Review of GTAP 7 Data Base and Overview of Data Goal

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Outline

- **Overview of the Pre-releases of GTAP 7 Data Base**
  - Additions and Improvements carried out in each of the Pre-releases 1-6
- **Current Status and Release Schedule**
- **Overview of the Data Goal**
  - Strategic Planning Survey Results
  - Improving the quality of our data products
  - Issues pertaining to this goal
  - Future course of action
- **Other Data-related Developments**

Overview of GTAP 7 Pre-releases

- **Reference year: 2004**
- **111+ regions, 57 commodities**
- **21 New and 17 (+EU27?) Updated regions**
- **Updated and Revised data:**
  - **Macro data: Dominique van der Mensbrugghe**
  - **Bi-lateral Trade Data: Mark Gehlhar**
  - **Domestic Support Data for OECD countries, China, Brazil, South Africa, Russia, Ukraine, Bulgaria and Romania: Hsin Huang and Hans Jensen**

Overview of GTAP 7 Pre-releases

– **Agricultural Export Subsidy: Aziz Elbehri**

– **Preferential Tariffs: David Laborde**

– **Improved bi-lateral services trade data, based on CPB's 2003 Dataset**

– **Agricultural factor shares : Shinsuke Uchida**

- **New features:**

– **New Regional Classification**

– **Equalization of Domestic Support payments across crop-sectors and re-allocation of direct payments to land**

Overview of GTAP 7 Pre-releases

Release	Date	Regions	Additions/Improvements
Pre 1	Apr '07	101	I-O Tables, Macro, Trade, Protection
Pre 2	May '07	101	Bi-lateral services trade data
Pre 3	Oct '07	105	I-O Tables
Pre 4	Feb '08	106	I-O Tables, Trade, Protection
Pre 5	Mar '08	106	US I-O Table, EU Export Subsidies
Pre 6	Jun '08	110	I-O, Trade, Protection, Energy, CDE, Agricultural Production Targeting
RC 1	Jul '08	111+	I-O Tables, Trade, Protection

Overview of GTAP 7 Pre-releases

- **Equalization of Domestic Support Payment Rates**
  - Older releases: Land-based support as a fraction of output was scaled to GTAP output levels, from OECD stats.
  - Update: Given the invariance of most of these payments to the crops, we equalize the rates of support across all crop sectors, after totaling all the cropland subsidies.

- **Re-allocation of direct payments to Land**
  - Older releases: All land-based payments were assumed to be capitalized into land.
  - Update: Following Gohin (2006;2008), we have allocated 50% of land subsidies to capital and labor equi-proportionately based on their non-land VA shares.

Current Status and Release Schedule

- **Final Release Candidate 1 - Expected in July 2008:**
  - New/updated I-O Tables (Including EU)
  - Further adjustments to services trade data in response to CPB Feedback
  - Minor fixes to income taxes
  - Inclusion of Time-series Trade Data
  - Revised Agricultural Export Subsidies for the year 2004
- **Public Release of GTAP 7 Data Base and Documentation - Expected in November 2008**

Overview of the Data Goal

- **Strategic Planning Survey Results on Data:**
  - **54% characterize GTAP as a provider of high quality economic data**
  - **52%: database as the most important GTAP offering**
  - **I-O, Trade and Protection Data are the top 3 areas of improvement in the content**
  - **More recent base-year, frequency of releases and detailed documentation are top 3 most important areas**

Overview of the Data Goal

- **The Data Goal: To Improve the quality of our data products.   Major considerations in the Strategic Planning Process:**
  - **Contributed IO Data (more on this by TW)**
  - **Comparison Programs**
  - **Addition and Improvement of Other Datasets**
  - **Versions and Database Documentation**

Overview of the Data Goal

Comparison Programs

Some Strategies to ensure better Data Quality:

- **Compares and summarizes the differences between 2 versions of a database. This has been useful to identify and rectify some defects so far (More by RM).**

- **Compares the results from a liberalization simulation with those of a previous version. This will be implemented soon.**

Overview of Data Goal

Additions/Improvements of Tax Data

- **Commodity taxes need close examination. We might use international data-sources to supplement the existing sources. There is a resource-constraint and no expert is available to work on this, so far.**

Additions/Improvements of Energy Data

- **There are some in-built weaknesses in the way we build our energy data. E.g. Treatment of energy commodity prices. This requires specialized knowledge of energy-related issues ➔ A new recruit/consultant may be required; linking up with MIT and EPA may also help.**

Overview of Data Goal

Addition of Domestic Margins Data

- **Domestic margins are crucial because they are important in themselves and also because they are the foundation for other things in the database.**

- **But it means a major change to the database construction procedures and in the contributed I-O tables.**

- **This is a multi-stage process and will be implemented over several versions. Two tasks are involved:**
  - **Alter I-O table procedures to include domestic margins**
  - **Implement into the construction programs**

Overview of Data Goal

Additions/Improvements of Skill-Splits

- **The Center has been working with Rod Tyers to improve the skill splits required for the labor data in GTAP Data Base.**

Version Control and Documentation

- **Multiple versions: More on this by TW.**

- **Various Version control issues**

- **Documentation of the Data Base will be shortened as recommended in the last board meeting.**

- **Documentation of Data Base Construction procedure in v8 cycle.**

Overview of Data Goal

Other Issues related to the Data Goal:

- **Human Resources:**
    - **Center is under-staffed ➔ Announcement of a post-doctoral position that involves working with the contributors on I-O tables.**
    - **Lack of good consultants to work with us on data issues such as tax-fixes and energy.**
    - **We are continually on the lookout for good people!**
- **Protection Data – CEPII's future plans (Sebastian)**

Overview of Data Goal: Summary

I. Addition and Improvement of Datasets			
What to do	**By Whom**	**When**	**Priority**
1. Commodity Taxes	?	?	?
2. Energy Data	RMD	8	Low
3. Domestic Margins Data	RMD/TW/BN	8-10	Low
4. Skill Splits	TW/RMD	8-10	Low
II. Monitoring Data Quality using Comparison Programs			
5. Procedurization of Comparison Programs	RMD	7	High
6. Comparing Simulation Results	TH/BN	7	High
III. Versions and Documentation			
7. Multiple Versions of GTAP Database	BN	8	High
8. Version Control	BN	8	High
9. African Database	BN	6.2	High
10. Documentation	TW/BN/AA	7	High
11. Documentation of Construction Process	BN	8	Low

Other Data Related Developments

GTAP Africa Data Base - Presentation later today!

TASTE Database (Previously TrdMat)

- Mark Horridge and David Laborde have developed TASTE (Tariff Analytical and Simulation Tool for Economists) for disaggregated tariff-shocks and to split up GTAP sectors.

- Board members have access to TASTE for GTAP v7.

- Final version of TASTE to be released with GTAP 7 Release Candidate in July '08.

- TASTE v7 will be available to public as per the funding agreement.

- Organized session on "Tariff-line Analysis" and TASTE at Helsinki Conference.

Thank you!

Any Comments or Questions?