Capturing non-tariff related trade costs for Asia-Pacific countries
ESCAP Trade Cost Database and Implications

Yann Duval,

Trade Facilitation Section

Trade and Investment Division,

United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

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Background

- Much progress has been made in developing trade facilitation/costs indicators
- However, there are limitations, including:
    - (1) partial coverage of international trade costs (e.g., only international shipping costs)
    - (2) little or no information on bilateral/regional/south-south trade costs
    - (3) very large variations in trade efficiency across products and trade routes not captured
- ESCAP is therefore:
    - Developing a database of bilateral and intraregional trade costs [macro]
    - Building capacity in Trade Process Analysis [micro]

ESCAP's Intraregional Trade Cost Database

- Based on the comprehensive trade costs measure proposed by Jacks, Meissner and Novy (2009)
  - Measure derived from the gravity equation, i.e., ratio based essentially on bilateral trade data and Gross Output data → "objective" measure of costs
- Captures all *additional costs involved in trading goods bilaterally relative to those involved in trading goods domestically*. It includes
  - International shipping and logistics costs
  - Tariff and non-tariff costs, including indirect and direct costs associated with trade procedures and regulations
  - Costs from differences in language, culture, currencies…

Methodology

Comprehensive trade cost equation:

$$\tau_{ij} \equiv \left(\frac{t_{ij} t_{ji}}{t_{ii} t_{jj}} \right)^{\frac{1}{2}} - 1 = \left(\frac{x_{ii} x_{jj}}{x_{ij} x_{ji}} \right)^{\frac{1}{2(\sigma-1)}} - 1$$

where
тij denotes geometric average trade costs between country i and country j
tij denotes international trade costs from country i to country j
tji denotes international trade costs from country j to country i
tii denotes intranational trade costs of country i
tjj denotes intranational trade costs of country j
xij denotes international trade flows from country i to country j
xji denotes international trade flows from country j to country i
xii denotes intranational trade of country i
xjj denotes intranational trade of country j
σ denotes elasticity of substitution (which is set = 8)

ESCAP's Intraregional Trade Cost Database
(version 2, December 2011)

- Bilateral Comprehensive Trade Costs (CTC)

- Between 107 countries

- From 1994 to 2009 (2010 for some countries)

- 2 sectors: Agricultural CTC & Manufacturing CTC

- **CTC excluding tariffs (NT-CTC) also calculated**

- Available at:

  www.unescap.org/tid/artnet/trade-costs.asp

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Non-tariff intra and extra regional trade costs in Asia (2007/9)*

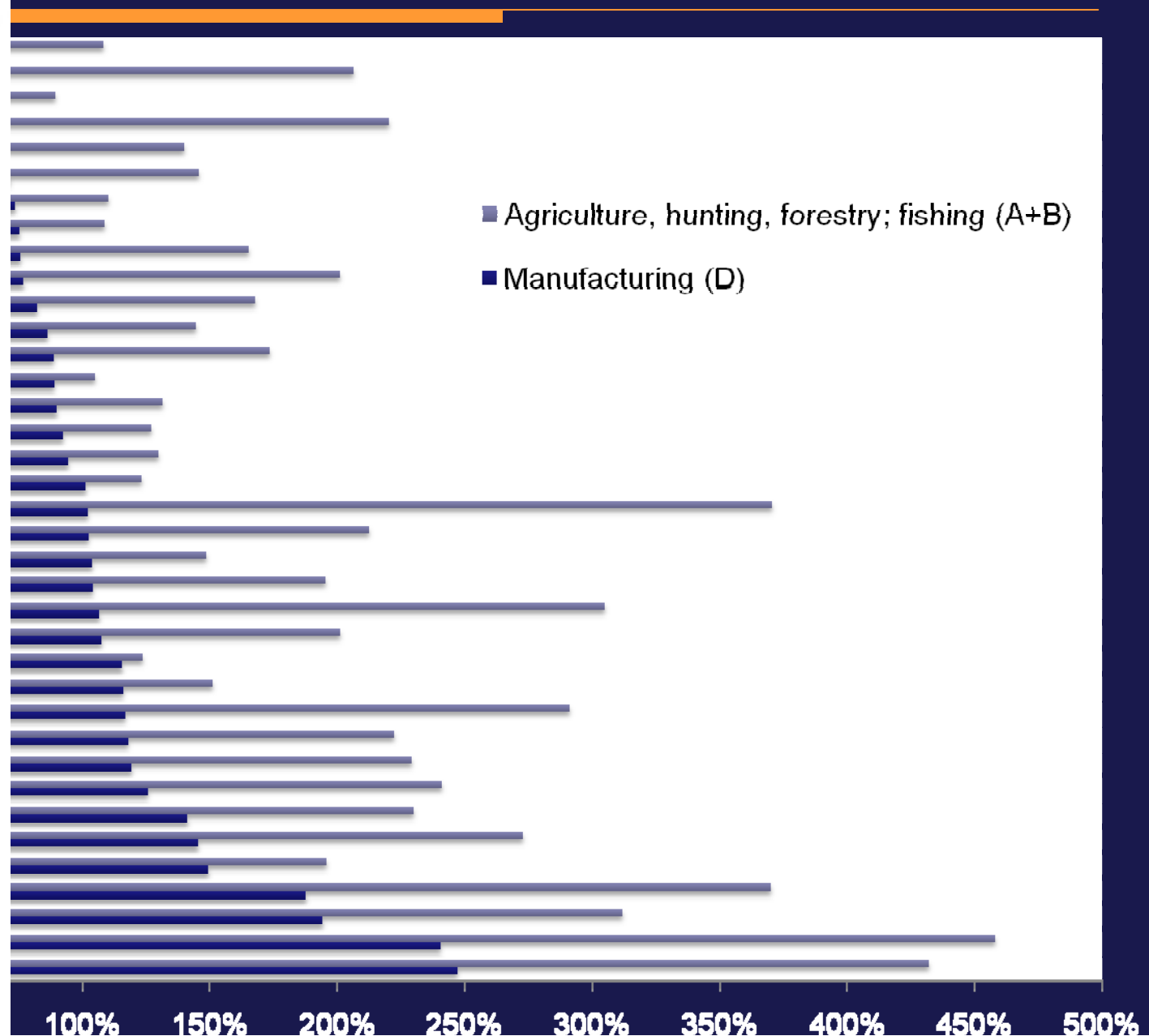| Region	ASEAN-4	East Asia-3	North & Central Asia	SAARC-4	AUS-NZL	EU-3	USA
ASEAN-4	79% (-9.5%)	73% (-5.9%)	291% (-14.2%)	134% (2.1%)	90% (-12.3%)	97% (-4.9%)	77% (3.0%)
East Asia-3	73% (-5.9%)	47% (-21.1%)	187% (-32.7%)	119% (-2.8%)	78% (-15.7%)	70% (-19.0%)	53% (-13.5%)
North & Central Asia	291% (-14.2%)	187% (-32.7%)	149% (-20.5%)	270% (-22.4%)	270% (-22.2%)	149% (-26.0%)	165% (5.0%)
SAARC-4	134% (2.1%)	119% (-2.8%)	270% (-22.4%)	113% (5.0%)	130% (-2.7%)	101% (-3.2%)	99% (5.9%)
AUS-NZL	90% (-12.3%)	78% (-15.7%)	270% (-22.2%)	130% (-2.7%)	45% (-23.5%)	89% (-17.0%)	82% (-11.1%)
EU3	97% (-4.9%)	70% (-19.0%)	149% (-26.0%)	101% (-3.2%)	89% (-17.0%)	32% (-32.6%)	51% (-18.2%)
USA	77% (3.0%)	53% (-13.5%)	165% (-17.3%)	99% (5.9%)	82% (-11.1%)	51% (-18.2%)	

Source: ESCAP Trade Cost Database (version 2).

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*values in parenthesis show change since 2001/3 (in %)

Non-tariff intra and extra regional trade costs in Asia (2007/9)*

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Tariff Comprehensive Trade Costs of Selected Economies with India (2007/2009, % ad valorem)