GTAP Advisory Board Meeting: Overview

June 12-13, 2006
Addis Ababa, Ethiopia
New Members

- Asian Development Bank (ADB), Philippines
- European Commission (EU), ???
New Representatives

- Frank Harrigan – ADB, Philippines
- Gasper Fontini – European Commission
- ??? – ESRI, Japan
- Paolo Giordano – IADB, Washington DC
- Hans van Meijl – LEI, Netherlands
- Antoine Boeut – IFPRI, Washington DC
2006 Substitute Representatives

- Wusheng Yu – FOI for Soren Fransden
- Masa ??? – IADB for Paolo Giordano
- Cheryl ??? – ERS/USDA for Agapi Somwru
- Serguey Paltsev – MIT for John Reilly
Missing

- ???

- Joe Francois – Member at Large, Australia
GTAP Center Staff

- Ginger Batta – Information Technology Specialist
- Judy Conner – Program & Administration Manager
- Betina Dimaranan – Research Economist and Database Administrator
- Thomas Hertel – Executive Director
- Huey-Lin Lee – Environmental Economist
- Robert McDougall – Deputy Director
- Wallace Tyner – Senior Policy Advisor
- Terrie Walmsley – Director
Agenda Overview: Monday

• Morning:
  – Data Base Release Strategies
    • Overview
    • Taxes

• Afternoon:
  – Top Data Base Issues
    • Services and Energy
  – Research:
    • Migration and A New Demand system for GTAP?

• Dinner at ????
Agenda Overview: Tuesday

• Protection

• Finances
  – Budgets and staffing plan

• Discussion of Other Data Base and Research Priority Issues
  – Board Priorities

• Network and Education
  – Research Fellows
  – Conferences

• Establish Action Plan for next year

• Dinner at ???
Research Goal

To actively participate in quantitative economic analysis of pressing global concerns.

1. Multilateral and Bilateral Trade Agreements
2. Global Environmental Issues
3. Trade and Development
Review of Goals and Action Plan

• Refine and document Dynamic GTAP Model
  – Progress has been slow. A few chapters of the book remain to be completed. It is hoped that we will send this to the publishers this year. Meanwhile quite a bit of new work on the GTAP-Dyn model has been done.

• Repository for baseline data.
  – An updated version of the GTAP-Dyn baseline is now available on the website:

  https://www.gtap.agecon.purdue.edu/access_board/default.asp

  Board members advice is also being sought on the potential supply and demand for the baseline repository.
Review of Goals and Action Plan

• Refine and document GMig2 Data Base and Model and make data available
  – The bilateral labour migration data base has now been made publicly available on the Sussex University website.
  

  The GMig2 data base is currently being updated to GTAP 6.1 data base Further information on this research and links to data bases as they become available can be found at:

  [https://www.gtap.agecon.purdue.edu/models/labor_migration.asp](https://www.gtap.agecon.purdue.edu/models/labor_migration.asp)
Review of Goals and Action Plan

• **Undertake applications using GMig2 Model and Data Base**
  - Two applications are currently provided on the website and one more is to be presented at the annual conference in Addis. [https://www.gtap.agecon.purdue.edu/models/labor_migration.asp](https://www.gtap.agecon.purdue.edu/models/labor_migration.asp)

• **Facilitate GTAP-disaggregated analysis of trade policy at the tariff line level by developing a prototype application/journal paper.**
  - Jason Grant and Tom Hertel are currently working with Tom Rutherford on this prototype model that integrates partial equilibrium, tariff line analysis with GE modeling of global trade. They will present this work at the annual conference in Addis.
Review of Goals and Action Plan

• GTAP Technical Paper on land use model and data base and provide access to land-use data.
  – Technical paper #25 and the GTAP Land Use data base are now available to the public on the website:

• Explore possibility of inclusion of land use data in a special purpose GTAP Data Base.
  – The land use data have been incorporated into a prototype GTAP Data Base/AEZ model. A paper will be presented at the annual conference in Addis.
Review of Goals and Action Plan

- **Extend Dynamic GTAP to include energy (GTAP-Dyn-E)**
  - This is the final chapter which remains to be completed for the book on the Dynamic GTAP model. It is hoped that this can be done this year.

- **Incorporate land use into the GDyn-E Model**
  - Tom Hertel, Steven Rose (EPA) and Richard Tol (Hamburg University, Germany) are presently editing a book on the incorporation of land use into global GE models for use in climate change analysis. Several of the consortium members will be contributing chapters focusing on alternative methodologies for accomplishing this goal. One of these will build on GTAP/GTAP-E.
Review of Goals and Action Plan

• Produce GTAP emissions baseline
  – Recently received new non-CO2 Greenhouse Gas emissions data base for 2001 from EPA. This is currently being processed and will be made available to consortium members for use in climate change analyses. The coverage of GHG’s and the mapping to activities in GTAP has been greatly improved. Once this is in place, we will begin working on a baseline.

• Look for a researcher in the environmental area to work on special projects
  – The Center has advertised a new position for a researcher in the environmental area to work on special projects. Due to the high priority being placed on climate change research at Purdue, the position has been upgraded to that of a research faculty member. We will be interviewing candidates in March and April.
Review of Goals and Action Plan

• Continue to explore opportunities for collaboration with Purdue Climate Research Center
  – Purdue is currently taking steps to significantly increase its presence in environment related research. Gerald Shively and Wally Tyner continue to explore opportunities to work with the Purdue Climate Research Center and other new Centers at Purdue. It is hoped that the new environmental economist will assist in this endeavor.

• Explore funding sources for a special project on bio-fuels
  – A group met in Lübeck after the conference last year and some notes were prepared on the points to consider, however nothing else has been done to date.
Review of Goals and Action Plan

• **Publish book on Poverty and WTO Doha Round**
  – The book by Tom Hertel and Alan Winters was published in December 2005.

• **Organize a session at next year’s conference on linking GTAP with more detailed national models.**
  – Thanks to the efforts of Ashley Winston, there will be an organized session on linking global and national models at the conference in Addis.
Data Goal

To improve data products.

1. Improve data quality and user service.
2. Improve data procurement.
3. Improve data development efficiency and quality by distributing data construction program.
4. Expand scope of data base.
5. Improve marketing of data base.
Review of Action Plan

• **GTAP 6 Data Base documentation**
  – The GTAP 6 documentation has been a high priority this year and all the chapters are close to completion. It is hoped that this will be delivered to purchasers of the GTAP Data Base after the board meeting.

• **Examine ways in which the data can be viewed to make it more readily accessible and usable in its own right – also adding ample “health warnings”**.
  – Tasneem Mirza, a graduate student at the Center has been looking at other websites which provide data to put together some ideas on what GTAP could do in this regard, however nothing has yet been decided upon.
Review of Action Plan

• Increase efforts to obtain new I-O tables for USA, China, Africa and Latin America
  – Efforts to obtain new I-O tables for the GTAP data base have been very successful.
  • USA has just been received from Marinos Tsigas (USITC)
  • Zhi Wang from the USITC and Fan Zhai are also working on contributing new data for China.
  • The UNECA continues to contribute I-O tables for Africa as data becomes available; most recently Senegal was included.
  • The World Bank are also examining ways of increasing coverage of Africa.
  • The EU has also expressed an interest in assisting with Latin America and the Caribbean.
Review of Action Plan

• Working committee to examine ways in which work done by CPB on bilateral services trade data can be incorporated into the GTAP 7 Data Base.
  – Arjan Lejour and the CPB continue to work on the services trade data. Arjan will present an update on this at the board meeting. It is expected that this will be a priority in the upcoming year.

• Look for funding to assist CEPII to meet the new 2 year release strategy.
  – Funding was provided by the World Bank and the USITC to assist CEPII with the production of a new protection data base for version 7 of the GTAP Data Base.
Review of Action Plan

• **Further improve relationship between FAO and GTAP**
  - This goal was aimed at establishing a collaboration between GTAP and the Statistics Division of the FAO. However, nothing more has been done since Haluk Kasnakoglu visited last year.

• **Continue to improve the quality of national I-O data through the creation of user-friendly check programs**
  - Ginger Batta has now included on the website a means by which I-O contributors can submit their I-O tables and reports can be provided back to the I-O contributors. Upon inclusion of the I-O table in the GTAP Data Base access to these reports is then given to the board.
Review of Action Plan

• Look for funding opportunities to develop facility for disaggregating commodities (SplitCom).
  – Funding was obtained from the USITC, ABARE and Nathan Associates to fund Splitcom. The program, named Splitcom, was produced by Mark Horridge and is available on the CoPS website. [http://www.monash.edu.au/policy/splitcom.htm](http://www.monash.edu.au/policy/splitcom.htm)

• Examine ways in which the source data for MACMap and the associated tariff bindings can be made available for replication and scenario building by board members.
  – The bound rates accompanying the MACMap data base are now available on the CEPII web so institutions can begin building their own scenarios. Incorporating the MACMap HS6 and tariff bindings data into the WITS software environment has been explored at the World Bank. This has proven to be difficult however and has not yet been done.
Review of Action Plan

- Examine ways to make an aggregation program of CEPII’s 10 scenarios available to board and then to public.
  - The GTAP 6 Data Base with Doha Scenarios and Reference-Group Weighted Tariffs were released in November 2005 by Betina Dimaranan. The tariff-cutting scenarios were supplied by CEPII and were constructed from the MAcMap Data Base and from the WTO’s Consolidated Tariff Schedules (for bound rates). The scenarios are available on the website at:

  https://www.gtap.agecon.purdue.edu/access_board/v6_with_DDA_scen_and_RGW.asp
Review of Action Plan

- Update energy data for incorporation into GTAP 7 Data Base.
  
  The GTAP 6 energy data in the GTAP Data Base uses 2001 volumes data combined with prices which have been indexed to 2001. Robert McDougall and Vitaly Kharitonov are currently working on updating the energy price data for 2001 to compare with the 2001 energy data in the GTAP 6 Data Base. Pre-releases of the GTAP 7 Data Base are expected to include 2004 energy volume data with the indexed prices until the procedure being examined by Robert and Vitaly for updating prices is ready to be incorporated into version 7.
Review of Action Plan

- Examine ways in which the division of value-added between capital and labor to take into account self-employed labor.
  
  - Betina Dimaranan plans to incorporate Maros Ivanic’s value added splits into the GTAP 7 Data Base. Nelson Villoria is currently working on improving the methodology for incorporating primary factor splits into the data base.
Review of Action Plan

• Examine ways to further improve tax data for the GTAP 7 Data Base. Appraise the available GFS statistics on commodity tax data and compare and contrast with the existing GTAP I-O based estimates

  - No progress has been made on tax data for v7. This is expected to be undertaken next year. Gilbert Metcalf will be presenting work, undertaken with John Reilly, comparing the current tax data in the GTAP 6 Data Base and those obtained using their own methodology. The results of Gilbert’s comparison are available on the website:

  https://www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=1920
Review of Action Plan

• Implement new release strategy and incorporate new I-O tables into interim releases of the GTAP Data Base. Release new version every 2 years and interim releases of new I-O tables every 6 months. GTAP 7 Data Base to be released in 2 years
  – The new release strategy has been implemented. After unexpected delays due to problems in the disaggregation of the new I-O tables, interim release GTAP 6.1 was released in October 2005. GTAP 6.1 included I-O tables for six new regions (Pakistan, Bolivia, Ecuador, Iran, Mauritius and Nigeria,). The GTAP 6.2 Data Base is expected to be released in early May 2006

• Implement GTAP 6 Data Base pricing increase.
Review of Action Plan

• Examine whether GTAP data can be reconciled to IMF trade totals
  – This has not been undertaken. The IMF trade totals cannot be reconciled because they're not globally consistent. We can compare to IMF trade totals and ask Mark Gehlhar about the differences.

• Working committee to explore approaches for addressing classification problem in textiles and wearing apparel and report to the board next year
  – Peter Minor, Nathan Associates, plans to use the SplitCom program to investigate the classification problem with textiles and wearing apparel raised by Joe Francois at the board meeting last year. Peter Minor has also spoken with Mark Gehlhar about the issue and how it relates to trade.
Review of Action Plan

• Working committee to examine the Sugar classification problems and report to the board next year
  – Chairmanship of the committee was vacated with Frank van Tongeren’s move to the OECD. Mark Gehlhar and Ashley Winston have met to explore the sugar classification problem.

• Review existing I-O tables and identify common problems to improve data procurement
  – Tasneem Mirza and Terrie Walmsley have updated the report on the I-O tables for the GTAP 6.1 Data Base. They are also currently using an entropy program to compare the shares in 39 I-O tables from the GTAP Data Base with the representative table. This exercise has shown a number of errors in both the I-O tables and in the representative table.
Model Goal

To improve understanding and credibility of the GTAP-based models.

1. Enhance testing and evaluation of the GTAP-based models.

2. Further enhance the ability of users to understand and explain model results (*long range*).
Review of Action Plan

• Validation of GTAP-Dyn parameters
  – Alla Golub has now completed a chapter for the Dynamic GTAP book which examines time series data to estimate the convergence parameters used in the GTAP-Dyn model. Further details are provided in section VI below.

• Workshop on parameter estimation
  – The Center has continued to conduct econometric estimation of parameters for the standard model. The most recent work has focused on consumer demand behavior across the income spectrum. The recent work on sectoral validation of the model (in this case for wheat), has been further refined in the context of Ernesto Valenzuela’s Ph.D. dissertation, and is in the process of peer review. The USITC are progressing with their work on model validation.
Review of Action Plan

- Technical Paper on adjustment cost
  - Vitaly Kharitonov and Joe Francois are currently working on a technical paper which incorporates adjustment costs into the GTAP model using an approach developed by Joe Francois. The paper is complete and awaiting review by Joe, followed by external reviews.
Education Goal

To expand and improve global economic analysis education worldwide (both within and outside the network).

1. Promote learning among data base contributors.
2. Use workshops and web-based products to provide specialized learning.
3. Improve communication, learning, and transfer of knowledge within the Center.
4. Improve marketing of GTAP courses.
Review of Action Plan

• Hold Thirteenth Annual GTAP Short Course in Crete, Greece in June 2005
  – The GTAP Short Course in June 2004 was again a success thanks to Judy Conner and all the instructors.

• Hold Dynamic GTAP Short Course
  – The Short course on the Dynamic GTAP model will take place in October 2006.
Network Goal

To increase effective participation in the global network, particularly in developing countries.

1. Obtain funding from donor agencies for developing country participants.
2. Conduct more courses and conferences in developing countries.
3. Review pricing to enable greater developing country participation.
4. Foster communication within the GTAP network and beyond.
## Statistics

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<th>2005</th>
<th>Change</th>
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<tr>
<td>Developed Countries</td>
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<tr>
<td>Lower</td>
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<td>545</td>
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<tr>
<td><strong>Total number of countries represented</strong></td>
<td>121</td>
<td>130</td>
<td>+7.4%</td>
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</table>
Review of Action Plan

• Aid in facilitation of Ninth Annual Conference on Global Economic Analysis to be held in Ethiopia, June 2006
  – Hakim Ben Hammouda and Patrick Osakwe have done a great job of organizing the 9th Annual Conference in Global Economic Analysis. Ginger Batta has managed the website and registration and paper submission process. 227 abstracts were submitted and 204 papers were accepted as a result of the review process. There will be a record number of participants from Africa, supported in part by the scholarships offered by UNECA for African presenters. 40 scholarships have been offered to participants from Africa.
Review of Action Plan

• Implement Developing Country Pricing policy

• Explore funding and marketing issues of increasing developing country participation through working committee
  – The developing country working committee has not been active this year; however it is expected that more work will be undertaken next year to explore scholarships for the 2007 conference.
Review of Action Plan

- Improve marketing of GTAP products through brochures.
  - A new brochure outlining all of the Centers activities was produced and distributed with the annual mailing. Further work is expected to be undertaken this year.

- Develop 2007 Purdue conference proposal
  - Tom Hertel will present the Center’s proposal for the 10th Annual conference at Purdue University at the Board meeting.
Review of Action Plan

• Hold special GTAP Short Course in Mumbai, India provided funding comes through.
  – The Indira Gandhi Institute for Development Research (IGIDR), India hosted the South Asia Short Course in Global Trade Analysis in February 2006. The course was very successful with 26 participants attending the course, of which 16 researchers from South Asia received scholarships. We are grateful to the IGIDR, the Ford Foundation (India) and the ERS/USDA for their support.