The MacMap-HS6 Database

CEPII Working Paper 2004-22

A consistent picture of applied protection across the world

Antoine Bouët, Yvan Decreux, Lionel Fontagné, Sébastien Jean, David Laborde

Scope of the Database

- Main Source of the raw data: ITC (Geneva).
- An exhaustive coverage
  - 163 reporting countries (importers)
  - 208 partners
  - 5111 produits HS6
- Trade policies are complex
  - Increasing number of preferential agreements
  - Different tools
    - Ad valorem Tariffs
    - Specific Tariffs
    - Mixed and Compound tariffs

CEPII

European Trade Policy in 2001 (simplified)

David Laborde 02/10/2005
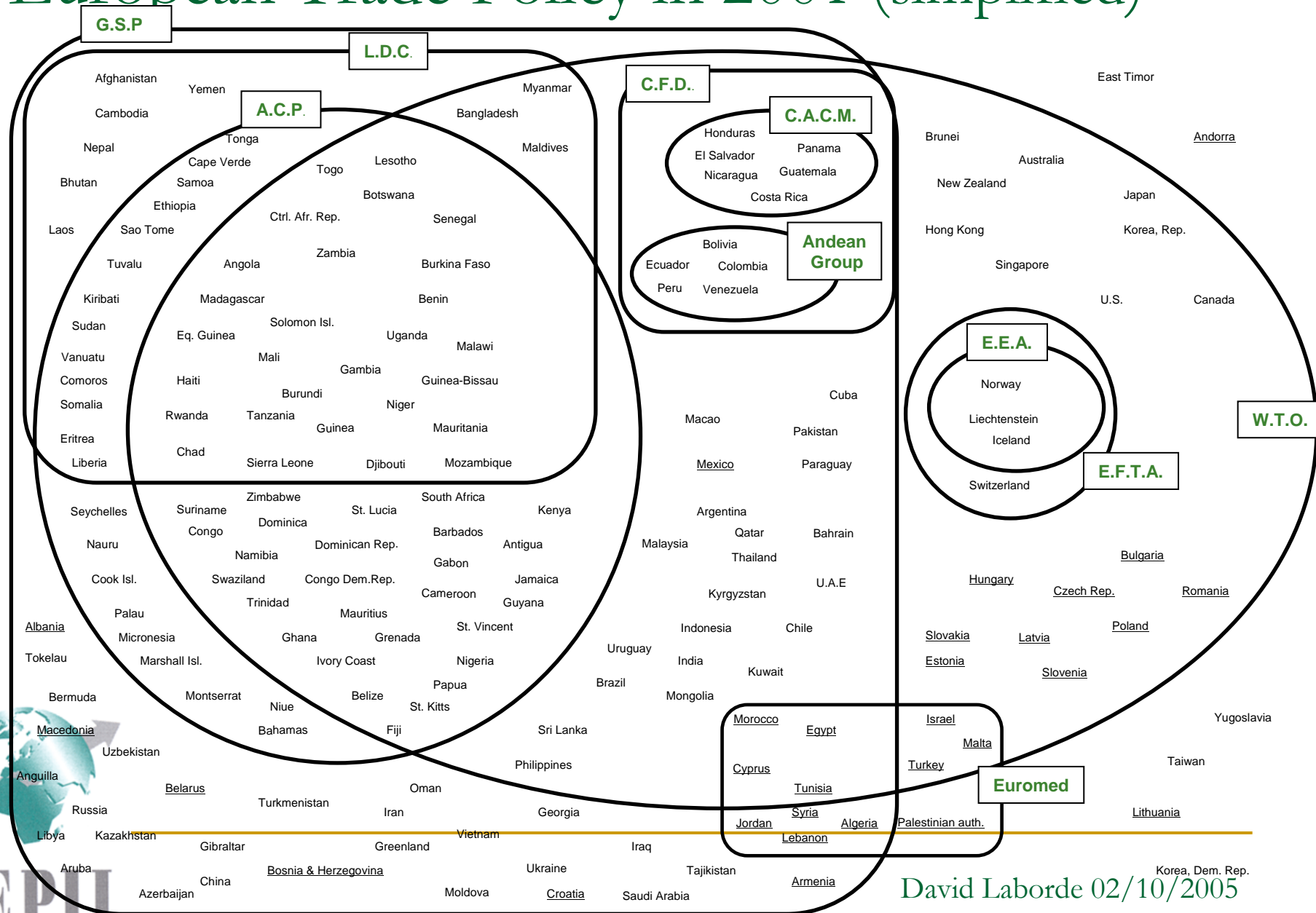
Note: An underlined country's name signals a bilateral agreement with the EU.

Conversion issues

- HS6 Nomenclature : Rev 1. HS1996.
- Physical units using BACI physical coefficients

>>> **At the HS6 level, basically, for every product**, we have one ad-valorem component and one specific component (USD per Ton)
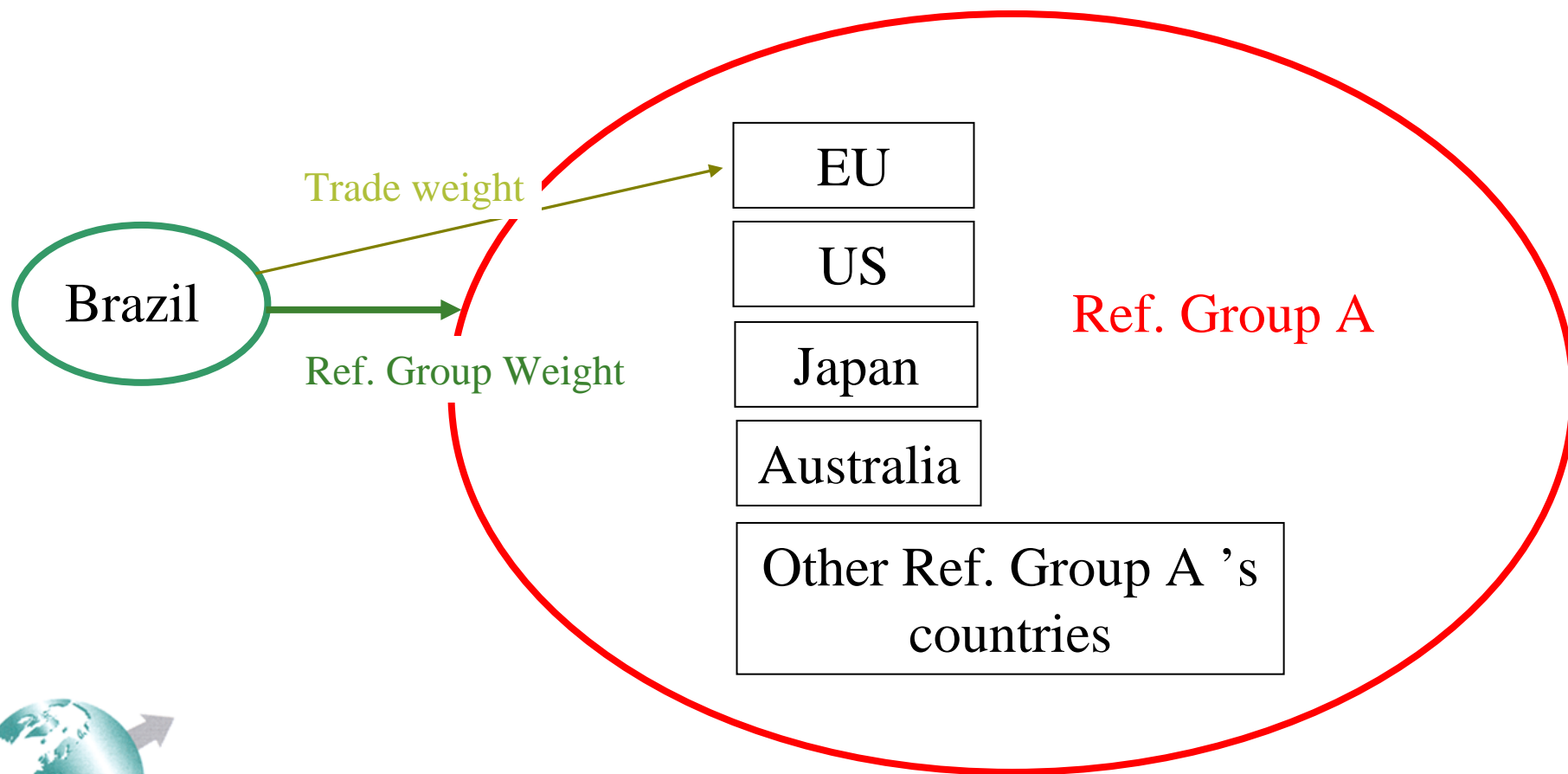
MAcMap Methology : The Reference Group

- Clustering on countries (real gdp per capita, trade openness) : 5 reference groups

- Group of exporters : Computation of Unit values, ERGUV.

  - To limit the noise in unit value data

  - To keep economic relevant of ad-valorem equivalent of specific tariffs

- Group of importers : weights for the MAcMap methodology of aggregation (against the endogeneity problem).

CEPII

How to weight a HS6 product tariffs ?

Trade weight

Ref. Group Weight

Brazil

EU

US

Japan

Australia

Other Ref. Group A 's countries

Ref. Group A

CEPII

TRQ in MacMap

- Source : AMAD and WTO notifications + National sources

- In quota / Out Quota rate ?

  - Three regimes are defined based on the filling rate of the quota

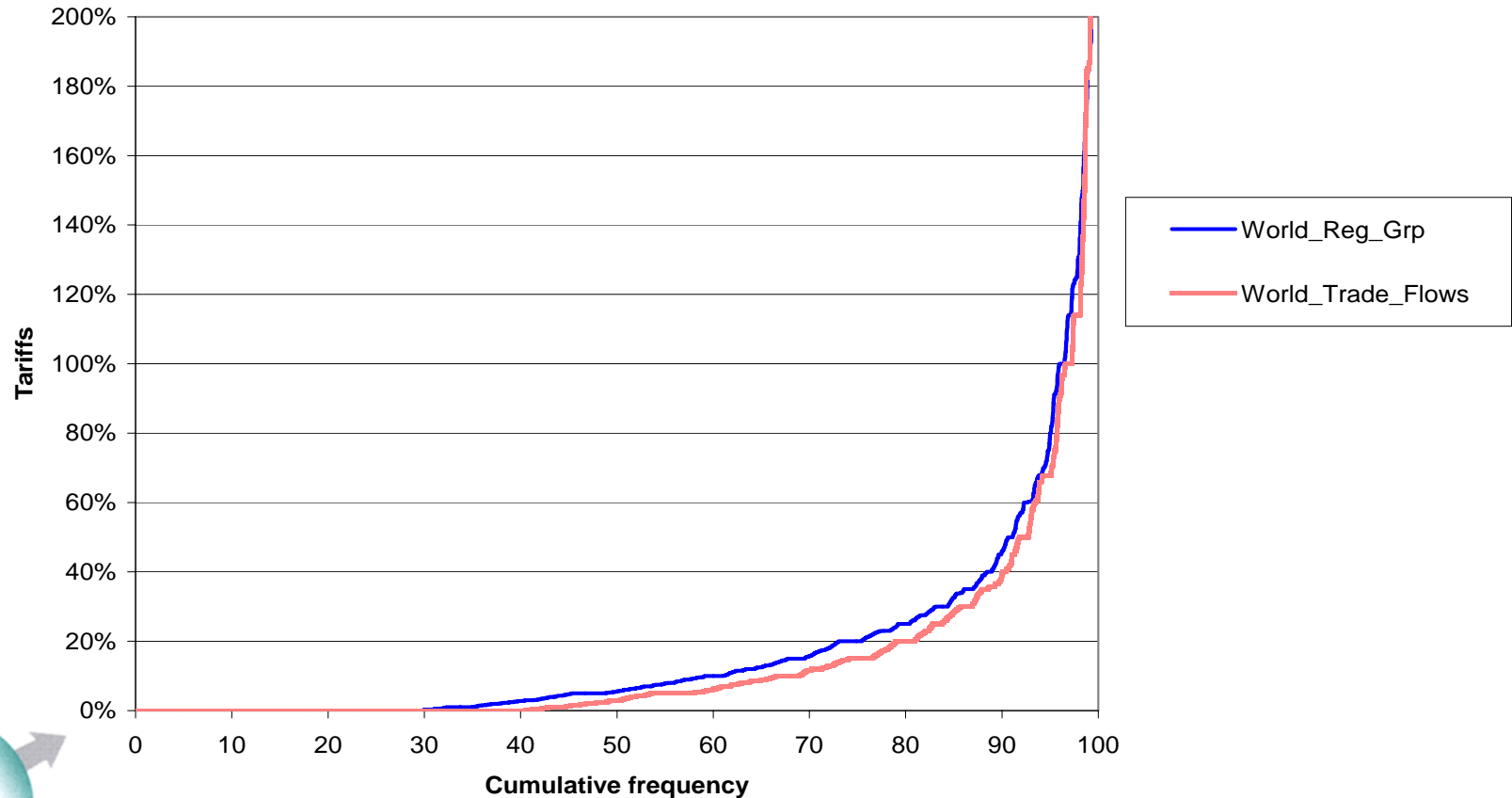- When not available, quota allocation based on trade

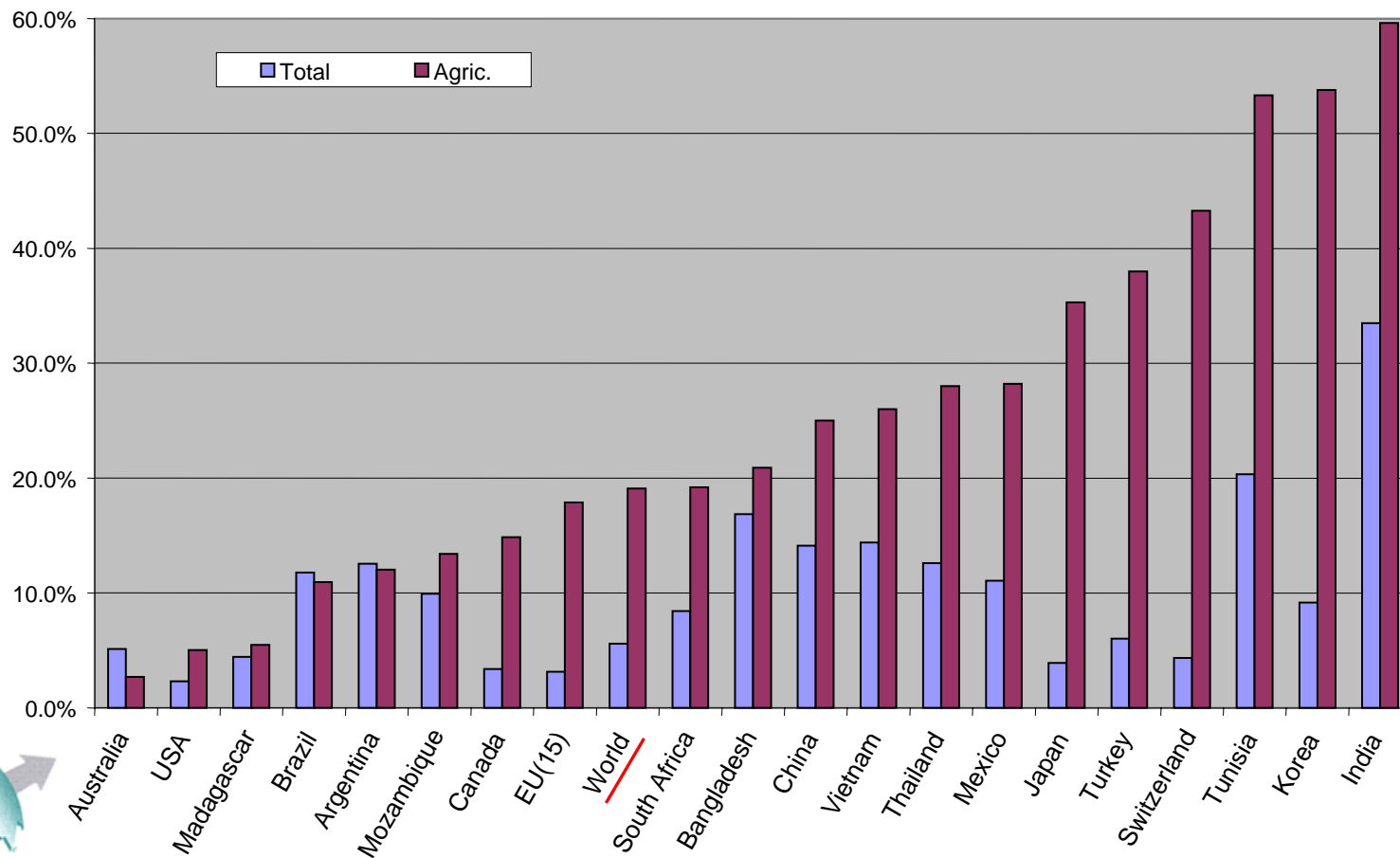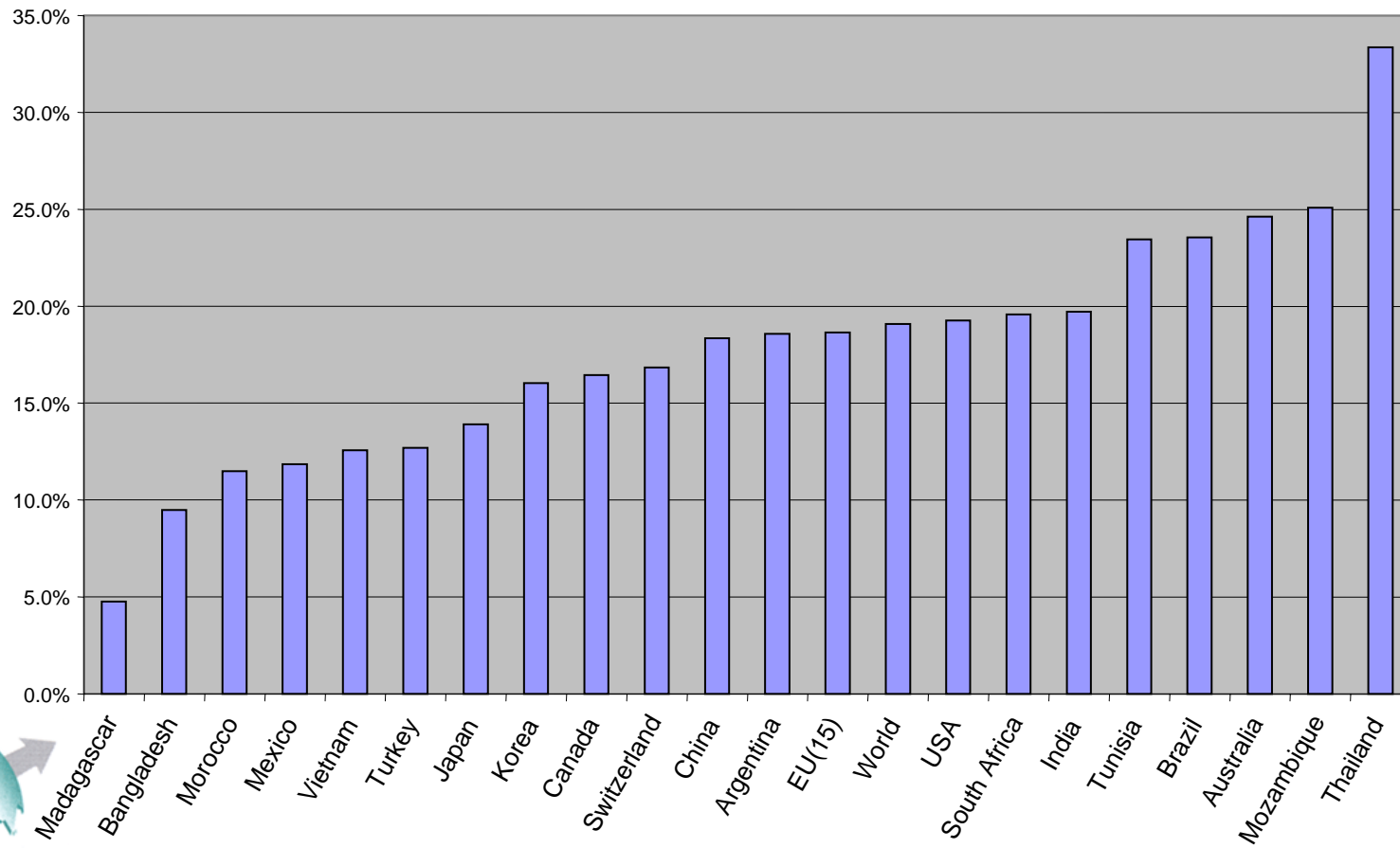**Robustness of the methodology to the aggregation procedure**

Illustrations
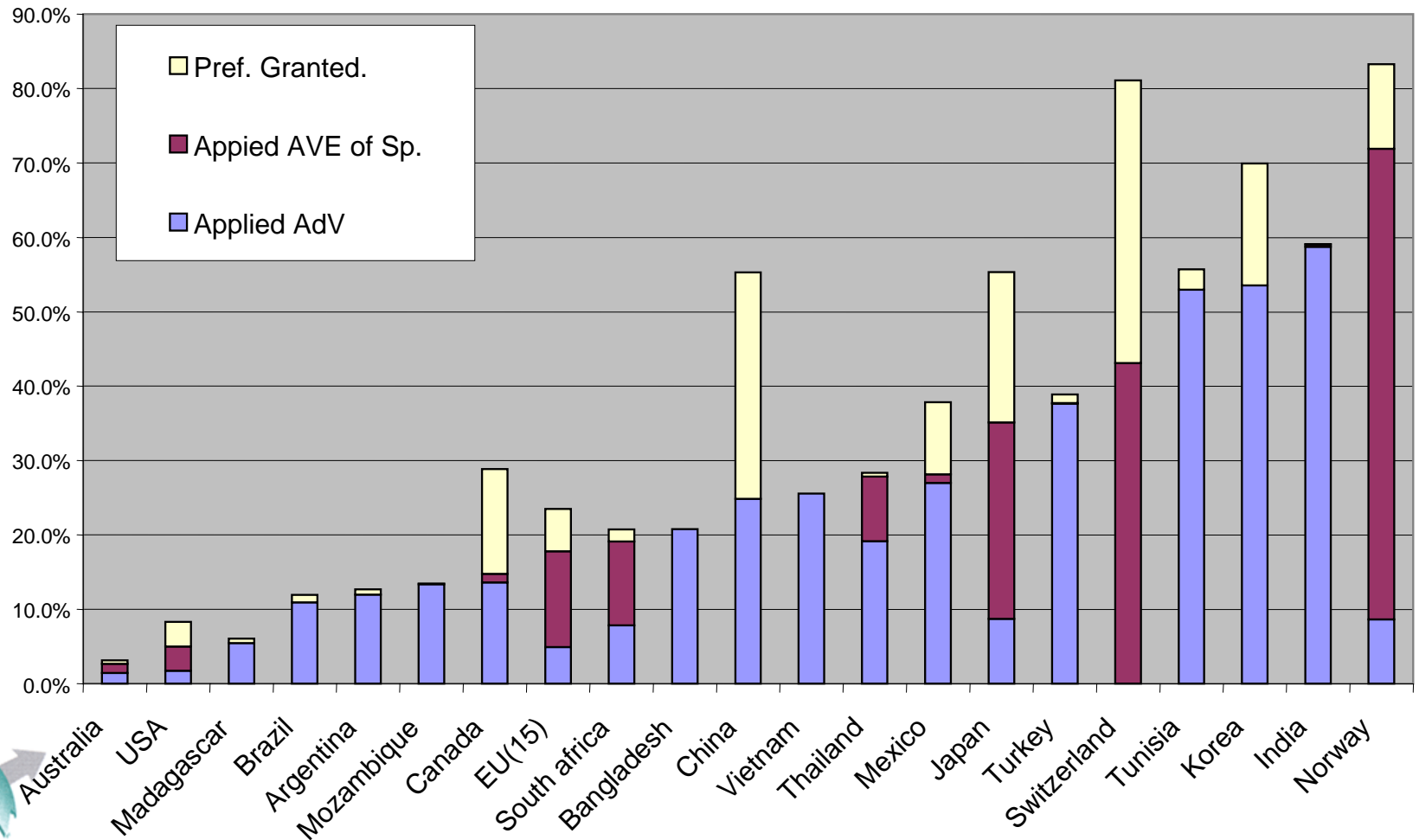
Agricultural tariffs : World distribution

David Laborde 02/10/2005

Applied Protection in 2001

Protection faced in 2001

Structure of Protection

MFN MacMap tariffs vs GTAP5 Tariffs

Agricultural tariffs

$y = 0.5377x$
$R^2 = 0.2516$
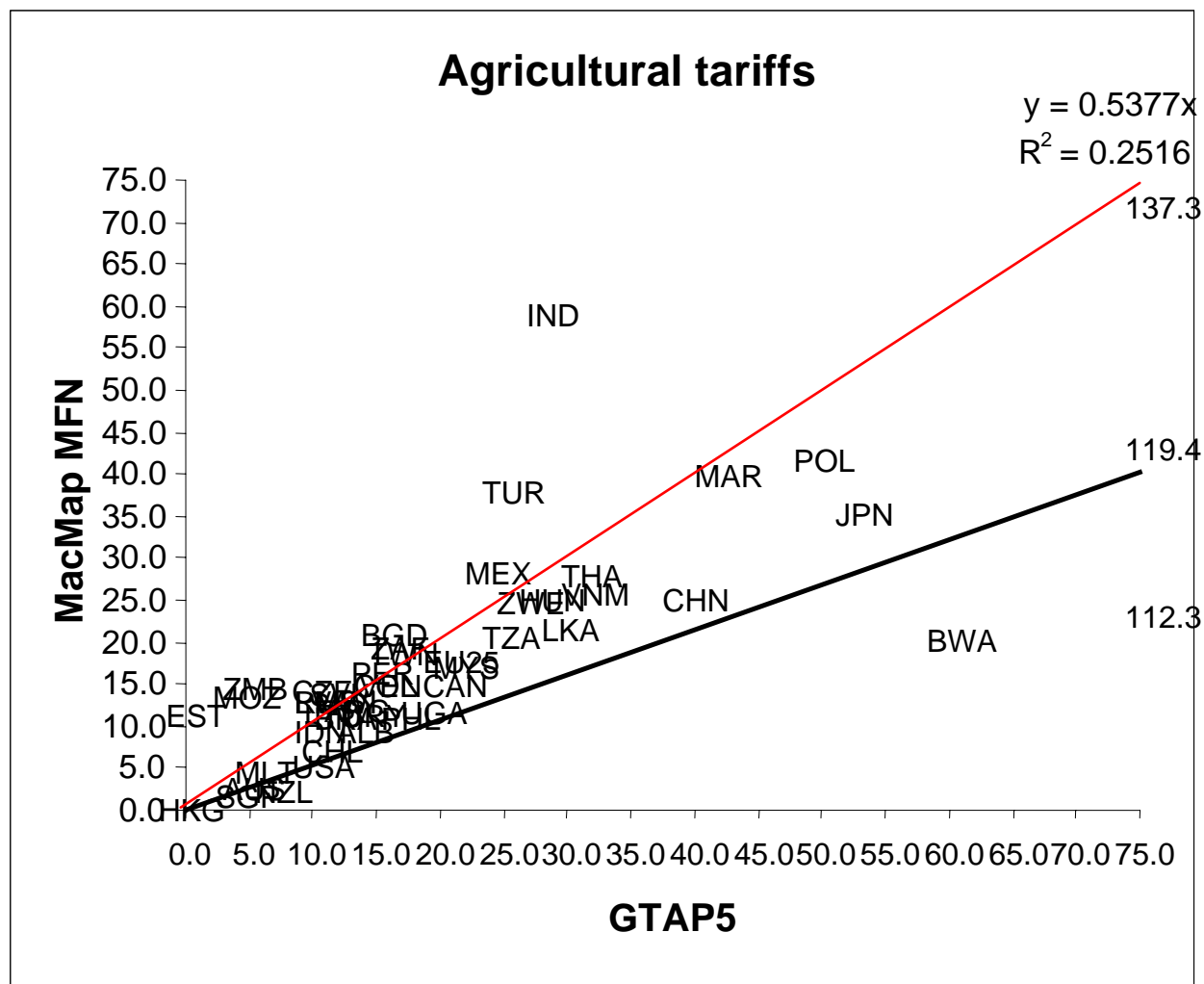
Comparison of the aggregation Methodologies

Agricultural applied tariffs

$y = 1.2522x$
$R^2 = 0.8086$

Applications

David Laborde 02/10/2005
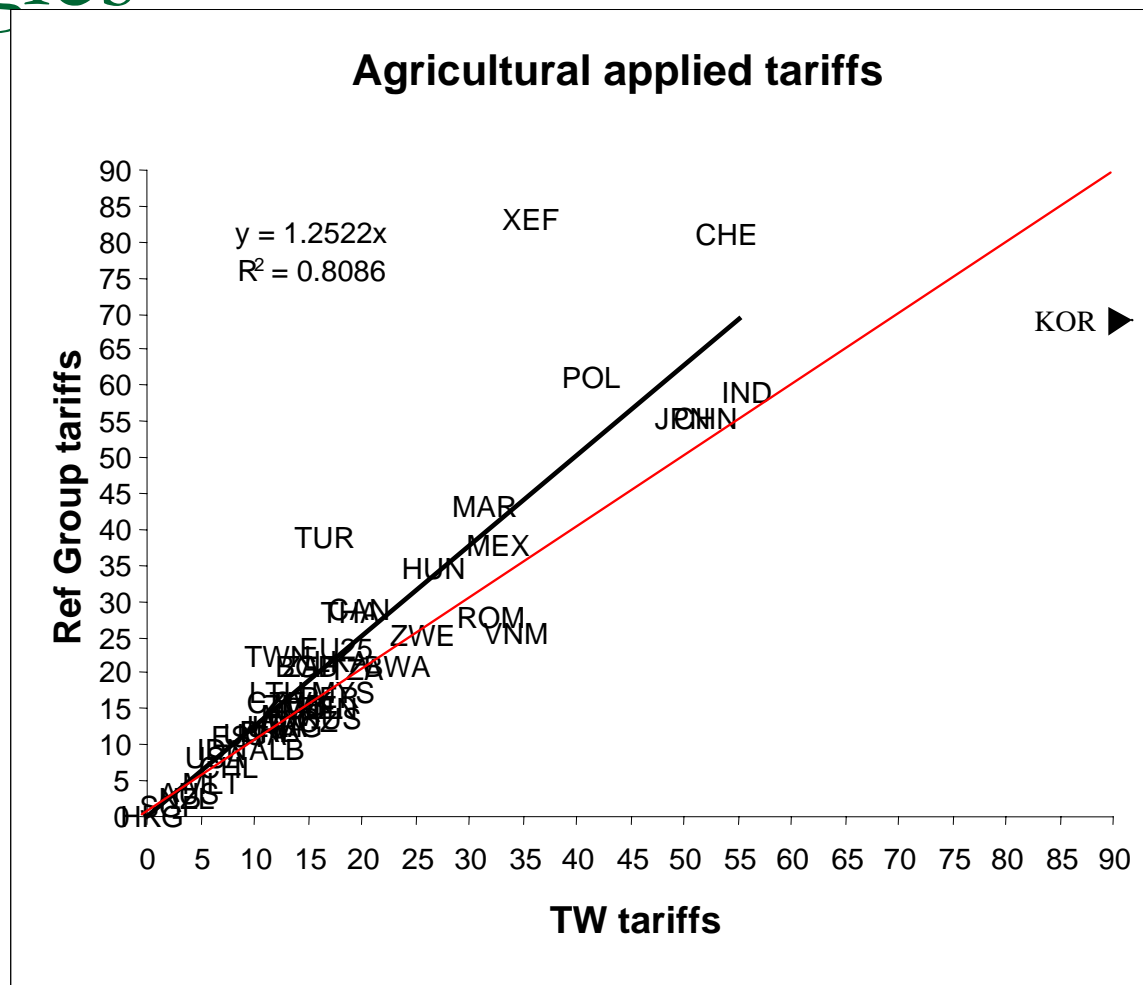
Average agricultural protection in selected rich countries, by partner (AVE, %)

Partner: Importer:	Rich	Dvg	LDC	All
Australia	2.3	1.3	0.4	2.0
Canada	23.9	5.9	0.4	18.5
Chile	7.0	6.9	7.0	7.0
EU-15	22.0	12.7	2.7	16.8
Japan	30.6	27.0	12.0	29.4
Korea	57.4	63.0	42.5	58.6
New Zealand	2.6	1.0	2.4	2.1
Switzerland	49.9	27.0	4.1	43.1
United States	5.1	4.3	5.5	4.9

David Laborde 02/10/2005

CEPII

"Apparent" preference margin

Average protection faced, difference to world average (excluding "small" countries, weighted by world exports of the exporter, pctg points)
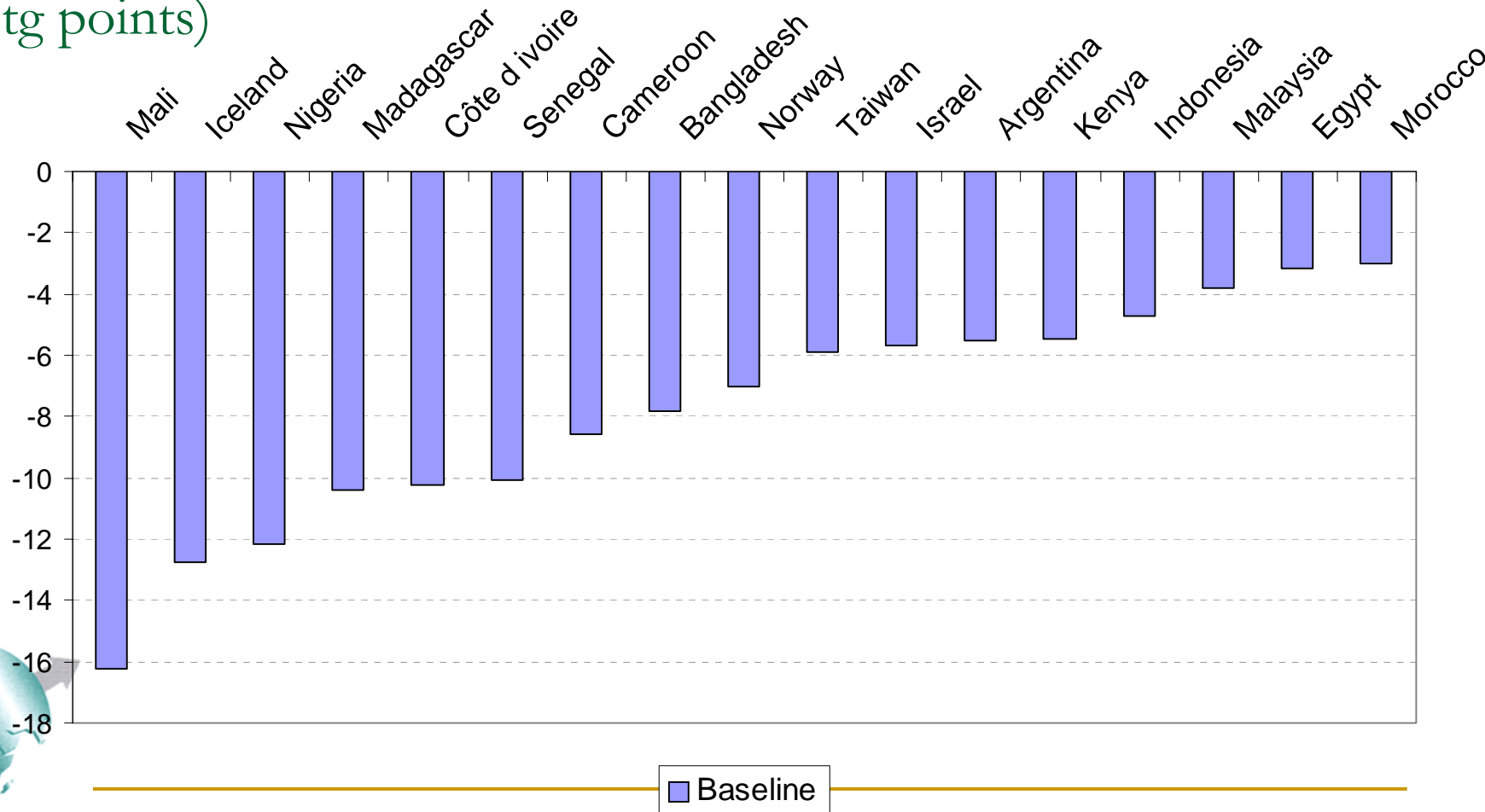
"True" average preference margin

- Not the difference in average protection faced: this would largely reflect product specialisation

- Preference margin (MFN - applied) calculated at the HS6 product level

- Then aggregation of this product-by-product preference margin, using MAcMap methodology (reference group weighting scheme)

Preferential margins granted by EU

David Laborde 02/10/2005
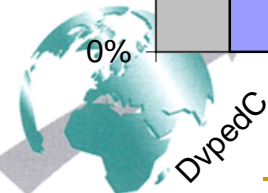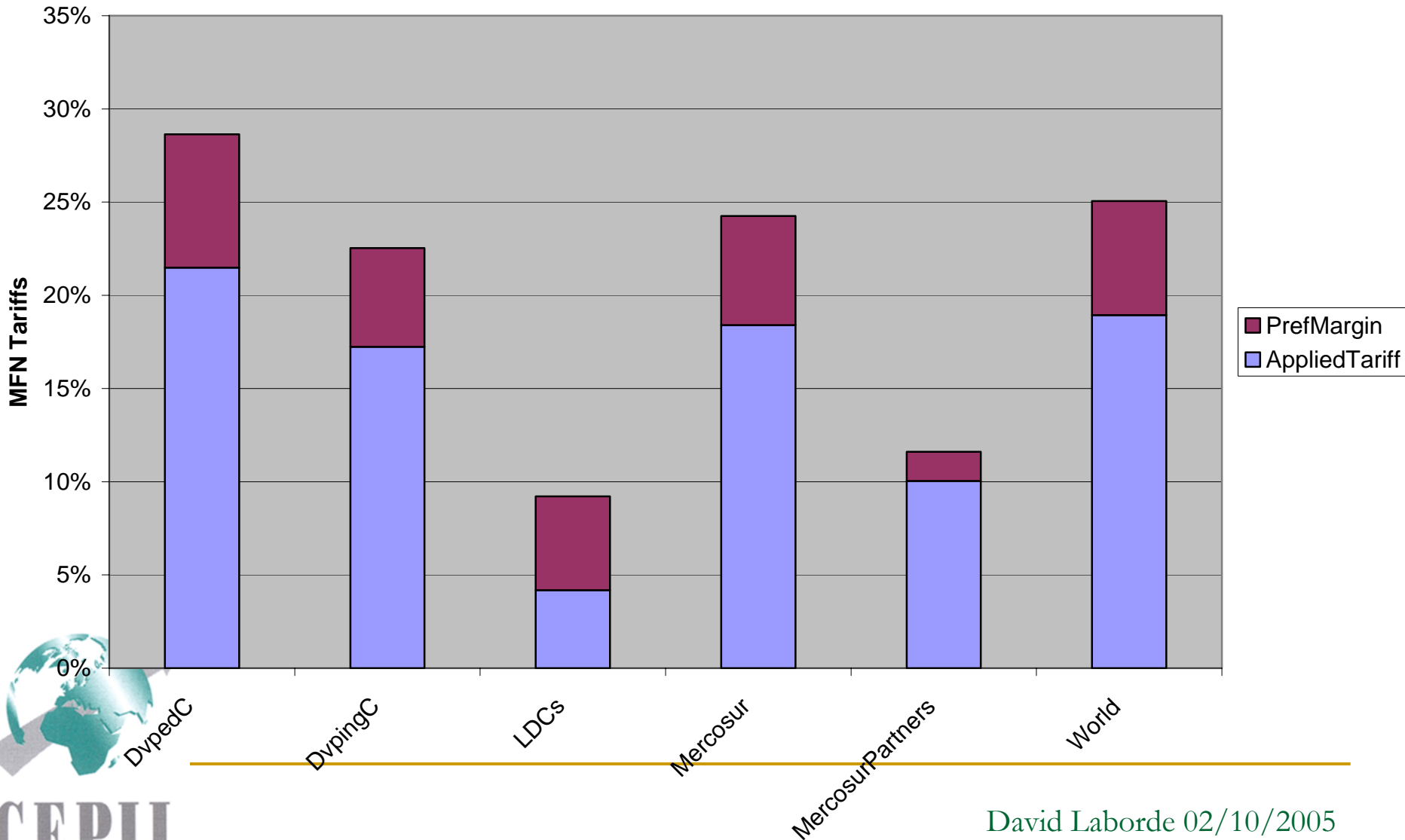
Average true preferential margin, agriculture baseline (pctg points)

David Laborde 02/10/2005
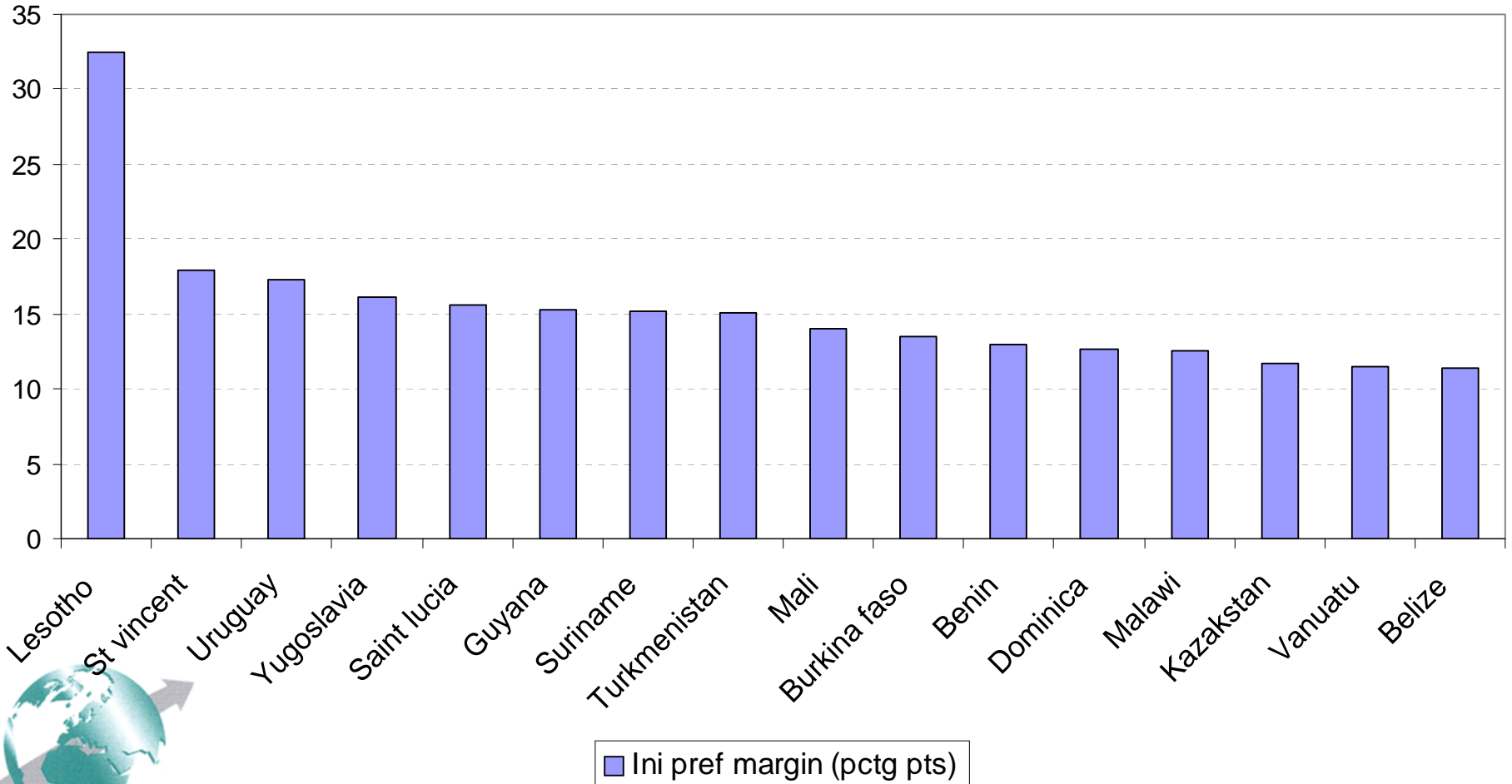
Average true preferential margin, agriculture, before and after application of a tiered formula

Legend: Ini pref margin (pctg pts) ■ New pref margin (pctg pts)

David Laborde 02/10/2005

CEPII
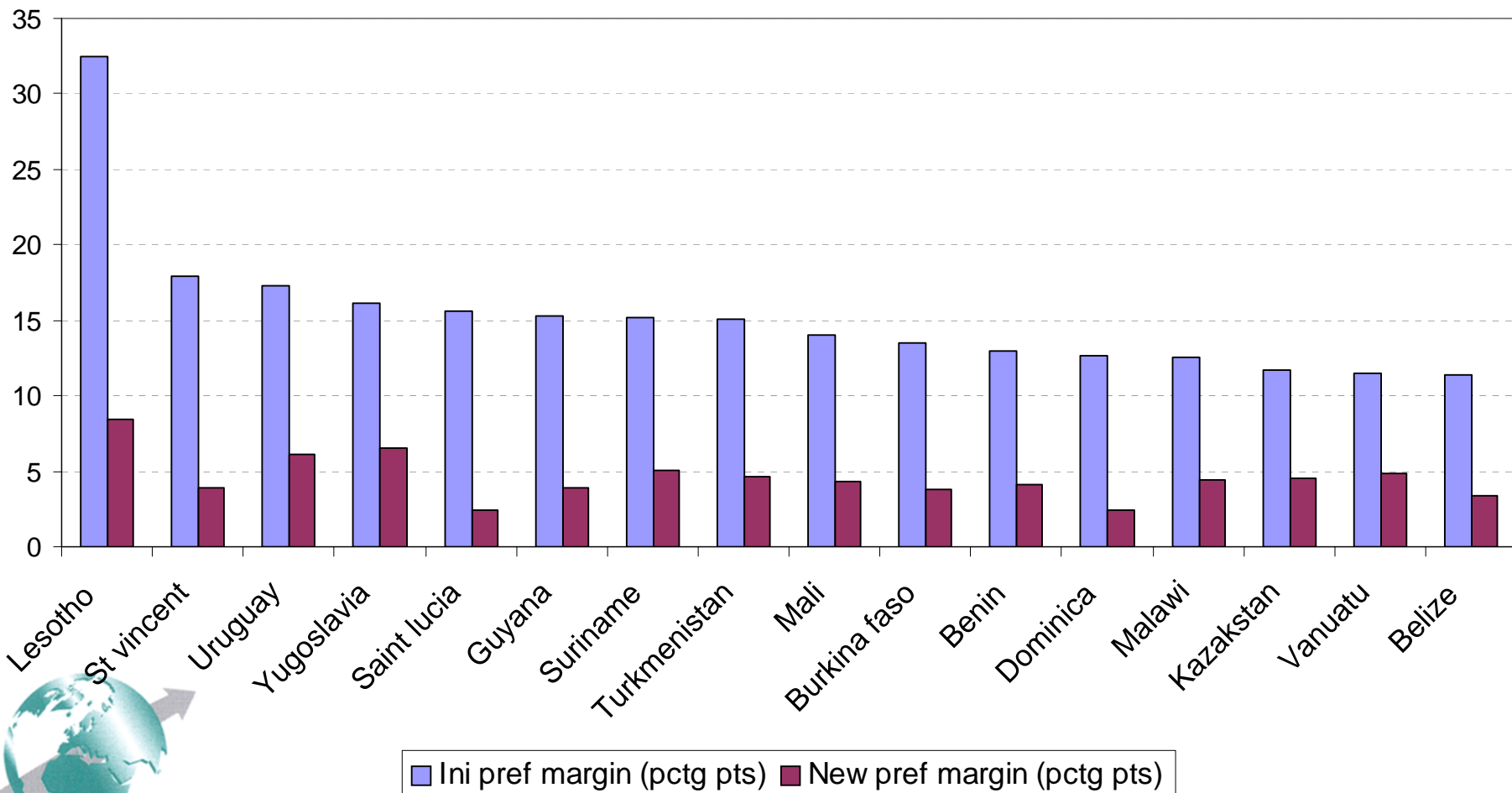
TRQ Rents from MacMaps by importer - blns USD

Legend:
- Others
- Morocco
- Thailand
- Poland
- Tunisia
- Indonesia
- South africa
- Canada
- United states of america
- Switzerland
- Mexico
- Korea
- Japan
- European Union (15)

Values: 96.4, 101.1, 120.3, 127.8, 134.3, 159.5, 231.9, 366.7, 408.0, 559.8, 696.8, 1011.5, 1132.0, 1602.8

CEPII