

## **Summary: GTAP Advisory Board Meeting 2009**

### **A. Summary of Goals and Accomplishments in the Past Year**

See Board Report and Issues document:

[https://www.gtap.agecon.purdue.edu/events/Board\\_Meetings/2009/default.asp](https://www.gtap.agecon.purdue.edu/events/Board_Meetings/2009/default.asp)

### **B. Summary of Agency Activities in the Past Year**

See: [https://www.gtap.agecon.purdue.edu/events/Board\\_Meetings/2009/agencies.asp](https://www.gtap.agecon.purdue.edu/events/Board_Meetings/2009/agencies.asp)

### **C. Overview of Core Goals 2008-2012**

1. **Data Goal:** To Improve the quality of Data Products through:
  - Improving the quality of contributed I-O data
  - Addition and Improvement of Other Datasets
  - Monitoring of Data Quality using Comparison Programs
  - Version control and Documentation
2. **Research Goal:** To actively participate in quantitative economic analysis of pressing global concern in the areas of:
  - Trade and Development
  - Global Environmental issues
3. **Model Goal:** To promote further development of GTAP-based models
4. **Education Goal:** To expand and improve global economic analysis education worldwide.
5. **Staffing Goal:** To actively seek and encourage talented staff and graduate students.
6. **Collaboration Goal:** Actively seek opportunities for fostering collaboration with institutions around the world.

## D. Overview of Priorities and Responsibilities

### 1. *Data Goal:* To Improve the quality of Data Products.

<i>Tasks</i>	<i>Individuals</i>
Improving the quality of contributed I-O data (core)	
– v7.1: EU I-O Tables	TW, CL and BN
– v8: Incorporation of Metadata and treatment flags, peer review system and reviewer guidelines, provide programs used for EU, IO disaggregation module	AA, TW, and CL
– Tertiary priority: adjust IO contributor requirements to include domestic margins	RMD, TW and AA
Addition and Improvement of Other Datasets (core)	
– v7.1: factor taxes, domestic support	RMD, BN
– v8: skill splits, Commodity taxes, protection, energy	USITC, NVL, BN, LA
– Tertiary Priority: domestic margins)	RMD, BN
Monitoring Data Quality using Comparison Programs (core)	
– Priority: Further work on Comparison Programs	RMD
– Secondary Priority: Comparing Simulation Results across data bases	TH, TW, Grad student
Versions and Documentation	BN, TW, RMD, AA, TH
– Priority: Documentation (core), Interim releases (core)	
– Secondary priority: Multiple Versions of GTAP Data Base (chopping block), Version Control, Documentation of Construction Process (core)	
Additional Data Bases (previously non-core)	TW, BN, CL
– Secondary Priority: Examine ways in which we can obtain funding and personnel time to update non-core data in a timely manner (e.g., GHG emissions, land use, migration etc), Africa data, FDI	
Open Sourcing	BN, RMD
– Secondary Priority: Examine ways in which to circulate some of the later-stage modules to	

contributors (core)

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2. **Research Goal:** To actively participate in quantitative economic analysis of pressing global concerns.
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<i>Tasks</i>	<i>Individuals</i>
Trade and Development <ul style="list-style-type: none"><li>– Priority: documentation of poverty module, dissemination of PE-GE model, encourage graduate student work on NTBs</li><li>– Secondary priority: Labor migration</li></ul>	TW, BN, RMD, AA, TH, AR, Graduate students
Global Energy and Environmental issues <ul style="list-style-type: none"><li>– Priority: continue to publish papers, develop methodologies for incorporating climate change impacts and GHG mitigation opportunities (non-core)</li></ul>	TH, WT, AG and graduate students

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3. **Model Goal:** To promote further development of GTAP-based models
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<i>Tasks</i>	<i>Individuals</i>
Actively seek out potential papers for the GTAP Technical Papers (core) <ul style="list-style-type: none"><li>– Priority: Better documentation of GTAP-E Model and data</li><li>– Secondary priority: seek out technical papers on issues of relevance to improving the theory of the GTAP Model</li></ul>	LA, AG, RMD TW, TH

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4. **Education Goal:** To expand and improve global economic analysis education worldwide
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<i>Tasks</i>	<i>Individuals</i>
Make short course materials more widely available to public (core)	TW, GB, MA, new post-doc

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- Priority: Thailand course, Internal training of staff and PhD's, and live sessions.
- Secondary: webinars, hiring a new person/outsource GTAP courses, encourage more new graduate students to pursue PhD's in quantitative global economic analysis

5. **Staffing Goal:** To actively seek and encourage talented staff and graduate students

<i>Tasks</i>	<i>Individuals</i>
Seek a new person to assist with data base work (core) <ul style="list-style-type: none"> <li>– Priority: Mentor new staff</li> <li>– Secondary: Hire a computer science student and a course coordinator, promotion path for Center staff, Continue to monitor hub and spoke system via internal and external reviews.</li> </ul>	Everyone

6. **Collaboration Goal:** Actively seek opportunities for fostering collaboration with institutions around the world.

<i>Tasks</i>	<i>Individuals</i>
Seek partners and funding opportunities for collaboration (core) <ul style="list-style-type: none"> <li>– Priority: Consortium institutions and Europe (core)</li> </ul>	TW, TH

### **E. Summary of Discussions**

The following relate to specific areas of discussion at the board meeting. In cases where an issue was discussed extensively in the Issues Report and no new issues arose at the board meeting it is not repeated again here (see the Issues Report: [https://www.gtap.agecon.purdue.edu/events/Board\\_Meetings/2009/default.asp](https://www.gtap.agecon.purdue.edu/events/Board_Meetings/2009/default.asp)).

1. **Data Goal:** To Improve the quality of Data Products through:

*Improving the quality of contributed I-O data*

**EU I-O Tables:** 27 SAMs have been received from Marc Mueller, Institute for Prospective and Technological Studies. The tables have not yet been converted into GTAP format, which requires considerable work. This work is being done by the Center with the assistance of Professor Scott McDonald. Further assistance in the future to

interact with ITPS (assuming they continue to produce EU SAMs), and to assist in converting these tables into GTAP format would be of paramount importance in ensuring the timely release of up-to-date EU data in the GTAP Data Base. Concerns were also raised by the LEI about the quality of the IO tables. **Action:** The 27 EU tables will be incorporated into version 7.1 of the GTAP Data Base. This version will then be distributed to board members for review before a decision will be made about the versions wider release. The general feeling amongst the EU board members seems to be that public release would be important if the new IO tables represent a qualitative improvement over what is currently in version 7.

**I-O Data Quality:** The quality of IO data in the GTAP Database has been the number one concern for many at the last several board meetings. As noted at the Santiago board meeting we now have a new staff member, Angel Aguiar, who will be dedicated to implementing the remaining ideas outlined by Terrie Walmsley at the 2008 Advisory Board meeting. One of the main tasks of Angel Aguiar will be implementation of the Peer Review system. It was suggested that we contact individuals who had previously reported on IO tables to help to develop a manual for reviewers. It was also agreed that Myanmar would be removed from v7.1 of the GTAP Data Base, due to problems with the underlying data. **Action:** Angel Aguiar will commence work in January 2010 to implement these and other ideas.

#### *Addition and Improvement of Other Datasets*

**Factor Taxes and Commodity Taxes:** The board reiterated its concern over the treatment of taxes in the GTAP Data Base. **Action:** Fixing issues related to factor taxes in release v7.1 and examining commodity taxes for v8 will be top priority.

**Bilateral Services Trade Data:** In version 7, there was a significant improvement in the GTAP Data Base due to the contribution of bilateral services trade data by the CPB. The US ITC and the WTO noted that they have additional bilateral services trade data which could be provided to help further improve the work of the CPB in version 8. **Action:** The Center will examine this further as new contributions are provided.

**Energy:** As outlined at last year's board meeting, considerable work is still required to improve the GTAP energy data base. As mentioned at the board meeting we are looking forward to Levent Aydin joining the Center to assist with these data. Unfortunately recent correspondence with Levent suggests that his arrival has been delayed, and unfortunately he may not be able to accept the position. **Action:** If this is the case the Center will again be advertising for a new staff member in the energy area.

**Protection:** At the board meeting ITC-Geneva presented an alternative methodology for providing protection data. Presently the ITC-Geneva protection data come to GTAP via CEPII, which invests considerable effort in processing the tariff data and making it compatible with the GTAP requirements. The ITC-Geneva has offered to provide protection data directly to GTAP using a somewhat different methodology. It is certainly attractive to source the data from the organization that is involved directly in assembling it. However, in deciding how to source these data the Center must consider several factors, including: a) consistency of data between versions – we have learned to our cost that methodological changes in the production of tariff data can raise many serious issues; and b) continuity of supply – this is always an issue for us with any data base; c)

documentation – the methodology used to process the data must be fully documented, and finally, d) responsiveness to requests for more information/clarification – in order for the data to retain its credibility, it is important that the supplier respond quickly and efficiently to concerns/puzzles which arise in the course of its use. **Action:** For version 8 we hope to receive contributions from both CEPII (pre-release 1) and ITC-Geneva (pre-release 2) so that comparisons can be made. Given the alternative methodologies for aggregating protection, trade weights, CEPII reference groups and ITC-Geneva reference groups, treatment of unit values, etc., we would like to encourage the parties to contribute to an organized session at the Bangkok conference to debate the issues and provide comparisons based on the v8 prerelease.

#### *Version control and Documentation*

**Recognition and Referencing:** The Center and the GTAP network have not been giving sufficient recognition to ITC-Geneva for its contribution to the protection data. Giving such recognition and ensuring adequate citations by GTAP users is an integral part of the success of the GTAP project. Indeed, upon reflection, we believe that we are falling short on this account with other data contributions as well as software and modeling work underpinning the research currently undertaken with GTAP.. **Action:** The GTAP Data Base documentation will be edited as needed, and a web page will be created which individuals can use to obtain the appropriate referencing for the GTAP data base, components of the database, models and computer software. We hope to make it extremely easy for users to download the appropriate references and use them in their papers.

**Warnings:** The issue was raised about how the Center could provide stronger warnings on selected data sets, such as the services trade data. **Action:** Add a note to the GTAP Data Base book.

**Time Series Databases:** Joe Francois is interested in creating a consistent time series of GTAP Data Bases. These will be valuable in ongoing validation work as well as for time series econometric research. He has offered his leadership in developing this, but would need the assistance of Center staff. At this stage this is not our priority so funding and staff would need to be found for to assist the Center in pursuing this worthy goal.

#### *Additional Data Bases*

**Africa Data Base:** There is considerable interest in further development of the GTAP African Data Base. A meeting was held in which the Center, IFPRI, the WTO, UNECA, USITC, the World Bank, FAO and ITC-Geneva expressed an interest in this. **Action:** A proposal, that includes more capacity building, data base development and research, will be circulated to interested parties.

**Non-Core Data Bases:** Non-core data bases are those databases produced as a result of special projects funded by one-off grants to Purdue University/the Center as well as other network members. Updates to these databases are generally done at the discretion of the originator if time is available. The Australian Bureau of Agricultural Economics (ABARE) raised the question of how support could be obtained to ensure that non-core data bases were updated with each release so that these were made available with each new GTAP Data Base release. The Center emphasized that funding and additional staff

would be required to make this a priority. Options for raising funds include increasing the price of the database (or offering options to purchase the additional datasets), or obtaining additional funds from board members or outside sources. The funding source would need to be long term so as to provide resources for continued updating of these additional datasets; at this stage however our greatest problem is staff. **Action:** The Center will endeavor to update these datasets more quickly, subject to constraints on their time. We hope to release the non-CO2 emissions in the near future.

**TASTE:** TASTE has become a powerful tool for those wanting to develop their own tariff scenarios or undertake disaggregated, PE-GE modelling work. A proposal was put forward at the board meeting to extend TASTE to ensure that users could investigate issues related to sensitive products. IFPRI have offered to cover David Laborde's time on these improvements, however funding of \$20K is needed to pay for the time of Mark Horridge. **Action:** There was interest in this proposal on the part of board members. We are waiting to hear from them about specific commitments.

A related issue was whether we have appropriately met the licensing requirements for TASTE. **Action:** We will ensure that we are.

#### *Open Sourcing*

**Open Source:** Open sourcing of the data base construction code was raised as a way in which contributors/board members could examine how data are adjusted during the construction process and experiment with different assumptions. As outlined in the Issues report, there are numerous issues, as well as potential benefits, which need to be considered. Hence the Center has adopted a measured approach to this problem. IFPRI has offered to assist in this process – beginning with the protection module. **Action:** The Center is planning to employ someone with computing skills to do some of the initial work to assist with open sourcing. We are also examining ways in which to circulate some of the later-stage modules to contributors. It is likely that we could benefit significantly from sharing the protection module with Betina Dimaranan and David Laborde at IFPRI, and eventually with all board members.

4. **Research Goal:** To actively participate in quantitative economic analysis of pressing global concern in the areas of:

##### a. Trade and Development

**Non-Tariff Barriers:** Work on NTB's amongst the GTAP network is on the increase and there is a great deal of interest in incorporating these measures into the model and database, although the data are not quite in a suitable format. **Action:** The Center plans to encourage graduate students to work in this area; we are interested in the efforts of board members to estimate tax equivalents for potential incorporation into versions of the GTAP data base.

5. **Education Goal:** To expand and improve global economic analysis education worldwide.

**Training of Board member staff in GTAP:** One of the concerns at the Center is the high demand for the GTAP short Course and our inability to meet that demand. The Center outlined a number of ways in which they hoped to address this concern. It was

noted that one source of the high demand is from board member agencies who are trying to provide their staff with modeling skills. Two issues were raised. First, how do board members ensure that staff who have been trained on these courses retain their skills? Both the Center and other board members emphasized the need to ensure that staff are given assignments immediately after the course that utilize the skills they have learnt on the course. It was also suggested that teaming these people with others who have done the course or PhDs in the field was also successful. However it was also noted that many of the best modelers are staff members who have done PhDs in this area. More needs to be done to promote PhDs in CGE modeling and related disciplines. **Action:** The Center plans to implement many of the ideas outlined to increase its ability to meet demand for GTAP short courses. The Center would also like to feature past CGE PhDs, as well as board members interested in hiring in this area in the future in order to emphasize the career opportunities to incoming graduate students. It is also suggested that board members utilize the website when seeking staff.





## **G. Research Fellows**

The members of the Research Fellow Nominating Committee included Antoine Bouet (IFPRI), Philip Bagnoli (OECD) from the board, and Thomas Hertel from the Center.

The following individuals were nominated as new research fellows: Ernesto Valenzuela, Joaquim Bento, Rod Tyers, David Laborde and Angelo Gurgel.