outcomes: Using Stochastic Processes,” Selected paper, International Agricultural Trade Research Consortium Symposium, Washington, D.C., January 7-9, 2008.
- J. Fernandez-Cornejo, R. Lubowski, and A. Somwaru. “Global Adoption of Agricultural Biotechnology: Economic and Land Use Implications,” Selected paper, Conference on Global Economic Analysis, West Lafayette, IN, June 7-9, 2007.
- J. Fernandez-Cornejo, R. Lubowski, and A. Somwaru. “Economic and Environmental Implications of a Biobased Global Economy: Modeling and Preliminary Results,” Invited paper, Biofuel Assessment Conference, Copenhagen, Denmark, 4-5 June, 2007.
- Gehlhar M. Erik Dohlman, Nora Brooks, Alberto Jerardo, and Thomas Vollrath “Global Growth, Macroeconomic Change, and U.S. Agricultural Trade” ERS Economics Research Report (ERR-46) September, 2007.

- Meade B., M. Gehlhar, and A. Somwaru. “The Korean Free Trade Agreement: economy-wide impacts”, USDA ERS Staff Analysis, August 2007.
- Wang Zhi, M. Gehlhar, S.Yao. “Reconciling Bilateral Trade Statistics from China and Hong Kong: A Math Programming Approach” GTAP Technical Paper No. 27, Center for Global Trade Analysis, Purdue University.
- Gehlhar M. and A. Somwaru “Food, Bio-Fuels, and Trade: An Economy-wide Assessment” Proceedings Paper on *Bio-fuels, Food & Feed Tradeoffs*, 2008, The Farm Foundation.

Contributions to GTAP database version 7 and Modeling Initiatives

- ERS-USDA contributed to the development of “USAGE-USITC-ERS-DOC” *detailed agricultural sectors* of the US SAM for the GTAP version 7.
- Mark Gehlhar provided the Center with updates/revisions for the merchandise trade database for the pre-release version 7 GTAP database in October 2007 and March 2008. In these updates he incorporated adjustments from the mathematical modeling approach established by Wang, Gehlhar and Yao (2007). This work was published in late 2007 as a GTAP technical paper. In addition the merchandise trade database now includes small transactions below 500,000 USD. This is in conjunction with the on going effort for better accuracy of bilateral protection measures. This data was provided to the Center for the final pre-release version.
- In 2007 Mark Gehlhar began a project under ERS’s emerging markets program with Everett Peterson (Virginia Tech) through a cooperative research agreement. The objective is to improve and expand the version of the GTAP-M model. Emphasis is being placed on developing countries to incorporate retailing/wholesaling margins activities for Brazil, China, and India.