Summary: GTAP Advisory Board Meeting 2010

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/2010/default.asp

B. Summary of Agency Activities in the Past Year

See: https://www.gtap.agecon.purdue.edu/events/Board_Meetings/2010/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.

Tasks	*Individuals*
Improving the quality of contributed I-O data (core)	
– Primary:	
• Review of I-O Data, peer review system and reviewer guidelines, chopping block, dwellings, update sectoral concordances, Annual report	AA
• Representative table	AA and BN
• factor taxes, Commodity taxes	RMD
– Secondary Priority:	
• Collaborations with AGRODEP (Africa) and WIOD (EU)	AA and TW
– Tertiary priority:	
• Make GAMs programs from EU project available	AA and SMD
• Incorporation of Metadata and treatment flags	BN (energy) and AA (I-O)
• adjust I-O contributor requirements to include domestic margins	RMD and AA
• I-O disaggregation module	RMD and AA
Addition and Improvement of Other Datasets (core)	
– Primary:	
• skill splits,	TW and USITC
• protection module	BN
• protection working committee (Will Martin, Chair)	BN and TH
– Secondary:	
• transportation data	RMD
• energy	New and RMD
• splitting specific and *ad valorem* tariffs	BN
• global I-O table	BN, Joe Francois, others
Monitoring Data Quality using Comparison Programs (core)	
– Priority:	
• Comparison programs	RMD
– Secondary Priority:	
• Comparing Simulation Results across data bases	BN
• Produce reports on how much regional I-O tables changed as a result of FIT for documentation and contributors	AA and BN
Versions and Documentation	
– Priority:	
• Finalize Documentation of v7	BN and RMD

• v8 Pre-releases, two base years, Multiple Versions of GTAP Data Base (chopping block), Documentation of Construction Process	BN
– Secondary priority:	
• alternative formats (global I-O, summary tables)	BN

Satellite Data Bases (non-core)

– Priority:	
• Make available CO2 emissions data base and Land use data base	TH, MA and AG
• set up a website for sharing baseline data (USITC and European board members)	TW
– Secondary Priority:	
• Time as a Barrier Data Base (Peter Minor), GMig2 data, FDI data (CEPII)	TW and AA

Open Sourcing

– Secondary Priority: Examine ways in which to circulate some of the later-stage modules to contributors (core)	BN and RMD

2. ***Research Goal*:** To actively participate in quantitative economic analysis of pressing global concerns.

Tasks	*Individuals*

Trade and Development

– Priority:	
• Firm heterogeneity tech paper and Papers using GDyn Model	TW
• Papers using PE-GE model	BN
– Additional papers using poverty module	TH and Monika
– Secondary priority:	
• Papers on Labor migration	TW and AA
• Non-tariff barriers and in particular services non-tariff barriers	Grad required
• Child Labor	BN and TW

Global Energy and Environmental issues

– Priority: continue to publish papers, incorporate second generation bio-fuels into GTAP, incorporate water and river basins into a modified GTAP Model, and improve representation of mitigation opportunities in agriculture and forestry. (non-core)	TH, WT, AG, FT and graduate students

3. *Model Goal***:** To promote further development of GTAP-based models

Tasks	Individuals
Actively seek out potential papers for the GTAP Technical Papers (core)	
– Priority:	
• GDyn-E Model (contingent on funding)	AG
• Documentation of poverty module – to be reviewed and on the web by the end of 2010	TH and MV
• Firm Heterogeneity Model	TW

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

Tasks	Individuals
Make short course materials more widely available to public (core)	
– Priority:	
• Short course in Purdue (August) and Ethiopia (March).	TW, GB, MA
• Continue internal training of staff and PhD's	TW and AA
• live forums	BN
• I-O courses and other data sessions	AA and BN
– Secondary:	
• marketing to potential Graduate students	TH
• User courses (WTO, ADB)	TW and AA

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

Tasks	Individuals
Seek a new person to assist with data base work (core)	
– Priority: seek a post-doc to work on energy data	TW and MA

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

Tasks	Individuals
Seek partners and funding opportunities for collaboration (core)	
– Priority	
• Post Doc at USITC and explore further collaboration on data	TW, RMD and BN
• Examine potential collaboration with Joe Francois to	TH and TW

undertake projects with the European Commission

- Collaborate with the LEI on issues related to land use, agriculture and the environment   TH and NV

E. Summary of Discussions

The following relate to specific areas of discussion at the board meeting.

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

Improving the quality of contributed I-O data

I-O Tables: Improving the quality of the I-O data in GTAP is of paramount importance and now that Angel Aguiar has begun working with the Center many of the improvements that were postponed previously (for example, the peer review process, more I-O courses and programs to assist contributors) will now be implemented. Bob Koopman agreed to provide a couple of reviewers, if anyone else would like to volunteer please let us know. The experience with the EU SAMs, and the issues with dwellings and margins data have also suggested that we need to undertake a more extensive review of what data is available and what data we require. **Action:** In the next few months Angel Aguiar will be collecting this information for a full discussion at the strategic planning meeting we expect to hold in October. The Productivity Commission is also assisting us in these efforts. One approach to the production of I-O tables is to use both the supply and use tables combined with I-O tables where available. In the case of the EU, this would mean combining the AgroSAMs which have additional agricultural detail with the Eurostat I-O tables.

African I-O Tables: It was noted that many of the African I-O tables contributed as part of the MERISSA project are now so old that they have been listed in the chopping block. Hence the GTAP 8 Data Base may have more Eastern and Western African economies due to the recent Africa project, however many Southern African economies may be removed. **Action:** We are currently contacting potential contributors and hope that our course in Ethiopia in March and the new AGRODEP network might assist us in getting new tables for Africa. If any of the board members are interested in funding contributions there are people in the network who might be willing to do the work.

New Release: In preparation for the new release cycle we will be also revisiting the sectoral concordances (in particular the changes to ISIC) and constructing a new representative table.

Addition and Improvement of Other Datasets

Taxes and Protection: At the board meeting a plan was laid out for addressing problems with the commodity taxes. In order to do this, revisions to the protection module are also required. **Action:** This work, along with fixes to the factor taxes will be undertaken by Badri Narayanan and Robert McDougall. Badri Narayanan also hopes to split specific and ad-valorem tariff rates during these revisions. Updating the tax data in the GTAP Data Base is a top priority for version 8.

Skills Data: Marinos Tsigas and Nico van Leeuwen reported on progress with the skills dataset. **Action:** It is expected that this data will be delivered to the Center in October.

We have asked Nico van Leeuwen to again review the data, and then Terrie Walmsley will work on incorporating the skills data into the construction process in December.

Protection: At the board meeting the ITC-Geneva said that they would provide the protection data directly to GTAP using a somewhat different methodology for version 9 and beyond. **Action:** For version 8 contributions will continue to be received from CEPII and David Laborde at IFPRI. A working group has been set up to oversee this process and ensure that the Consortium's interests continue to be well-served. As a first step, the ITC will submit directly a v8 protection data base by the end of the year. This will form the basis for a thorough comparison of the two approaches. Will Martin is chairing this sub-committee and members include Antoine Bouet, Martina Brockmeier, Thomas Hertel, Sebastien Jean, Mondher Mimouni, Badri Narayanan and Janine Pelikan. Others wishing to join this committee should contact Tom Hertel.

Transportation data: revised transportation data has been obtained from a number of sources. It is hoped that this data can be used to improve upon the transportation data in version 8. **Action:** Misak Avetisyan (a graduate student) will be working with Robert Mcdougall to examine the alternative sources and examine how the current methods might be improved.

Global I-O: There appears to be an increasing need for the construction of a global I-O table that shows imports for intermediate and final use. Both WIOD and the USITC are working on such a database, and Joe Francois has spent some time going through the HS6 data to divide commodities according to intermediate and final use. **Action:** We will examine the possibility of providing a global I-O table to as an alternative format for the GTAP 8 Data Base.

Monitoring Data Quality using Comparison Programs (core)

Comparison programs: with the inclusion of the EU I-O tables into the GTAP Data Base it became clear how important this type of checking is for picking up errors and improving the quality of the GTAP Data Base. **Action:** This checking will now become common practice for all versions, and along with our other checks will be distributed to board members and contributors along with pre-releases and to the network at the time of release.

Version control and Documentation

Documentation: documentation of the GTAP Data Base is of utmost concern. **Action:** contributors will be required to submit documentation before their tables are accepted and we would like to encourage you to ask staff contributing to datasets in GTAP to finalise their documentation as soon as possible.

Time Series Databases: Due to increasing demand for time series data for baseline and validation work, the GTAP 8 Data Base will be released with two base years. The suggestion was made that one could interpolate to get a longer time series.

Satellite Data Bases

Satellite 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. We are now charging for these in an attempt to generate a revenue stream to support this work. However, so far the funds are insufficient to support a dedicated graduated student in this area. **Action:** A group of board members are investigating the possibility of assisting us in this regard, in particular with the energy related datasets. We fully support the possibility of receiving more data contributions and funding to update and extend our satellite datasets, either for individual datasets or more generally for multiple datasets. However, a feasibility assessment will be required before committing the Center to maintain satellite data sets beyond those previously provided for v6.

Sharing Baselines: The European board members expressed an interest in developing a website to share baseline materials with each other and with other contributors. The possibility of sharing baseline data was also raised at a USITC supported workshop on baselines and validation in Shanghai following the conference. We would hope to provide Baseline data, along with programs that people could be used to update the GTAP Data Base (and in particular their own region's data) before undertaking policy simulations. **Action:** We plan to hire a consultant to help in the collection of baseline data at the macro and country level and the construction of programs for developing baselines. A website will be developed to assist in sharing these materials. We hope that you will contribute your baseline data.

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

   a. Trade and Development
   b. Global Energy and Environmental issues

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

User courses (WTO and ADB): The idea of a course for users was raised with some interest being expressed by the WTO and ADB. We reiterate that this is not our area of expertise but we stand ready to assist. **Action:** an experimental user course was proposed to coincide with the 2012 conference in Geneva when many potential instructors/lecturers will be in Geneva at the same time.

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

New Staff and consultants:
   - Energy position to be opened in August
   - Post Doc Csilla Lakatos to work with USITC
   - Consultant for baseline work
   - Potential post doc/s in Europe

Nelson Villoria will be joining us in August as a Research faculty member to lead new research projects. Jevgenjis Steinbuk will be joining us in September as a post-doc. He is working on a joint research project between the Center and the University of Chicago.

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

Europe: Following Terrie Walmsley's recent trip to the WIOD conference and Joe Francois report on the WIOD project, it was decided that there was some potential for collaboration and also some unexploited opportunities in Europe which needed to be examined. **Action:** we are currently examining closer collaboration with the University of Linz in Austria and with the LEI in The Netherlands in order to strengthen GTAP activities in the EU. A possible University to University Memorandum of Agreement between Purdue University and Linz University offers the prospect for the Center to participate in proposals submitted to the European Commission, along with other Consortium member organizations.

USITC: Data construction efforts are also taking place in the USITC that could help to improve the GTAP Data Base. **Action:** Csilla Lakatos is expected to take up a post-doc position with the Center, upon completion of her PhD, where she will work directly with colleagues at the USITC. We have also asked Zhi Wang and Bill Powers to visit the Center to discuss potential avenues for collaboration.

F. Resources and Timing

An overview of how individuals are funded and all the activities they will spend their time over the next 12 months is given below.

Robert McDougall	Badri Narayanan	Angel Aguiar	Terrie Walmsley	Thomas Hertel	Nelson Villoria	Alla Golub	Graduate Students
100% core	100% core	100% core	100% core	25% core	50% Projects	100% Special Projects	Various
Documentation of v7	Implement release strategy	Documentation of v7	GTAP Short Course and education plan	Assist with GTAP Conference	Short courses	Dynamic GTAP Model Applications	Trade pre-processing
Comparison programs	Website and data documentation	I-O Tables and peer review process	Grad Student Projects	Poverty Module	Land use, agriculture and the enviornment	Land Use and Environmental Modelling	Short Courses and education plan
Short Course	Version control	I-O Table Documentation	Conference and Board Meeting	Grad Student Projects	Satellite Data	Satellite data	Pre-processing of macro data
Energy	Documentation of construction process	I-O Educational materials	Skills Data	Global impacts of climate mitigation policies	Potential collaboration with the LEI	GDyn-E	Agricultural Production Targeting
Trade and services trade pre-processing	Protection Module	Pre-processing of macro data	Dynamic Model and baseline	Climate change impacts		Land-based mitigation strategies	Elasticities
Taxes	Short Course	Dwellings	Satellite data	Satellite data			Satellite data
Transportation Margins	Seminar series and live sessions	Agricultural Production Targeting	AGRODEP, USITC and Europe	GTAP activities in Europe			Global transport data by mode
I-O Disaggregation	Research	Research	Research				
	Meta-data	Meta-data					

G. Research Fellows

The members of the Research Fellow Nominating Committee included Antoine Bouët (Committee Chair), Thomas Hertel, Willem van der Geest, and Richard Tol.

The following individuals were nominated as new research fellows: Kim Anderson, Peter Dixon, Elena Ianchovichina, Marc Mueller and Fan Zhai.