



CENTER FOR GLOBAL TRADE ANALYSIS NEWSLETTER

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A smarter version of the GTAP Newsletter is available at:

<http://www.gtap.agecon.purdue.edu/about/newsletters.asp>.

MISSION STATEMENT:

The Center for Global Trade Analysis is the publicly funded, university based home for GTAP (Global Trade Analysis Project), a global network of researchers and policy makers conducting quantitative analysis of international policy issues. Our purpose is to improve the quality of global economy-wide analysis through education and by developing analytical data bases, economic models, and innovative methodologies. Our unique institutional structure enables us to foster collaboration among academia, public and private sectors worldwide.

1. CENTER NEWS

Wedding wishes are in order for the Center's Information Technology Specialist, Ginger Batta. The former Ginger McColley tied the knot with Chris Batta on October 29, 2005. Ginger manages the GTAP website and helps in all areas related to information technology including GTAP short courses and conferences.

Two new graduate students joined the Center as graduate assistants. Tasneem Mirza from Bangladesh and Nelson Villoria from Venezuela are first year doctoral students in Purdue University's Economics Department and Agricultural Economics Department, respectively. Nelson was a participant in the 2004 GTAP Short Course. Tasneem and Nelson join six other graduate assistants who are affiliated with the Center. More information about the Center's staff and graduate assistants are available at: <https://www.gtap.agecon.purdue.edu/about/staff.asp>.

The Center is seeking to hire an Environmental Economist to work on global environmental economics issues. The individual will be expected to publish, participate in raising external funds, supervise graduate students, and lead international research projects. More information about this job opportunity and other vacancy announcements from GTAP Consortium member agencies are available at:

<https://www.gtap.agecon.purdue.edu/about/jobopps.asp>.

Thomas Hertel organized a symposium on the “Impact of the Doha Agenda on Poverty in Developing Countries” and presented the organized session paper “Poverty Impacts of a WTO Agreement,” and the selected paper “Agricultural Productivity Growth: Is the Current Trend On-Track for Poverty Reduction?” co-authored with Ernesto Valenzuela, Maros Ivanic, and Carlos Ludena, at the annual meetings of the American Agricultural Economics Association held in Providence, Rhode Island, on July 24-17, 2005.

Thomas Hertel visited Cornell University and presented “Twelve Propositions for Effective Policy Analysis” at a special colloquium celebrating the 75th Anniversary of the International Association of Agricultural Economists held October 7-9, 2005. Tom also presented “Understanding the Poverty Implications of the Doha Development Agenda” at the AEM seminar in the Department of Applied Economics and Management on October 10, 2005.

At the Experts’ Meeting on Long Run Projections for Asia held at the Asian Development Bank in Manila, Philippines on November 10-11, 2005, Thomas Hertel presented “Productivity Growth and Convergence in Crop, Ruminant and Non-Ruminant Production: Measurement and Forecasts,” based on his work with Carlos Ludena, Ken Foster, and Paul Preckel.

The GTAP seminar series is a venue for Center staff and graduate students to present their research to faculty, staff, and graduate students in the Center and in the Department of Agricultural Economics, Purdue University. Betina Dimaranan presented “The GTAP Data Base: Sourcing, Construction and Distribution” on October 3, 2005. Syud Amer Ahmed presented “The Impact of Liberalizing Labor Mobility in the Pacific Region” from his work with Terrie Walmsley and Chris Parsons on November 14, 2005.

2. CONSORTIUM NEWS

Two regional agencies joined the GTAP Consortium recently. The Asian Development Bank (ADB), based in Manila, Philippines, is a multilateral development finance institution dedicated to reducing poverty in Asia and the Pacific. Frank Harrigan, Assistant Chief Economist at the Macroeconomics and Finance Research Division, Economics and Research Department, represents ADB in the GTAP Advisory Board. The Trade Directorate of the European Commission, based in Brussels, Belgium, is in charge of implementing the external trade policy of the European Union. Gaspar Frontini, Head of the Trade Analysis Unit, represents the Trade Directorate in the GTAP Advisory Board.

The GTAP Advisory Board is composed of representatives from consortium member agencies that provide financial support and guidance to the project. Recent changes in the Advisory Board membership include: Lionel Fontagne, Director of the Centre d'Etudes Prospectives et d'Information Internationales (CEPII), Paris, France; Mitsuo Hosen, Executive Research Fellow of the Economic and Social Research Institute (ESRI), Cabinet Office, Tokyo, Japan; and, Yuji Hosoya, Director of Research, Research Institute of Economy, Trade and Industry (RIETI), Tokyo, Japan. More information about the GTAP Consortium is available at:

<https://www.gtap.agecon.purdue.edu/about/consortium.asp>.

The next meeting of the GTAP Advisory Board is scheduled for June 12-13, 2006, in Addis Ababa, Ethiopia. Further information about previous GTAP Advisory Board meetings is available at:

http://www.gtap.agecon.purdue.edu/events/Board_Meetings/default.asp.

3. RESEARCH HIGHLIGHTS

Poverty and Trade Liberalization

The book “Poverty and the WTO: Impacts of the Doha Development Agenda,” edited by Thomas W. Hertel and L. Alan Winters, a co-publication of the World Bank and Palgrave Macmillan (available immediately, with a 2006 publication date), reports on the findings from a major international research project investigating the poverty impacts of a potential Doha Development Agenda. It combines in a novel way the results from several strands of research. Firstly, it draws on an intensive analysis of the DDA Framework Agreement, with particularly close attention paid to potential reforms in agriculture. The scenarios are built up using newly available tariff line data and their implications for world markets are established using the GTAP global modeling framework. These world trade impacts, in turn, form the basis for thirteen country case studies of the national poverty impacts of these DDA scenarios. The focus countries include: Bangladesh, Brazil (2 studies), Cameroon, China (2 studies), Indonesia, Mexico, Mozambique, Philippines, Russia, Vietnam and Zambia. While the diversity of approaches taken in these studies limits the ability to draw broader conclusions, an additional study which provides a 15 country cross-section analysis is aimed at this objective. Finally, a global analysis provides estimates for the world as a whole.

A few of the main findings of the project are:

- The liberalization targets under the DDA have to quite ambitious if the round is to have a measurable impact on world markets and hence poverty.
- Assuming an ambitious DDA, the near-term poverty impacts are mixed; some countries experience small poverty rises and others more substantial poverty declines. On balance, poverty is reduced under this DDA, and this reduction is more pronounced in the longer run.
- Allowing minimal tariff cuts for just a small percentage of special and sensitive products reverses the results, with the ensuing DDA raising, rather than lowering, global poverty.
- Deeper cuts in developing country tariffs would make the DDA more poverty friendly.
- Key determinants of the national poverty impacts include: the incomplete transmission of world prices to rural households, barriers to the mobility of workers between sectors of the economy, as well as the incidence of national tax instruments used to replace lost tariff revenue.
- In order to generate significant poverty reductions in the near term, complementary domestic reforms are required to enable households to take advantage of new market opportunities made available through the DDA.
- Sustained long term poverty reductions depend on stimulating economic growth. Here, the impact of the DDA (and trade policy more generally) on productivity is critical. In order to fully realize their growth potential, trade reforms need to be

far reaching, addressing barriers to services trade and investment in addition to merchandise tariffs.

Global Land Use Data Base

The GTAP Data Base is increasingly being used to analyze issues associated with climate change policy and the environment. One of the key areas of current research has to do with land use change, as climate change mitigation policies could have a significant impact on the patterns of land use, and these changes could in turn affect emissions. Land use change also has important implications for local environmental issues. However, the standard GTAP data base is ill-equipped to deal with such issues, as the characterization of land is very simplistic. Fortunately, the US Environmental Protection Agency funded the development of a new, GTAP-consistent, land use data base which draws on newly available global information on agro-ecological zones and land cover. This has just been released in conjunction with GTAP Technical Paper No. 25: "Towards An Integrated Land Use Database for Assessing the Potential for Greenhouse Gas Mitigation", authored by Huey-Lin Lee, Thomas Hertel, Brent Sohngen, and Navin Ramankutty.

In constructing the GTAP land use data base, the authors drew inspiration from the work of Roy Darwin and others at ERS/USDA. The new data base follows the state-of-the-art FAO/IIASA treatment of agro-ecological zones (AEZs). It separately identifies land located in 18 AEZs, covering six different lengths of growing period spread over three different climatic zones. Agro-ecological zoning segments a parcel of land into smaller units according to agro-ecological characteristics, including: precipitation, temperature, soil type, terrain conditions, etc. Each zone has a similar combination of constraints and potential for land use. By including information on which agricultural and forestry activities are undertaken in each AEZ, the data base permits a much more refined characterization of the potential for shifting land use amongst different activities.

The GTAP land use data base includes the following data items, each of which has the dimensions of GTAP countries/regions and the 18 agro-ecological zones: (1) harvested area by crop types; (2) physically cultivated area by land cover types; (3) crop yield by crop types; (4) timberland area by management types and age of trees; (5) timberland marginal land rent by management types; (6) forest carbon stock by management types and age of trees; and (7) GTAP-compatible land rents for 13 agriculture and forest sectors. When combined with the forthcoming data base on non-CO₂ greenhouse gas emissions which links emissions to economic drivers in the GTAP model, the land use and emissions data bases will permit economists interested in Integrated Assessment (IA) of climate change to better assess the role of land use changes in GHG mitigation strategies.

4. SHORT COURSES

The Indira Gandhi Institute of Development Research (IGIDR) and the Center for Global Trade Analysis will hold the South Asian Short Course in Global Trade Analysis at the IGIDR campus in Mumbai, India on February 18-24, 2006. Part I of the course, a series of seven modules delivered via CD-Rom and World Wide Web, runs from November 28, 2005 to February 10, 2006. Twenty scholarships were provided for participants from countries within South Asia with support provided by the Ford Foundation (India) and the Economic Research Service, US Department of Agriculture (USA). Although open to

participants from all countries, the short course is strictly limited to 30 participants. The South Asian Short Course is now full; applications are no longer accepted.

The Fourteenth Annual Short Course is scheduled for July 29 to August 4, 2006 at Purdue University. Part I of the course will be delivered by CD-Rom and through the World Wide Web from May 15 to July 14, 2006. Part II is the on-site week-long intensive training consisting of a mix of daily lectures, computer laboratory assignments, and informal discussions designed to introduce participants to the basic features of the GTAP model and data base. To register please visit the GTAP web site at:

https://www.gtap.agecon.purdue.edu/events/Short_Courses/2006/default.asp

The GTAP Short Courses in Global Trade Analysis aim to: (1) introduce participants to a standardized framework for conducting global trade analysis in an applied general equilibrium setting, (2) provide participants with ample hands-on training with software that has been tailored to global trade analysis within a standard modeling framework, and (3) give participants the opportunity to interact with economists working on global trade and resource use issues, and become part of an international network. Information about previous and forthcoming short courses is available at:

https://www.gtap.agecon.purdue.edu/events/Short_Courses/upcoming.asp

5. CONFERENCES

The Ninth Annual Conference on Global Economic Analysis is scheduled for June 15-17, 2006 at the United Nations Conference Center in Addis Ababa, Ethiopia. The conference is organized by the United Nations Economic Commission for Africa (UNECA), in conjunction with the Center for Global Trade Analysis, Purdue University. Sponsorship is provided by the African Trade Policy Centre, in collaboration with the African Economic Research Consortium, the African Development Bank, and the United Nations Development Programme. Hakim Ben Hammouda of the UNECA and Thomas Hertel of the Center for Global Trade Analysis are co-chairs of the conference.

The goal of the annual conference is to promote the exchange of ideas among economist conducting quantitative analysis of global economic issues. The theme of the conference, "Multilateralism, Bilateralism, and Development," was chosen because several countries in Africa are putting a lot of effort in bilateral, multilateral, and regional trade negotiations. The conference will focus on the following sub-themes: multilateral and bilateral trade arrangements; trade and the environment; climate change and development; and trade, poverty, and gender.

The conference will include a number of plenary sessions, organized sessions, and general sessions comprised of papers selected by a reviewing committee. Abstracts may be submitted starting December 1, 2005. All abstracts must be submitted via the GTAP website by January 15, 2006 to be eligible for consideration. For more information about the Ninth Annual Conference on Global Economic Analysis, please visit the conference homepage on the GTAP website at:

<http://www.gtap.org/events/Conferences/2006/default.asp>.

6. DATA BASE DEVELOPMENTS

Pricing for the GTAP 6.0 Data Base will change effective January 1, 2006. The price change includes a revised structure of discounted pricing for subscribers from lower-middle and low income developing countries. The new pricing is available at:

https://www.gtap.agecon.purdue.edu/databases/new_pricing.asp.

If you wish to purchase the GTAP 6.0 Data Base before the price change becomes effective, your order must be placed and payment received prior to January 1, 2006. For any questions regarding the new pricing structure, please contact Judy Conner. Further information about the GTAP 6.0 Data Base including current pricing and order information is available at: <https://www.gtap.agecon.purdue.edu/databases/v6/default.asp>.

The GTAP 6.1 Data Base was released to GTAP Consortium member agencies and data base contributors in October 2005. The 92-region interim release data base is based on the GTAP 6.0 Data Base that was shipped to the public beginning May 2005. GTAP 6.1 includes domestic databases for six new regions — Pakistan, Bolivia, Ecuador, Iran, Mauritius and Nigeria — and updated input-output tables for two regions — Australia and Chile. Free access to pre-releases and interim releases of the data base is a benefit provided only to GTAP Consortium member agencies and data base contributors.

A version of the GTAP 6.0 Data Base (GTAPAgg Package only) which includes an aggregation facility for 10 Doha market access scenarios was released to GTAP Consortium member agencies and data base contributors in November 2005. The data for the Doha tariff-cutting scenarios were supplied by CEPII and were constructed from the MAcMap data base and from the WTO Consolidated Tariff Schedules (for bound rates). The data base also allows for the aggregation of CEPII's reference-group weighted tariffs for 2001. The data base will also be made available for free to the subscribers to the GTAP 6.0 Data Base. Further details are forthcoming.

Data on CO2 emissions have now been updated to match the regional classification of the GTAP 6.0 Data Base. The data base is made available to facilitate integrated assessment of climate change policies with GTAP. Please contact Huey-Lin Lee for further information. The data is available for download from:

https://www.gtap.agecon.purdue.edu/access_staff/resources/res_display.asp?RecordID=1143.

7. SOFTWARE DEVELOPMENTS

Mark Horridge of the Center of Policy Studies, Monash University, completed an initial version of SplitCom, a series of programs designed to help add sectoral detail to a GTAP Data Base. Funding for the SplitCom project was contributed by three GTAP Consortium member agencies, namely: Nathan Associates, Australian Bureau of Agricultural and Resource Economics (ABARE), and the Productivity Commission (Australia). Please contact Mark Horridge for further information and/or feedback. The initial version of SplitCom may be downloaded from: <http://www.monash.edu.au/policy/splitcom.htm>.

Mark Horridge also released an updated version of the ShadeMap software, a tool for shading or coloring regions of simple maps. ShadeMap now includes map boundary files showing the 87 regions of the GTAP 6.0 Data Base and the 92 regions of the GTAP 6.1 Data Base (interim release). The free download is available from:

<http://www.monash.edu.au/policy/shademap.htm>.

8. NEW RESOURCES ON THE GTAP WEBSITE

The list below covers recent documents submitted to the GTAP Resource Center from August 16, 2005 through November 30, 2005. The most recent additions to GTAP resources can be found at:

<https://www.gtap.agecon.purdue.edu/resources/latest.asp>.

GTAP WORKING PAPERS

Walmsley, Terrie, Syud Amer Ahmed and Christopher Parsons, 2005. "The Impact of Liberalizing Labor Mobility in the Pacific Region," GTAP Working Paper No. 32.

Valenzuela, Ernesto, Thomas Hertel, Roman Keeney, and Jeff Reimer, 2005. "Assessing Global CGE Model Validity Using Agricultural Price Volatility," GTAP Working Paper No. 33.

GTAP RESEARCH MEMORANDUM

Walmsley, Terrie, Syud Amer Ahmed, and Christopher Parsons, 2005. "The GMig2 Data Base: A Data Base of Bilateral Labor Migration, Wages and Remittances," GTAP Research Memorandum No.6.

GTAP APPLICATIONS

Mai Yinhua, Philip Adams, Mingtai Fan, Ronglin Li, and Zhaoyang Zheng, 2005. "Modelling the Potential Benefits of an Australia-China Free Trade Agreement," an independent report prepared for the Australia-China FTA Feasibility Study, http://www.dfat.gov.au/geo/china/fta/modelling_benefits.doc.

Matthews, Alan and Keith Walsh, 2005. "Economic Consequences of the Doha Round for Ireland," Research report commissioned by Forfás (www.forfas.ie), Ireland.

ECONOMETRIC APPLICATIONS

Bejar, Sergio, 2005. "Majoritarian Politics, Skill Endowments and Variation in Trade Protectionism."

OTHER CGE APPLICATIONS

Fan, Mingtai and Zheng Yuxin, 2002. "The Impact of China's Trade Liberalization for WTO Accession," <http://www.monash.edu.au/policy/conf/42fan.pdf>.

9. CONTACT INFORMATION

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