



**GTAP Advisory Board Meeting Summary
June 16-17, 2014 Dakar, Senegal**

Attendance

GTAP Center: Angel Aguiar, Zeynep Akgul, Ginger Batta, Mary Burfisher, Thomas Hertel, Zekarias Hussein, Wendy Kincaid, Robert McDougall, Badri Narayanan, Jeffrey Peters

Board Representatives: Martin Banse, Mohamed Hedi Bchir, Antoine Bouët, Lucian Cernat, Pramila Crivelli, Aziz Elbehri, Mark Horridge, Sébastien Jean, Hans Grinsted Jensen, Stephen Karing, Kenichi Kawasaki, Carlos Ludena, Will Martin, Mondher Mimouni, Roberta Piermartini, Susumu Suzuki, Marinos Tsigas, Hans van Meijl, Frank van Tongeren, Niven Winchester

Guests: Philip Adams, S. Amer Ahmed, Maryla Maliszewska, Bert Saveyn, Dominique van der Mensbrughe

A. Summary of Goals and Accomplishments in the Past Year (*Board Report and Issues Document*)

http://www.gtap.agecon.purdue.edu/events/Board_Meetings/2014/documents/2014_IssuesReport.pdf

B. Summary of Agency Activities in the Past Year

http://www.gtap.agecon.purdue.edu/events/Board_Meetings/2014/default.asp#agencyreports

C. Overview of Broad Goals for the Center

1. **Data Goal:** To Improve the quality of data products through:
 - a. Improving the quality of contributed I-O data
 - b. Addition and improvement of other datasets
 - c. Monitoring of data quality using comparison programs
 - d. 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 and Global Environmental Issues
3. **Model Goal:** To promote further development of GTAP-based models
4. **Education Goal:** To expand and improve education for global economic analysis worldwide
5. **Staffing Goal:** To actively seek and encourage talented staff and graduate students
6. **Collaboration Goal:** To actively seek opportunities for fostering collaboration with institutions around the world

D. Overview of Priorities and Responsibilities, by Goal Type

1. Data Goal: To Improve the quality of data products

Tasks	Responsibility
Improving the quality of contributed I-O data (core)	Aguiar
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> Develop programs that would facilitate the contribution of Supply and Use tables and alternative formats more consistent with those coming out of statistical offices 	Grad
<ul style="list-style-type: none"> Work with contributors to improve the EU IO Tables 	Grad
<ul style="list-style-type: none"> Work more closely with National Statistical Offices (NSOs) and OECD 	Grad
<i>Secondary Priorities</i>	
<ul style="list-style-type: none"> Further examination on whether the treatment of the dwellings sector can be improved 	McDougall
Addition/Improvement of Datasets used in GTAP Data Base (core)	Narayanan
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> Investigate possibilities for services sector disaggregation for v10 	Aguiar, McDougall
<ul style="list-style-type: none"> Collaborate with ITC on further splitting tariff dataset and other developments on tariff dataset 	Pichot, Mimouni
<i>Secondary Priorities</i>	
<ul style="list-style-type: none"> Examine possibility of targeting trade balances 	McDougall
<ul style="list-style-type: none"> Examine the availability of NSO data (production, etc., by year) to update IO tables as part of FIT process (when redo FIT) 	Aguiar
<ul style="list-style-type: none"> Domestic Margins 	McDougall, Aguiar, Ludena
<ul style="list-style-type: none"> Domestic support, PSE database for Latin America and Africa – MAFAP 	Van Tongeren
<ul style="list-style-type: none"> Baseline/forecast tool for updates 	Resource dependent
Addition/Improvement of Protection Data (core)	Narayanan
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> Update TASTE to v9 	Pelikan, Laborde, Horridge
Version Control and Documentation	Narayanan
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> Begin to implement pre-release process for version 9 	McDougall, Aguiar
Monitoring Data Quality using Comparison Programs (core)	Narayanan
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> Undertake more pre- and post-data Comparisons 	Aguiar, McDougall
Communication (core)	Narayanan
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> Add a number of FAQs to the website to address questions like: Is GTAP SNA compatible? 	Aguiar
<ul style="list-style-type: none"> FAQ for website: where does my money go? 	Kincaid
Satellite Data	Narayanan
<i>Primary Priorities</i>	

<ul style="list-style-type: none"> Release the satellite datasets (GDyn, GMig2, land use, GTAP-E, non-CO2 emissions) soon after the public release of version 9 	Aguiar, Golub, McDougall, Villoria, Irfanoglu
Publish more on the GTAP Data Base Construction Process	Various
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> Papers on data base construction process, including specific examples of why GTAP data do not match source data 	Aguiar, McDougall, Narayanan
<ul style="list-style-type: none"> Paper/chapter outlining how much I-O tables have changed - ranking of countries. Which changed the most and which the least and why? 	Narayanan

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

Tasks	Responsibility
Trade and Development	Various
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> Continue to publish papers on trade, poverty, migration/labor and global supply chains 	Staff and Grads
Global Energy and Environmental issues	Various
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> Continue to publish papers on energy and environmental issues with a special focus on the land-water-energy-climate nexus 	Staff and Grads

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

Tasks	Responsibility
Technical papers	Various
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> Technical paper on a Firm Heterogeneity Model (under peer review in late summer 2014) 	Akgul, Villoria, Hertel
<i>Secondary Priorities</i>	
<ul style="list-style-type: none"> Finalize technical paper on tariff aggregation tools 	Will Martin

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

Tasks	Responsibility
Education Plan	Villoria, Burfisher
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> 2014 GTAP Short Course (Purdue) 	Villoria, Batta, Douglas
<ul style="list-style-type: none"> Introducing cutting-edge modeling strategies to GTAP Short Course participants: The GTAP Short Course 2014 will feature work on firm heterogeneity as well as water in agriculture. 	Villoria, Liu, Akgul
<ul style="list-style-type: none"> GTAP 101 Course(s) 	Burfisher, Villoria, Batta, Douglas

<ul style="list-style-type: none"> • Mentoring Network - Respond to Board's views that stronger connections are needed with universities, including affordable access to training, mentoring of young professionals, and internship/work opportunities. Follow-up with Karingi and Bouët to develop proposal seeking external grant funding to support this outreach. 	Villoria, van der Mensbrugghe, Burfisher
<ul style="list-style-type: none"> • Education plan implementation 	Villoria, Burfisher, Batta, Douglas
<i>Secondary Priorities</i>	
<ul style="list-style-type: none"> • GTAP Live Forums 	Narayanan, Aguiar, Batta, Douglas
<ul style="list-style-type: none"> • GTAP-U - Definition of new courses as well as resources needed for their implementation 	Villoria, Batta, Douglas

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

Tasks	Responsibility
Recruitment and Hiring	Various
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> • Research Economist 	Hertel, van der Mensbrugghe, Narayanan, McDougall, Aguiar, Kincaid

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

Tasks	Responsibility
GTAP Conferences and Board Meetings	Batta, van der Mensbrugghe
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> • 2015 Conference and Board Meeting (Melbourne, Australia) 	Batta, CoPS, Productivity Commission
<ul style="list-style-type: none"> • 2016 Conference and Board Meeting (Washington DC, USA) 	Batta, World Bank
<ul style="list-style-type: none"> • 2017 Conference: solicit proposals 	van der Mensbrugghe
Seek partners/funding opportunities for collaboration (core)	Various
<i>Primary Priorities</i>	
<ul style="list-style-type: none"> • Attend IO meetings 	Aguiar
<ul style="list-style-type: none"> • Ongoing work with contributors, see IO report 	Aguiar

E. Summary of Discussions

GTAP Data Base

After Tom Hertel's overview presentation, the following issues were discussed:

- **Labor Splits** - WTO's Roberta Piermartini welcomed the inclusion of the ILO labor splits in GTAP Data Base and suggested possibility of collaboration in this as well as other new extensions to the data and model (including firm heterogeneity). Sebastien Jean suggested that we should try updating labor splits dataset in the future on regular basis, by collaborating with the ILO.
- **NTMs** - Ken Kawasaki gave an update on the NTMs (Non-Tariff Measures) dataset; these data are in preparation based on surveys in ASEAN, WTO's ITIP dataset as well as collaboration with UNCTAD for other countries. There was further discussion (during the 'parking lot') of consolidating the efforts by various board members on this aspect; Ken Kawasaki will work with UNCTAD, WTO and the World Bank. The European Commission has provided some funds to the ITC-Geneva to develop this dataset. Mondher Mimouni (ITC) mentioned that the current measures of NTMs are biased, since they consider all of the restrictive effects that arise from importing country's policies, yet some of these could well be because of the exporting country's restrictions/bottlenecks in infrastructure, bribery to government officials, etc. Another challenge in collecting such a dataset is that it varies a lot across countries and sectors. The ITC's measure is expected to have these two components separated; however, this is a long-run project. Ken Kawasaki discussed an effort to produce a HS6 level dataset on *ad valorem* equivalents of NTMs. Will Martin suggested working on papers using this. To allow this to be integrated into the GTAP data base, someone at the Center will need to be the focal point to incorporate that into GTAP Data Base. Badri Narayanan was nominated, by the data team, as the focal point from the Center for work on NTMs. Frank van Tongeren raised the issue of difficulty in converging on a single method for handling NTMs; rather, he advocated for an inventory of data and information on NTMs.
- **Backward compatibility of data** - Niven Winchester pointed out that with the expansion of time-series in GTAP Data Base, the challenge could be to ensure backward compatibility for various aspects of the dataset, such as sectoral disaggregation. Robert McDougall responded to this question, stating that with the current extent of time-series coverage, we can largely ensure such compatibility, but as the time series lengthens, all of these challenges will increase sharply.
- **Bio datasets** - Sebastien Jean raised the issue of bio-fuels dataset not being a standardized GTAP product. He suggested developing formal GTAP satellite data releases containing biofuel information. Martin Banse also mentioned that the work done by Farzad Taheripour and Wally Tyner on bio-fuels is being replicated by people outside Purdue University, since a formal release is not available. Bilateral communication with these authors is currently needed for this data/model. This led to a lunch meeting chaired by Wally Tyner, resulting in collaboration between interested board members and Taheripour and Tyner on the new biofuels data base.
- **FDI** - Sebastien Jean mentioned that CEPII's FDI dataset is well-developed and is released regularly, so it will be good to incorporate that into a version of GTAP Data Base, as has been done by Csilla Lakatos and Tani Fukui recently.

Badri Narayanan presented the status of developments in GTAP Data Base. He summarized the development and release of GTAP 9 Data Base. He also identified various concerns/issues raised by the

European Commission, in their board summary report (see box 1 below). Robert McDougall provided a briefing of the state of play in agricultural production and energy datasets. Following are the discussion points that came up after these presentations:

- **Domestic Support** - Frank van Tongeren mentioned that there has been a concerted effort at OECD in collaboration with partners in IADB (for 18 countries, according to Carlos Ludena), FAO (MAFAP), IFPRI, Productivity Commission and World Bank, to prepare a globally consistent domestic support and export taxes/subsidies dataset. The data are already available for about 100 countries. For GTAP version 10, the Center would like to use the new domestic support data compiled by the OECD. Hans Jensen welcomed this potential development. He also argued for the need of further splits in domestic support. Will Martin suggested considering substitution incentives (among different types of crops) vis-à-vis different types of transfers/subsidies in domestic support. For version 9, EU domestic support data is being provided by contributors Emanuele Ferrari, Hassan Dudu, George Philippidis (JRC-IPTS) and Hans Jensen. This is expected to be contributed by September. In a subsequent discussion (parking lot), Frank van Tongeren was concerned whether the new dataset from the IPTS, which is largely based on CATS (Clearance of Accounts Trails System) dataset, may deviate from the OECD PSE definitions. However, during a follow-up discussion in the conference, George Philippidis clarified that it will be fully compliant with OECD-PSE and in fact, the numbers to be supplied by IPTS for EU member countries will sum up to the OECD's total for the EU, to a large extent.
- **Export Taxes/restrictions** - Export policies include restrictions, quotas, bans as well as taxes and subsidies. These are also available for 100 countries.
- **TASTE** - Bound rates have not been included in TASTE for v8, but they are included in the current version to be released for v9. There was some discussion on this by Frank van Tongeren, for getting the bound rates for version 8. This does not seem to be a high priority task, since we have the information for both 2007 and 2011 with the new ITC dataset.
- **The regions XTW and XOC** - Joe Francois felt the need for either eliminating or merging the two composite regions rest of the world (XTW) and rest of Oceania (XOC) to avoid model behavioral issues such as the possibility of a region with zeroes. Others suggested that these regions are generally aggregated with larger regions for modeling purposes anyway.
- **Consistency with real life data** – The data team does a lot of discrepancy checking, but this does not necessarily square the data with real world observations. Furthermore, it is very important to understand the stories behind any differences which might arise. Besides this, the data team plans to publish indicators, work on a paper on the effect of updating a table on policy results using GTAP model. Another paper that we plan to work on will explain how much an IO table change during the construction process. A suggestion came up here (Hans van Meijl and Dominique van der Mensbrugghe) of releasing and comparing the implicit agricultural production quantities in GTAP Data Base with FAOSTAT, much like we do for energy volumes. Sebastien Jean suggested coming up with flags and indicators showing consistency both internally and externally. During the parking lot discussions, Dominique also mentioned that we need multiple sources for reasonable work, since the discrepancies and inconsistencies will always exist.
- **Other agricultural data issues** - Two different issues in agriculture were discussed at length, partly causing confusion between the two. The first is the agricultural IO dataset being updated by Everett Peterson will be used exclusively to disaggregate the IO tables that have aggregated agricultural sectors. The second one is the agricultural production data from the OECD that is used to

target production in a few IO tables. There was a suggestion for the former, by Dominique, to target the product of quantities and market prices of output, rather than values directly as the data on cost structure for agriculture is available with the FAO. Robert McDougall clarified that this dataset is purely for disaggregation and not for targeting.

- **Services sector disaggregation** - The European Commission (Lucian Cernat) came with the suggestions to improve GTAP Data Base thoroughly, because trade policy decisions for 20 member countries are directly based on GTAP Data Base and model. Among the many points raised by them, some have been implemented, while a few others are in progress. There are a few that have not been thought about so far and will need to be given priority in future. Box 1 below gives a summary. The Center will work on a feasibility study for the further disaggregation of services activities, since this seems to be the most feasible among the new changes suggested. This will be studied further and discussed with other board members. Joe Francois suggested that ICT services may be easy to be split out from the other services sectors. Mark Horridge suggested obtaining more information from the IO contributors on the potential for greater sectoral disaggregation. Angel Aguiar replied to this, saying that very few IO tables come with a greater level of disaggregation than GTAP.
- **Services Trade** - Roberta Piermartini (WTO) mentioned that the WTO dataset on restrictions on services trade as well as the trade flows themselves may be useful for comparison and incorporation in GTAP Data Base in future. During the parking lot, Mondher Mimouni mentioned that ITC has undertaken a project on services trade barriers, which is expected to be completed in a year, with harmonized taxonomy.
- **IO tables of Mediterranean countries** - Bert Saveyn (IPTS) mentioned that EC has recently completed an FP7-commissioned project on developing IO tables for Mediterranean countries (MedPro), including several on our wish list, such as Libya. This is likely to be a very useful resource for us to pursue further.
- **Reference year** - This was another issue raised by the Commission as well as a few other board members in 2013 as well. Given that 2010, 2007 and 2004 are consecutively equidistant and the new EU IO tables are likely to come with a base year of 2010, the EC would like 2010 to be the reference year for version 9. However, we have already made 2011 the reference year for GTAP 9 Data Base, since all the data components for 2011 are fairly stable and the data with the latest possible reference year is most appealing to the network as well. Further, Tom Hertel highlighted the fact that using 2010 EU IO tables for a dataset with a base year of 2010 does not necessarily mean that the IO tables contributed will be fully in line with the final GTAP Data Base, since we would still subject them to a lot of international datasets. Badri Narayanan mentioned that we could do a special version of GTAP 9 Data Base with a base year of 2010, apart from the standard release. Lucian Cernat, after hearing the discussion, agreed with the idea of sticking to 2011 as the base year and felt that we need not construct a 2010 dataset.

Badri Narayanan and Mondher Mimouni discussed about the trade and protection datasets in version 9. Following are the discussion points in this regard:

- **Reference groups (RG)** - Mondher Mimouni underlined the need to change the RGs used in the protection data base calculations in order to reflect the realities, by considering various factors in addition to the usual variables such as GDP per capita; this also resulted in larger number of RGs than before, with fewer countries in each of them. Antoine Bouet expressed concern about changing the criteria for constructing RG by expanding the explanatory variables list as well as having too many RGs with too few countries in each of them. The main issue here is endogeneity, which is the

main motivation to construct RGs in the first place. Mondher Mimouni responded by saying that the new variables added are not arbitrary but reflect the structure of trade, which is very important. The minimum number of countries in each RG is 20 usually, but there are exceptions, when the RGs involve bigger countries. Robert McDougall suggested using a unique set of weights for countries, based on RGs. Sebastien Jean mentioned that RGs do make some difference in total tariffs, but not a lot. Mondher Mimouni further clarified that RGs are employed only when there is no tariff-line level data for trade, for specific duties.

- **Tariff revenue** - Hedi Bchir further added to the debate the importance of accounting for tariff revenue, which is a significant source of revenue for governments in small developing countries. Mondher Mimouni mentioned that this is difficult to be incorporated in the tariff data construction stage. Badri Narayanan suggested working together on this issue for a paper.
- **Utilization of preferences** - This is a major issue, particularly from the viewpoint of exports from developing countries. For example, the utilization rates are very low for COMESA countries (mainly Mauritius, Malawi, Sudan and Ethiopia). The paper on the organized session in the conference explores this issue. Doing this for all the countries is on the wish list, but the process is very time-consuming, since we need transaction-level data on tariffs actually applied.
- **Dismantling Schedule** - Mondher Mimouni mentioned that ITC is working on providing data on tariffs resulting from dismantling schedule for the future years, which can be handy for policy simulations. This is heavy work, but may be begun with one or two major agreements, such as TPP.
- **More details on the tariff dataset** - Since there is demand for more disaggregation of tariff dataset, Mondher Mimouni suggested collaborating with the Center on providing information on simple *ad valorem*, simple specific, TRQs, compound and mixed tariffs, in the future.
- **Annual release of tariff dataset** - Mondher Mimouni also suggested releasing tariff dataset on an annual basis, using data from the ITC, in GTAP format. This will be of great help for the modelers at large.

Other parking lot issues not covered above:

- **Fixes in the disaggregation module** - There are some minor issues in the IO tables' disaggregation module that can lead to strange sales disposition. We had plans to fix them earlier, but owing to the lack of resources, we shall pursue this in version 10 data cycle.
- **Baseline** - Bert Saveyn (IPTS) suggested that the Center should continue developing/releasing baselines for dynamic modeling. He also suggested comparing baselines across sources and validating them. While the Center has done this in the past, there are not currently resources in the Center for doing so. Therefore, further work will depend on outside funding.

Box 1: Concerns raised by the EC and our discussion

Disaggregation of Business Services:

This will be investigated further by the data team

Additional regional disaggregation of European neighbors (e.g. Bosnia Herzegovina, Serbia, Algeria and Libya)

Algeria and Libya were pursued hard in the past (PEP); we may try using FP7-commissioned MedPro outcome.

More sectoral detail in the manufacturing sector particular for the energy-intensive sectors
This is difficult, given that a lot more information is needed and with the amount of work needed for services, any other disaggregation will be difficult to pursue.

The GTAP Data Base could be provided in an official GTAP-MRIO format.
In progress for future releases.

More information on the representation of tariffs by type (specific, mixed, compound, tariff rate quotas with fill rates and rents).
We will work with ITC on TRQs, compound and mixed tariffs in future versions.

We have a keen interest in having energy trade represented in detail, including for biomass and biofuels.
Data is scarce in this regard, for many countries. Resources are needed to provide enough focus in this area.

One could provide more insights and documentation about why the GTAP Data Base may deviate from the values published in the National Accounts.
This is a paper under progress currently.

Other issues

We strongly encourage taking 2010 as a new base year for GTAP 9.

Currently we have reasonably stable trade, macro and tariff data for 2011 and pursuit of 2010 data at this stage may delay v9 data cycle. It was later agreed that we will continue to have 2011 as the base year.

Better representation of the institutional accounts and their transfers within the GTAP Data Base (particular attention to government and taxation).

Not in the agenda now. Need more resources for pursuing this.

Increasing attention towards the so-called "bio-economy"; biofuel, 2nd generation biofuel, bio-energy, bio-plastic etc...

Again, resources are needed if these need to be done for all regions in GTAP.

An update and time-series extension of the GTAP migration data base

This is already being done in continual basis.

The construction of a GTAP baseline up to 2030 or beyond where the GTAP Data Base is extrapolated in the future, based on clear assumptions on global indicators like GDP growth, population etc.

GDyn Baseline has already been prepared (2012) until 2030 for GDP, labor, etc.; 2050 and 2100 for certain variables too.

Mainstreaming the Non-CO2 Emissions Data Base

The discussion on the non-CO2 emissions data base had two components spread across a brief discussion in the morning session of Day 2 of the Board meetings, and a longer session with a smaller group in the afternoon. The discussions reviewed the history of the non-CO2 emissions data bases across GTAP Data Base Versions 6 to 8, with a focus on the different methodologies and sources of input data. The key

advantages and drawbacks of the various methodologies were discussed, with a focus on identifying a sustainable way to mainstream the satellite accounts into the main GTAP Data Base release schedule. Several alternative methodologies – an ideal approach and several alternatives - were discussed. The ideal approach would be to replicate the approach used in Version 6. This would involve updating the data of Rose et al. (2010) which came out of a multi-year EPA study. This would require incorporating CRF reported emissions as available and standardized estimates. The advantage of this would be the accuracy and precision. The drawback would be that it is highly resource intensive and would have to be done every release cycle.

The approach taken most recently for Version 8 is to update the emissions data of Rose et al. (2010) using data from FAOSTAT and EDGAR. The use of global databases like EDGAR and FAOSTAT lead to another possible future approach called dubbed the global data approach, which is to use the data from these directly as inputs into the build. The advantage here is that since these databases are regularly updated, the construction in the GTAP Data Base can be standardized. The downside is that there is cruder mapping to drivers and sectors. The resulting data also do not necessarily match with official reports. Another alternative discussed would be to apply a combination of the ideal and global data approaches.

The discussions around which approach could be applied for the satellite account for Version 9 also covered the timeliness and resources available. Center staff noted that the next version of the satellite database would need to be developed within the next year to be able to come out with the other satellite accounts for Version 9. Time for devising and execute a new methodology is thus limited. The resource envelope would also partly determine which method to apply. For example, the ideal approach would be more resource intensive than the global approach.

To help guide the development of the satellite account, there was also a call for volunteers to serve on a working group. Currently, the working group comprises Dominique van der Mensbrugge and Burcu Irfanoglu on behalf of the Center, with Amer Ahmed (World Bank) and Steve Rose (EPRI). There was also interest from EC IPTS, LEI and Thünen Institute in being involved. Aziz Elbehri (FAO) mentioned that Francisco Tubiello from the GHG emissions program at FAOSTAT had expressed interest in serving on the working group and it was also suggested that we recruit a member from the EDGAR team.

Key points:

- The non-CO2 emissions data base for use with GTAP 9 Data Base can be updated using a range of methodologies.
- The different approaches have varying levels of precision, accuracy, sustainability, and cost.
- A decision has to be made regarding what approach is a reasonable compromise given the resource constraints, and that the database needs to be completed by June 2015.
- A working group was formed with representatives from the Center, EPRI, and the World Bank; and with interested volunteers from FAO, EC IPTS, LEI, and Thünen Institute.

I-O Tables

Angel Aguiar presented the status of I-O tables in the GTAP Data Base. Given our extensive country coverage, we are now focusing on improving the quality of I-O tables. In particular we will seek to

update I-O tables with most outdated data (i.e., those listed in the Chopping Block) and those in need of update given their economic importance (e.g., EU I-O tables). To meet these objectives we are actively looking for direct contact with National Statistical Offices and have already established the link to the European Commission Joint Research Center (JRC) who will work on the EU I-O tables' contribution, see below.

EU Data Base

In 2009 Marc Mueller updated the representation of EU member states in the GTAP Data Base based in Eurostat Tables of 2000. During an audit of the European Court of Auditors at DG TRADE it was suggested that EU trade policy analysis may benefit from an update of the representation of EU Member States in the GTAP Data Base. Therefore, on invitation by DG Trade, JRC IPTS is planning to submit the needed data such that the GTAP Data Base can update the EU Member States.

This update of the EU is considered as one of the major projects of the forthcoming 1-2 years (possibly for release of version 10). The presentation made by Bert Saveyn (JRC IPTS) included:

- An overview of the use of the GTAP Data Base at JRC-IPTS
- The various steps of the update process
- A presentation of the TIMESUT project (under leading of Jose Manuel Rueda JRC IPTS)
- Some insights of the tax data work done by Tamas Revesz (JRC IPTS)
- A presentation of the update of domestic support (presented by Emanuele Ferrari, JRC IPTS)

GTAP-Power Proposal

Jeffrey Peters pitched a proposal to disaggregate the electricity sector in the GTAP Data Base in order to: i) reduce labor hours for many other researchers pursuing this independently and ii) provide a common dataset for electricity related research. The end product would be a full (all sectors, all regions) GTAP Data Base plus 12 new electricity sectors and a stylized GEMPACK model.

The proposal budget is ~\$70,000. \$20,000 has been committed by MIT and several board members offered to follow up with their contacts to fill the \$50,000 gap (any contributions are welcome). Frank van Tongeren will follow up with contacts in OECD, Bert Saveyn and Lucian Cernat with European Commission, Hans van Meijl with interested researchers, and Niven Winchester will work with John Reilly to solicit funds with the partners in Washington DC. Jefferson Cole (EPA) attended the presentation and will contact folks at EPA regarding possible funding.

Contingent on this funding, Jeffrey Peters will work with contributing partners to ensure a useful dataset and to bring the current disaggregation process up to GTAP standards for public use.

Action Items:

- Follow up with board members for GTAP-Power funding
- Upon funding:
 - publish a GTAP-Power database and model on website
 - publish documentation for disaggregation process

Firm heterogeneity modeling

Firm heterogeneity will be one of the applications in the 22nd Annual Short Course in Global Trade Analysis in August 2014. Application materials and files will be made available during and after the short course. This work is intended to culminate in a standard tool for undertaking firm heterogeneity analysis within the GTAP framework.

Future work includes a paper on a larger scale parameterization of the firm heterogeneity model. This work will focus more on the definition, estimation, and calibration of fixed costs as well as the choice of firm heterogeneity parameters bringing the current developments in the empirical literature on this topic into the CGE analysis. We are planning to work on it in the Fall of 2014.

Public procurement project (01/2014--09/2015)

Public purchases are important in the context of GDP and trade flows. Because public procurement agreements involve multiple countries, purchasing a wide range of goods and services, supplied by many different regions, the effect of these agreements is best addressed in a multi-region, general equilibrium framework.

The Center is working to enhance the government representation in the GTAP framework to improve the characterization of public purchases of domestic and imported products; Identify public investment and the sourcing of imports. Some of the data that will be brought to bear to enhance the GTAP Data Base include: national input-output tables, statistical reports presented to the WTO by members of the Government Procurement Agreement (GPA), and public investment data from EUROSTAT, OECD, and the UN. To estimate the sourcing of imports we will rely on multiregional input-output (MRIO) techniques.

We will also modify the model to accommodate these enhancements and will collect available estimates of the restrictiveness of current public procurement policies in key economies to analyze the potential economic effects

GTAP Conferences

Presentations and subsequent discussion on the current and future GTAP Conferences was held with the following outcomes.

2014 Conference Update

Antoine Bouët, on behalf of IFPRI, provided an update on the preparations and turnout for the 17th Annual Conference on Global Economic Analysis.

2015 Conference Update

Philip Adams, Centre of Policy Studies, Victoria University, updated the board on arrangements for the 18th Annual Conference on Global Economic Analysis, which will be held June 17-19, 2015 at the Melbourne Convention and Exhibition Centre. Discussion followed on the topics of overall funding, scholarship opportunities and themes. The Productivity Commission will host the 2015 GTAP Advisory Board Meeting June 15-16, immediately prior to the conference.

2016 Conference Proposal

Will Martin presented a proposal to host the 19th Annual Conference on Global Economic Analysis at the World Bank in Washington DC, which was approved by the board. Discussion followed on funding and the ample supply of local partnering institution in the DC area.

2017 Conference Proposals

Dominique van der Mensbrugghe is soliciting proposals for hosting the 2017 Conference. As this would be the 20th Annual Conference, one idea would be to return to Purdue University, which hosted the first and tenth conferences.

GTAP Research Fellows

The board approved the following individuals to serve as GTAP Research Fellows for 2014-2017.

- S. Amer Ahmed
- Peter Dixon
- Hans Lofgren
- Terrie Walmsley
- Wusheng Yu

The board also approved an updated process for research fellow nominations. Previously, only GTAP Staff and the main GTAP Advisory Board Representative were allowed to submit nominations for consideration by the Research Fellows Committee. The new process will also allow members of the GTAP Network who have presented a paper at the annual conference and/or contributed to the data base in the past 5 years to submit nominations. Criteria for consideration remains unchanged.

Budget and Staffing

The Center reduced their budgeted shortfall for 2013 by \$55,000. This was primarily due to reduced Staff Support costs and increased data base revenue. Satellite data sales are slowly on the rise. While 2014 shows a budgeted shortfall (due to data base sales tapering off pending the release of version 9), the Center remains in a good position to obtain another data team member which is a priority in the coming months. As planned, new staff have been added to the Center – Dominique van der Mensbrugghe as Director and Research Professor and Jeremy Douglas as Web and Information Technology Specialist. The staff will continue to focus some effort on bringing in external grants and contracts to expand the Center's revenue base.