The MacMapHS6v2 Database

GTAP Board Meeting, Addis Abeba 12-13 June 2006



Objectives

- To provide a new set of EAVS in the GTAP format
- To provide an HS6 version of the EAVs to be disseminated through WITS to GTAP users
- Constraint: the agreggator is BACI, hence the need to be licensed for COMTRADE
- Acknowledgments: USITC, World bank



Broad description

- 167 reporting countries 224 partners
- 5,113 products (HS6 rev. 1)
- Ad Valorem and Specific Components
- Set of alternative unit values
- Set of alternative weighting schemes
- Protection data sources: ITC Geneva, TARIC (for EU data), other domestic sources. Base year 2004
 - End of the UR implementation period
 - EU enlargement
- Trade source : BACI (CEPII) Three years average (2002,2003,2004) - Data reconciliation



The issue of Tariff Rate Quotas (1)

- Sources: AMAD (2004), MAcMap (2001), De Gorter's TRQ database, WTO notifications, USTA (TRQs from PTA), INRA.
- Update and cleaning:
 - TRQs elimination (10 Easten European countries, Brazil pears-, Norway, Iceland, etc.)
 - New TRQs (Euromed TRQs, USA FTA-TRQs, Croatia, Dominican Republic, Costa Rica)
 - □ TRQs update (EU25 's TRQs, USA TRQs)
- Number of TRQs: 1,328 TRQs
 - 1,127 WTO TRQs
 - 27 USA-FTA TRQs
 - 175 EU-FTA TRQs



Tariff Rate Quotas (2)

- HS classification: 6 digits
- TRQ dimensions: i (product HS6), r (reporter) and s (partner) => bilateral database.
- TRQ allocation: Explicit allocations in notifications or in national legislation. Otherwise existing trade used as an allocation key.
- Bound and applied Tariffs: in-quota, marginal and out-of-quota tariffs (ad-valorem+AEV of specific tariffs). For some countries Bound AND Applied rates (used for consistency check).
- TRQ 's regimes:
 - 3 regimes (in, at and out) from MAcmap (2001) defined only by the fill rate, but,
 - improved by De Gorter's regimes (8 regimes) which consider not only the fill rate but also the applied tariff (and water in the tariff) and the presence of overquota imports.
- TRQ 's administration methods: applied tariff, auctions, first come-first served, historical imports, mixed, etc.



Methodological choices (unchanged)

- From the tariff line level to HS6: (ITC- Geneva)
 - Simple Average
 - For compound tariffs: priority to the Ad Valorem components
- Computing AVE of specific tariffs:
 - Every physical units converted in Tons (BACI matrix)
 - Unit values computed using weighted median for each Exporter's Reference Group (ERGUV) + World unit value.
- From HS6 to GTAP
 - Trade weighted / Importer's Reference Groups (5 unchanged) / Ref Gr (1) = World
- Cross checking with Bound tariffs database



Methodological innovations

- Using TARIC's monthly tariffs data for EU. New procedure. Increased precision. Intra-year tariff volatility solved using a prorata temporis average
- Improved and evolved algorithm for harmonising the products nomenclature
- Expanded sets of Unit values capturing different aspects, including official WTO unit values (<u>BUT</u> standard UV are still ERGUV).



New tariff levels reflecting

- Full implementation of the UR
- EU enlargement
- Changes in trade policy patterns
- New RTAs
- Change in exchange rates (for the AVE)
- Change in trade:
 - New uvs
 - New aggregation vectors



PROVISIONAL results

- Applied protection by sector
- Applied protection by country
- Protection faced by country
- Differences in applied protection by country
- Diff. in applied protection by country/sector
- Sources of differences
- Assumptions
 - AVEs capped to 1000%
 - Old database of TRQs (avoid additional noise in the comparison)
 - Intro of TARIC not implemented (cross checking not completed)
 - Comparison EU15 (V1) with EU 25 (V2)



Results (1) – Average protection applied - by large sectors

	ALL SECTORS		AGRIC		IND		TEXT	
WORLD	New	Old	New	Old	New	Old	New	Old
RG	4.8%	5.7%	18.8%	19.2%	3.5%	4.3%	8.9%	10.9%
TW	4.0%	4.7%	15.8%	17.3%	2.9%	3.5%	7.4%	9.0%



Results (2) – Average protection applied - by categories of partners

	RG	RG	RG	RG	TW	TW	TW	TW
	LDC	DNG	RICH	WORLD	LDC	DNG	RICH	WORLD
	New							
BANGLADESH	14.2%	19.8%	15.4%	17.0%	2.8%	19.2%	17.4%	18.2%
BRAZIL	1.7%	8.1%	12.3%	11.1%	6.9%	3.4%	10.5%	7.9%
CANADA	0.0%	2.7%	3.7%	3.4%	0.0%	2.3%	1.2%	1.4%
CHINA	1.4%	6.6%	8.2%	7.7%	0.9%	4.1%	6.9%	6.2%
EU25	0.7%	2.2%	3.5%	2.9%	1.0%	2.3%	2.2%	2.2%
INDIA	26.7%	34.6%	32.4%	33.1%	26.9%	31.1%	29.5%	29.9%
JAPAN	1.4%	3.4%	3.9%	3.7%	0.9%	2.9%	5.3%	4.2%
ROW	8.2%	8.9%	7.4%	7.8%	6.4%	6.8%	5.7%	6.0%
USA	5.1%	2.3%	2.3%	2.3%	5.4%	1.7%	1.4%	1.5%
WORLD	3.5%	4.1%	5.2%	4.8%	3.1%	3.8%	4.1%	4.0%



Results (3) – Average protection *faced* - by categories of partners

	RG		TW	
ALL SECTORS	New	Old	New	Old
BANGLADESH	2.8%	5.3%	2.4%	5.4%
BRAZIL	9.8%	11.2%	7.5%	8.6%
CANADA	4.2%	4.2%	1.1%	1.1%
CHINA	4.0%	5.9%	4.5%	6.3%
EU25	6.0%	6.1%	5.8%	5.8%
INDIA	5.4%	7.5%	5.2%	6.2%
JAPAN	5.4%	6.1%	4.8%	5.3%
ROW	4.1%	5.2%	3.4%	4.3%
USA	4.7%	5.8%	3.3%	4.2%
WORLD	4.8%	5.7%	4.0%	4.7%



Results (4) – Average protection applied - by cat. of partners: differences with MMPHS6V1

	LDC		DNG		RICH		WORLD	
RG	New	Old	New	Old	New	Old	New	Old
BANGLADESH	14.2%	16.7%	19.8%	20.2%	15.4%	14.8%	17.0%	16.9%
BRAZIL	1.7%	2.4%	8.1%	9.2%	12.3%	12.8%	11.1%	11.8%
CANADA	0.0%	5.8%	2.7%	3.0%	3.7%	3.5%	3.4%	3.4%
CHINA	1.4%	3.6%	6.6%	12.6%	8.2%	14.7%	7.7%	14.1%
EU25	0.7%	1.2%	2.2%	3.2%	3.5%	3.8%	2.9%	3.5%
INDIA	26.7%	28.3%	34.6%	35.4%	32.4%	32.5%	33.1%	33.5%
JAPAN	1.4%	1.8%	3.4%	4.2%	3.9%	3.9%	3.7%	4.0%
ROW	8.2%	7.9%	8.9%	8.9%	7.4%	7.3%	7.8%	7.7%
USA	5.1%	5.1%	2.3%	2.5%	2.3%	2.2%	2.3%	2.3%
WORLD	3.5%	4.9%	4.1%	5.5%	5.2%	5.8%	4.8%	5.7%



Results (5) – Average prot° applied - by cat. of partners/sectors: differences with MMPHS6V1

	AGRIC/WORLD		TEXT/LI	OC	INDUS/WORLD	
RG	New	Old	New	Old	New	Old
BANGLADESH	20.4%	20.9%	27.5%	29.7%	15.7%	15.2%
BRAZIL	10.4%	11.0%	16.6%	18.1%	10.8%	11.4%
CANADA	15.1%	14.9%	10.5%	10.8%	2.1%	2.1%
CHINA	10.5%	25.0%	12.1%	20.4%	7.2%	12.7%
EU25	17.7%	19.0%	5.2%	6.3%	1.8%	2.4%
INDIA	59.3%	59.6%	29.8%	29.5%	29.8%	29.9%
JAPAN	32.7%	36.2%	6.3%	6.8%	1.0%	0.9%
ROW	24.0%	21.6%	12.2%	12.3%	6.1%	6.2%
USA	5.7%	5.0%	9.2%	9.4%	1.7%	1.7%
WORLD	18.8%	19.2%	8.9%	10.9%	3.5%	4.3%



Results (6) – The origins of differences

Applied tariffs of EU25 on LDCs agricultural exports (ref group)

tariffs	weighting	UV	ALLSECT	AGR	IND	TEX
old	old	old	1.2%	4.7%	0.7%	1.9%
ne w	old	old	0.8%	4.5%	0.3%	1.2%
ne w	old	ne w	0.8%	4.2%	0.3%	1.2%
ne w	ne w	old	0.8%	6.2%	0.3%	0.6%
new	ne w	ne w	0.7%	5.3%	0.3%	0.6%

