Global Trade Analysis Project Overview (1992-2016)

GTAP NETWORK

New Members (2016) 1,700+
Countries Represented 172
Total Members 15,100+

GTAP CONSORTIUM

Members 28
Members-at-Large 3
Countries Represented 14

GTAP DATA BASE REGIONAL DISAGGREGATION

GTAP 9 140
GTAP 8 129
GTAP 7 113
GTAP 6 87
GTAP 5 66
GTAP 4 45
GTAP 3 30
GTAP 2 24
GTAP 1 15

GTAP RESEARCH

“GTAP” Google Scholar Citations 21,400+
Impact Factors
476 Global Trade Analysis: Modeling & Applications
15.5 GTAP Technical Paper Series
14.3 GTAP Working Paper Series
4.9 GTAP Research Memoranda Series

GTAP EDUCATIONAL OUTREACH

Courses Offered 50
Graduates 1,100+
Countries Reached 82
Scholarships Awarded $211,000+ internally and externally funded
GTAP 9 Data Base

The centerpiece of the Global Trade Analysis Project is the GTAP Data Base, a fully documented, publicly available global data base which contains complete bilateral trade information, transport and protection linkages. The GTAP Data Base represents the world economy and is utilized by thousands worldwide as a key input into contemporary applied general equilibrium (AGE) analysis of global economic issues. The current release, the GTAP 9 Data Base, features 2004, 2007 and 2011 reference years as well as 140 regions for all 57 GTAP commodities.

What’s New in GTAP 9?

- GTAP 9a Data Base – This release updated the following items.
  - Domestic support data - A processing error lead to significantly underestimating the 2011 domestic support in EU27 member countries.
  - Capital stock data - A very low capital stock level for Zimbabwe was reported. Capital stock data were originally retrieved from the Penn World Tables, and in release 9a, selected countries in all three reference years have been revised using their regional average.

- GTAPAgg2 – Updated release of the original GTAPAgg program which allows users to import data for multiple versions into one shell aggregator instead of separate installations per version and reference year.

- Additional regional disaggregation: 140 regions and 57 sectors
  - New regions: Benin, Burkina Faso, Guinea, Togo, Rwanda, Brunei Darussalam, Jordan, Dominican Republic, Jamaica, Puerto Rico, and Trinidad and Tobago
  - Updated regions: Brazil, Colombia, Paraguay, Belarus, Pakistan, Turkey, China, Japan, Korea, Singapore, Taiwan, Australia, New Zealand, Norway, Malawi, Mozambique, Nigeria, Senegal, Tanzania, and Zambia

- New bilateral merchandise trade data for 2011
- New protection data for 2007 and 2011
- New Time-Series Bilateral Trade data from 1995-2013
- Improved bilateral services trade and energy data for 2004, 2007, and 2011
- Decomposition of tariff (into ad valorem and specific)
- CO2 emissions dataset integrated into core data base
- Five labor skill categories

GTAP 9 Satellite Data and Utilities

The GTAP 9 Satellite Data and Utilities are developed for use alongside the GTAP 9 Data Base allowing users to more easily adapt the full suite of GTAP Models for analysis of global trade and environmental issues.

Currently Available (cost: free with purchase of GTAP 9)

- GTAP-Power - electricity-detailed extension of the GTAP 9 Data Base
- GDyn - facilitates development of baseline projections consistent with GTAP 9 and for use with the GDyn Model
- GMig2 - contains global bilateral migration and remittances data consistent with the GTAP 9 Data Base
- GTAP-E - provides carbon dioxide emissions data distinguished by fuel and user for each GTAP 9 region
- Non-CO2 Emissions - complements GTAP-E providing information on other greenhouse gas emissions

www.gtap.agecon.purdue.edu/databases/v9/

www.gtap.agecon.purdue.edu/databases/Utilities/
2016 GTAP Research Highlights

GTAP Working Paper Series
Extending the GTAP framework for public procurement analysis
by Aguiar, Angel, Caitlyn Carrico, Thomas Hertel, Zekarias Hussein, Robert McDougall and Badri Narayanan
GTAP Working Paper No. 82

Journal of Global Economic Analysis
The inaugural issue of the Journal of Global Economic Analysis (JGEA) was released in June 2016. JGEA is co-edited by Thomas Hertel, Center for Global Trade Analysis, Purdue University and Niven Winchester, MIT, and guided by an Editorial Advisory Board comprised of distinguished scholars and practitioners in AGE modeling and related disciplines.

The Journal of Global Economic Analysis:
- provides an open access, peer-reviewed platform for publication and dissemination of innovations in applied general equilibrium (AGE) modeling;
- publishes developments in theory, data, statistical analysis, methods, and teaching;
- enhances the credibility of AGE modeling by requiring replication of results during the peer-review process and, when possible, publication of new model code and data on the journal’s website; and
- builds on and extends the high-impact, peer-reviewed GTAP Technical Paper Series.


- Advances in Methods and Theory
  Modern Trade Theory for CGE Modelling: The Armington, Krugman and Melitz Models
  by Peter B. Dixon, Michael Jerie and Maureen T. Rimmer

  GTAP-HET: Introducing Firm Heterogeneity into the GTAP Model
  by Zeynep Akgul, Nelson B. Villoria, Thomas W. Hertel

- Advances in Data and Parameters
  An Overview of the GTAP 9 Data Base
  by Angel Aguiar, Badri Narayanan and Robert McDougall

  The GTAP-Power Database: Disaggregating the Electricity Sector in the GTAP Database
  by Jeffrey C. Peters

- Advances in Software
  Using R to Extract Data from the World Bank’s World Development Indicators
  by Dominique van der Mensbrugghe
2016 GTAP Research Highlights

Center for Global Trade Analysis Publications


2016 GTAP Research Highlights

Publications (cont.)


Center for Global Trade Analysis Presentations


Corong, Erwin and Angel Aguiar, “Regional and Global Impacts of Skill Mobility within the ASEAN Economic Community”, 19th Annual Conference on Global Economic Analysis, Washington DC, USA, June 15-17, 2016.

Hertel, Thomas, Unis Lantz Baldos and Dominique van der Mensbrugghe, “Predicting Long Term Food DC, USA, June 15-17, 2016.”
2016 GTAP Research Highlights
Presentations (cont.)


Golub, Alla, and Badri Gopalakrishnan, “Global Economic Impacts of Russian Restriction on Food Imports”, AAEA 2016, Boston, MA, USA, July 31-August 2, 2016.


2016 GTAP Research Highlights
Presentations (cont.)
Hertel, Thomas, Uris Baldos, and Dominique van der Mensbrugghe, “Predicting Long Term Food Demand, Cropland Use and Prices”, AAEA 2016, Boston, MA, USA, July 31-August 2, 2016.


Hertel, T.W., based on work with U.L.C. Baldos, Jing Liu, Navin Ramankutty and Yoshi Wada, “Estimating the Real Cost of Food”, organized session contribution, Global Land Project meetings, Beijing, China, October 25, 2016.

Hertel, T.W., based on work with Guolin Yao and Farzad Taheripour, “Economic Insights into Telecoupling”, symposium presentation, Global Land Project meetings, Beijing, China, October 25, 2016.

Hertel, T.W., based on work with U.L.C. Baldos, “Food and Environmental Security in an Era of Globalization”, seminar presented at Renmin University, Beijing, China, October 24, 2016.


Hertel, T.W., based on work with U.L.C. Baldos, Jing Liu, Navin Ramankutty and Yoshi Wada, “Estimating the Real Cost of Food”, organized session contribution, Global Land Project meetings, Beijing, China, October 25, 2016.

Hertel, T.W., based on work with Guolin Yao and Farzad Taheripour, “Economic Insights into Telecoupling”, symposium presentation, Global Land Project meetings, Beijing, China, October 25, 2016.

Hertel, T.W., based on work with Guolin Yao and Farzad Taheripour, “Economic Insights into Telecoupling”, symposium presentation, Global Land Project meetings, Beijing, China, October 25, 2016.

Hertel, T.W., based on work with U.L.C. Baldos, "Food and Environmental Security in an Era of Globalization", seminar presented at Renmin University, Beijing, China, October 24, 2016.


Hertel, T.W., based on work with Uris L.C. Baldos, “Global Change and the Challenges of Sustainably Feeding a Growing Planet”, National Conference on Food and Agri-business, Indianapolis, November 16, 2016.

2016 GTAP Research Highlights
Presentations (cont.)

2017 GTAP Events

2017-1 GTAP 101 Course
"Introduction to Computable General Equilibrium Modeling"
April 10 – May 28, 2017  |  Online Course
*Applications due January 15

2017 GTAP Advisory Board Meeting
June 5-6, 2017  |  West Lafayette, IN, USA

20th Annual Conference on Global Economic Analysis
"Global Economic Analysis in the 21st Century: Challenges and Opportunities”
June 7-9, 2017  |  West Lafayette, IN, USA
*Abstracts and organized session proposals due January 15

25th Annual Short Course in Global Trade Analysis
"Introduction to Applied General Equilibrium Analysis in a Multi-Region Framework”
July 15-20, 2017  |  Cartagena, Colombia
*Applications due February 12

2017-2 GTAP 101 Course
"Introduction to Computable General Equilibrium Modeling”
September 18 – November 5, 2017 |  Online Course
*Accepting applications April 10 – July 2

2017 Short Course in Dynamic Global Trade Analysis
"Dynamic Modeling and Applications in Global Economic Analysis”
October 6-11, 2017  |  West Lafayette, IN, USA
*Applications due April 9

2017 GTAP PTA Course
"Applied Policy Analysis: Mini-course on Preferential Trade Agreements”
October 23 – November 26, 2017 |  Online Course
*Accepting applications February 1 – August 13

www.gtap.agecon.purdue.edu/events/