

MAcMap-HS6 2007, an exhaustive and consistent measure of applied protection for GTAP 8

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based on joint work with
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Context: Season 3

- New season of a now-old series
 - ❑ MAcMap-HS6 v1 (2001) for GTAP 6
 - ❑ MAcMap-HS6 v2 (2004) for GTAP 7
 - ❑ MAcMap-HS6 v2 (2004) and **v3 (2007)** in GTAP 8
- Same producers: collaboration between CEPII and ITC
- Same scenario: a database suitable for CGE analysis of applied tariff protection
 - ❑ Consistent and exhaustive (incl. PTAs!)
 - ❑ Detailed and unbiased (to the extent possible)
 - ❑ Robust and transparent (CEPII WP 2012-10, www.cepii.fr)
 - ❑ Freely available

Methodology

- Continuity with previous versions
- Raw data from MAcMap ITC: ad-valorem and specific component, HS6 level, 190 reporters x 238 partners
 - AD, CV duties not covered yet
- Use 5 (unchanged) reference groups of country (clustering on GDP per capita and trade openness)

Methodology: Ad-valorem equivalent of non-ad-valorem tariffs

- Give priority to ad-valorem component for mixed and compound
- Use median UV for reference group imports over 2006-07-08, by HS6 product
- TRQs: outside tariff if fill rate $> 98\%$; inside tariff if fill rate $< 90\%$; average in between; if managed “Applied tariff”, always inside

Methodology: Weighting schemes

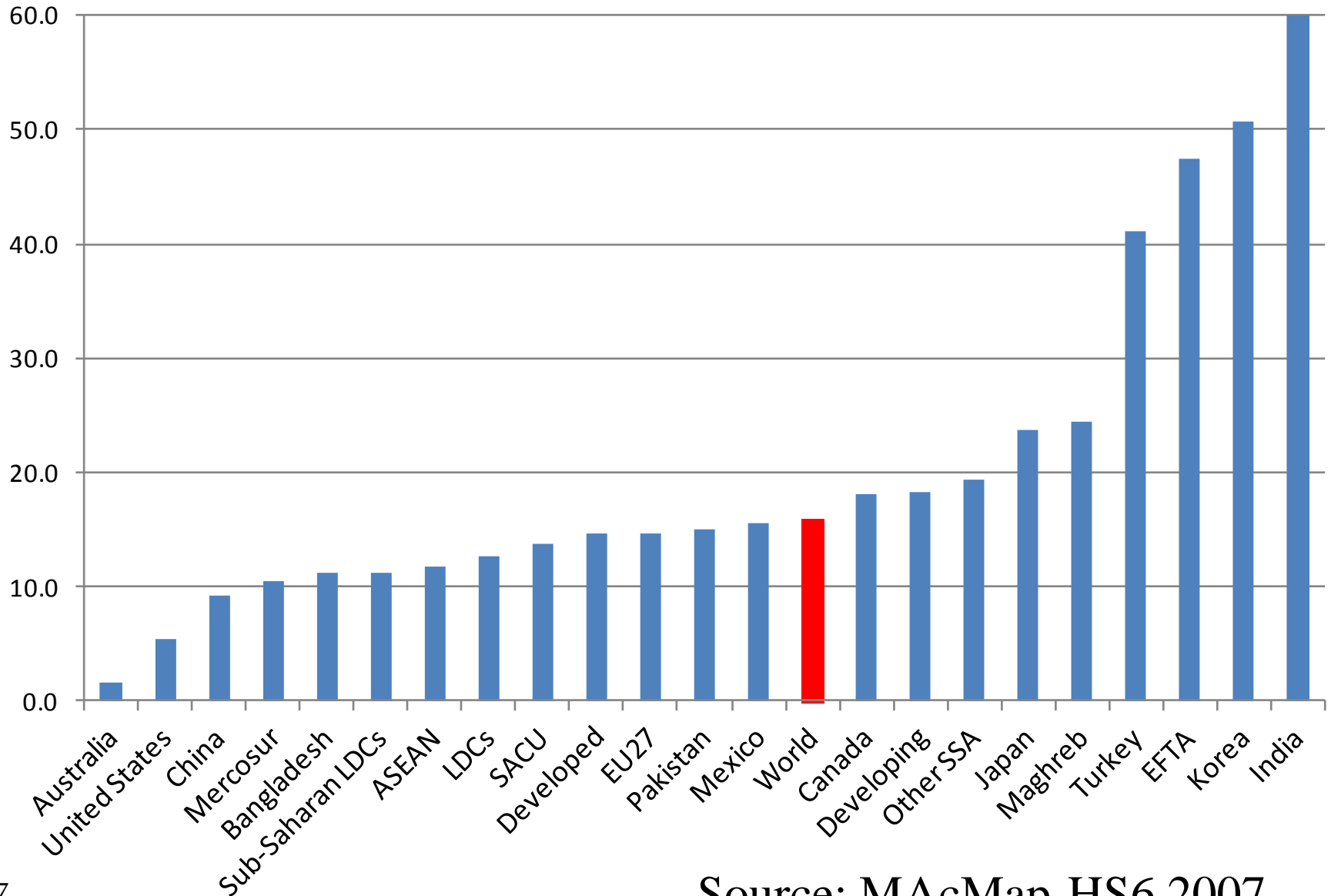
- How to aggregate ad-valorem equivalent tariffs?
 - ❑ Across products, from the HS6 level?
 - ❑ Across countries
- 2 alternative schemes available in GTAP
 - ❑ “GTAP default methodology”: Weighted by imports of the importing country
 - ❑ “MAcMap-HS6 methodology”: Weighted by imports of the reference group of the importing country
 - ❑ All figures hereafter based on MAcMap-HS6 methodo

Worldwide protection in 2007 in a nutshell (AVE, %)

	As importer		As exporter	
	All	Agric.	All	Agric.
Developed	2.7	14.6	4.5	16.0
EU27	2.6	14.6	4.7	16.2
Japan	2.5	23.8	5.8	14.0
United States	1.7	5.5	4.7	13.6
Developing	8.0	18.3	4.4	15.8
China	6.3	9.2	4.5	16.1
India	17.9	60.5	5.1	14.8
Mercosur	9.5	10.4	8.6	16.8
LDCs	10.1	12.6	3.5	13.0
World	4.4	15.9	4.4	15.9

Tariff protection in agriculture

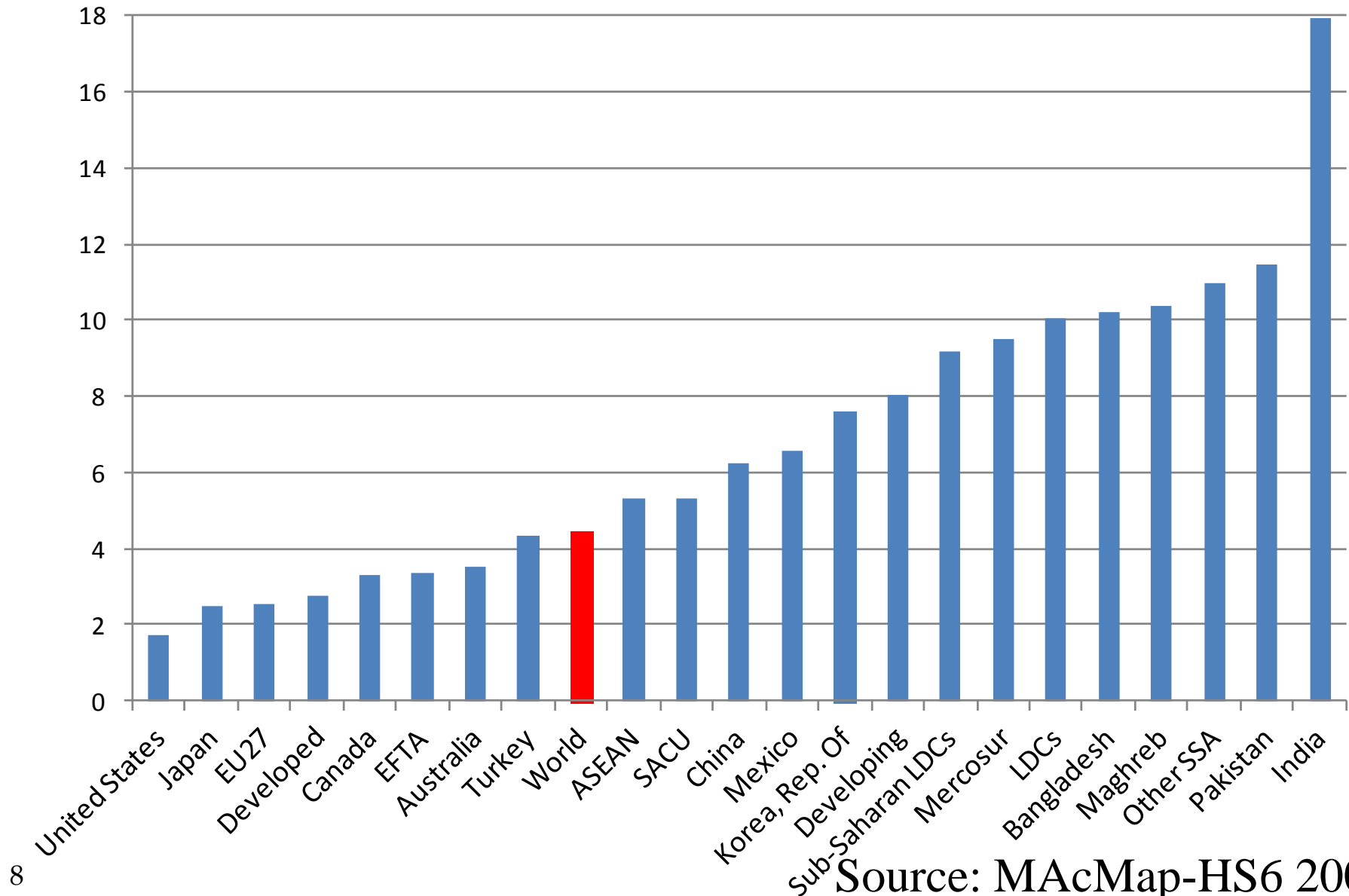
(2007, AVE in %)



Source: MAcMap-HS6 2007.

Tariff protection, all products

(2007, AVE in %)



Source: MAcMap-HS6 2007.

Specific tariffs and TRQs

	Non-TRQ agric. prod. covered by specific tar.		Agricultural prod. covered by a TRQ	
	AVE	Coverage	AVE	Coverage
Developed	13.9	20.6	44.7	15.2
EU27	18.1	20.6	38.4	24.9
EFTA	42.1	42.6	111.3	26.3
United States	4.1	39.7	19.7	16.4
Developing	39.3	5.6	36.0	0.9
ASEAN	54.7	8.9	42.6	0.2
SACU	12.4	13.6	23.8	0.0
Turkey	17.1	0.4	56.0	5.5
LDCs	38.7	0.5		
World	17.5	14.7	44.4	9.7

Source: MAcMap-HS6 2007.

Changes 2004-2007 (AVE in %)

	Total	Trade policy	TRQ	Weighting	Unit values
Developed	-0.69	-0.25	-0.04	-0.13	-0.26
EU27	-0.66	0.00	-0.02	-0.31	-0.33
Japan	-0.80	-0.39	0.40	-0.31	-0.51
United States	-0.73	-0.33	-0.06	-0.19	-0.15
Developing	-1.90	-1.82	0.00	-0.10	0.03
China	-1.63	-1.47	0.00	-0.53	0.37
India	-1.09	-0.02	0.00	-1.07	-0.01
Mercosur	-1.59	-1.00	0.02	-0.61	0.00
LDCs	-2.05	-2.20	0.00	0.17	-0.01
World	-0.66	-0.75	-0.03	0.31	-0.19

Comparing methodologies (AVE in %, 2007)

	MMHS6 method. (5 RGs)	ITC's method. (11 RGs)	GTAP methodo (import- weighted)	Simple average
Developed	2.7	2.2	2.1	3.3
EU27	2.6	1.5	2.0	1.6
EFTA	3.4	3.2	1.5	7.3
Japan	2.5	1.9	2.4	3.6
United States	1.7	1.5	1.2	2.4
Developing	8.0	11.8	6.4	11.2
China	6.3	12.6	4.9	11.0
India	17.9	20.0	14.1	18.1
Mercosur	9.5	11.4	7.6	10.8
LDCs	10.1	10.7	9.5	10.4
World	4.4	5.0	3.6	7.7

Conclusion

- Changes since 2004: decline by 0.7 p.p. on average
 - ❑ Unilateral lib'n + PTAs
 - ❑ Higher commodity prices → lower AVE of specific tariffs
 - ❑ Higher share of developing countries → higher average protection
- Mistake? What mistake?
 - ❑ Complete documentation issued as CEPII Working Paper 2012-10 (www.cepii.fr) (forthcoming in *International Economics*)
 - ❑ Responsiveness
 - ❑ If you don't like it, fix it! (and tell us...)