Trade Facilitation Variables for Gravity Research

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Potential variables for TF? – Doing Business

- Doing Business ranks the business regulation and environment in 185 economies around the world.

- Ranking is based on 10 topics: starting a business, dealing with construction permits, getting electricity, registering properties, getting credit, protecting investors, paying taxes, trading across borders, enforcing contract, resolving insolvency.

- Distance to frontier provides the score for comparison across years.

- Source: [http://www.doingbusiness.org](http://www.doingbusiness.org)
Economy Rankings

Economies are ranked on their ease of doing business, from 1 – 185. A high ranking on the ease of doing business index means the regulatory environment is more conducive to the starting and operation of a local firm. This index averages the country’s percentile rankings on 10 topics, made up of a variety of indicators, giving equal weight to each topic. The rankings for all economies are benchmarked to June 2012.

Potential variables for TF? – Doing Business
Distance to Frontier

This measure shows the distance of each economy to the "frontier," which represents the highest performance observed on each of the indicators across all economies included in Doing Business, since each indicator was included in Doing Business. An economy's distance to frontier is indicated on a scale from 0 to 100, where 0 represents the lowest performance and 100 the frontier. For example, a score of 75 in DB 2012 means an economy was 25 percentage points away from the frontier constructed from the best performances across all economies and across time. A score of 80 in DB 2013 would indicate the economy is improving. In this way the distance to frontier measure complements the yearly ease of doing business ranking, which compares economies with one another at a point in time. Read about this measure (PDF, 79KB).
Potential variables for TF? – Logistic Performance Index

- Logistics Performance Index (LPI) indicates the level of logistic friendliness in 155 countries

- LPI ranking is based on 6 topics: customs, infrastructure, international shipments, logistics competence, tracking and tracing and timeliness

## Potential variables for TF? – Logistic Performance Index

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>LPI Rank</th>
<th>LPI Score</th>
<th>Customs</th>
<th>Infrastructure</th>
<th>International Shipments</th>
<th>Logistics Competence</th>
<th>Tracking &amp; Tracing</th>
<th>Timeliness</th>
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Potential variables for TF? – LSCI

- Liner shipping connectivity Index (LSCI) measures the level of seaport connectivity to the global networks in 159 countries.

- LSCI ranking is based on 4 topics: numbers of ships, total container-carrying capacity of ships, maximum vessel size, number of services and number of companies that deploys container ships on services to and from a country’s port.

- Source: http://data.worldbank.org/indicator/IS.SHP.GCNW.XQ
### Liner shipping connectivity index (maximum value in 2004 = 100)

The Liner Shipping Connectivity Index captures how well countries are connected to global shipping networks. It is computed by the United Nations Conference on Trade and Development (UNCTAD) based on five components of the maritime transport sector: number of ships, their container-carrying capacity, maximum vessel size, number of services, and number of companies that deploy container ships in a country's ports. For each component a country's value is divided by the maximum value of each component in 2004, the five components are averaged for each country, and the average is divided by the maximum average for 2004 and multiplied by 100. The index generates a value of 100 for the country with the highest average index in 2004. The underlying data come from Containerisation International Online.


**Catalog Sources World Development Indicators**

<table>
<thead>
<tr>
<th>Country name</th>
<th>Afghanistan</th>
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<th>Algeria</th>
<th>American Samoa</th>
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</tbody>
</table>
How to Access Trade Cost Data

1 Go to www.unescap.org

2 Click Trade and Investment
How to Access Trade Cost Data

3 Click ARTNeT

4 Click Database
How to Access Trade Cost Data

http://www.unescap.org/tid/artnet/database.asp

Asia-Pacific Research and Training Network on Trade

Databases

ARTNet acts as an information repository providing a linkage to international organizations such as the International Trade Centre, UNCTAD, and the WTO, which in turn facilitate researchers’ access to trade data and trade analysis tools. ARTNet also builds trade research capacity through facilitating access to relevant trade and investment related databases. In addition to the ARTNet Trade Publications Database, ARTNet supports the development of the trade performance indicators component of the Asia-Pacific Trade and Investment Agreement Database (APTIAD).

- Gravity Modeling Database
- Trade costs
- APTIAD

http://www.unescap.org/tid/artnet/trade-costs.asp
How to Access Trade Cost Data

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

ESCAP-World Bank Trade Cost Database
(Global version issued December 2012)

The ESCAP Trade and Investment Division, in support to the ARTNet research programme on trade facilitation, initiated development of a bilateral trade cost database in 2011 in an effort to increase understanding of the cost of trading between countries in Asia and the Pacific and beyond. The trade cost measure, based on Novy (2012), is a comprehensive all-inclusive measure based on micro-theory and calculated using macro-economic data, providing an alternative measure of trade facilitation performance. Following release of a first version of the database in 2016 using trade and GDP data, [1] an improved and expanded version 2 was released in December 2011 - based on gross output data and providing sectoral trade cost estimates for about 100 countries [2]

In late 2011, United Nations ESCAP and the World Bank (WB) joined hands to develop a common standard methodology for calculating comprehensive international trade costs and provide the research and policy community with a global reference. The resulting ESCAP-World Bank Trade Cost Database covers 178 countries and is available below, as well as on the WE website [3]

- ESCAP-World Bank Trade Cost Database (tarfile file)
- Metadata
- User Note

Note: Earlier versions of the databases are available upon request to the authors.
How to Access Trade Cost Data


Trade Costs Dataset

The Trade Costs Dataset provides estimates of bilateral trade costs in agriculture and manufactured goods for the 1995-2010 period. It is built on trade and production data collected in 179 countries. Symmetric bilateral trade costs are computed using the Inverse Gravity Framework (Novy 2009), which estimates trade costs for each country pair using bilateral trade and gross national output.