

ESCAP-World Bank Trade Cost Database - Implication for Asia-Pacific Connectivity

Courtesy of
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*Based on a joint paper with Jean-François Arvis (WB) and
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(Trade Costs in the Developing World: 1995-2010)*

Outline

1. Background & rationale for the database
2. Trade costs in the ESCAP-WB Database: Definition
3. End result – the ESCAP-World Bank Trade Cost Database
4. Trade costs in developing countries: Main findings
5. Explaining trade costs
6. Conclusion and policy implications

1. Background & Rationale for the Database

- ▶ Regional/global trade and production networks as a key engine of development
- ▶ Trade Facilitation [TF] (efficient trade procedures and low trade costs) essential to enable firms to participate
- ▶ Intraregional (South-South) trade important for A-P countries to continue growing at a time when developed markets slowing/shrinking
- ▶ Some cross-country indicators of TF and trade costs available (e.g., WB Doing Business indicators) but **none allowing for measuring bilateral/intra-regional trade costs**
- ▶ → Development of a bilateral trade cost database to provide a systematic and standardized way to evaluate trade costs in developing countries

2. ESCAP-WB Trade Cost: Definition

- ▶ Based on the comprehensive trade costs measure proposed by Jacks, Meissner and Novy (2009)
 - ▶ Measure derived from the theory-consistent 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...



2. ESCAP-WB Trade Cost: Definition

- ▶ Our measure of **ad valorem trade costs**:

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

Where

- ▶ **T_{ij} denotes geometric average trade costs between country i and country j**
- ▶ t_{ij} denotes international trade costs from country i to country j
- ▶ t_{ji} denotes international trade costs from country j to country i
- ▶ t_{ii} denotes intranational trade costs of country i
- ▶ t_{jj} denotes intranational trade costs of country j
- ▶ **X_{ij} denotes international trade flows from country i to country j**
- ▶ **X_{ji} denotes international trade flows from country j to country i**
- ▶ **X_{ii} denotes intranational trade of country i**
- ▶ **X_{jj} denotes intranational trade of country j**
- ▶ **σ denotes intra-sectoral elasticity of substitution (which is set = 8)**

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- ▶ Intuition: keeping all else constant, a rise in the ratio of international trade relative to domestic trade must be associated with a fall in international trade costs relative to domestic trade costs
- ▶ *Ad valorem* ? → bilateral trade costs are expressed in % of the value of goods (like tariffs generally are)
- ▶ Important note: Change in the value of sigma can change the absolute value of trade costs → **better to look at trade cost relative to each other**

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Note that:

- ▶ Our trade costs are always expressed in terms of international relative to intra-national trade costs
- ▶ Our trade costs are the geometric average of trade costs in both directions (country i to j and country j to i)
 - ▶ → This can make the identification of policy effects challenging

3. End Result – the ESCAP-WB Trade Cost Database

- ▶ **“All-inclusive” Bilateral trade costs for 178 countries**
- ▶ **For the period 1995-2010***
- ▶ **Two macro-sectors covered**
 - ▶ **Agriculture**
 - ▶ **Manufacturing**
- ▶ Underlying data on international trade (X_{ij}, X_{ji}) are relatively easy to come by, but data on intranational trade (X_{ii}, X_{jj}) are more complicated...
 - ▶ Intranational trade = Gross Output (from UN National Account statistics) –

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_6551

