DATA SOURCES FOR TRADE POLICY ANALYSIS

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ESCAP

Capacity Building on Trade Policy Analysis
24-25 October 2016,
Colombo, Sri Lanka
OVERVIEW

- Nomenclatures
- Trade data
- Trade policy data
- Ready to use trade and trade policy indicators
- Integrated platforms: ITC & WITS
- Micro-data
- Data visualization tools
## RECAP

<table>
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<th>Policy purpose</th>
<th>Methods</th>
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<td>Overview of trade and trade policy</td>
<td>Use trade indicators and trade policy measures</td>
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<td>Ex-ante impact on specific sector of interest</td>
<td>Partial equilibrium models (SMART, GSIM, TRIST)</td>
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<td>Ex-ante economy-wide impacts</td>
<td>CGE</td>
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<td>Ex-post overview</td>
<td>Usage of preference measures, simple trade indicators</td>
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<td>Ex-post actual impact</td>
<td>Gravity models</td>
</tr>
<tr>
<td>Detailed analysis of impact on household, firm level development outcomes</td>
<td>Use survey data and econometric analyses</td>
</tr>
</tbody>
</table>
WHAT KIND OF DATA DO WE NEED?

- Data on trade flows
  - Exports and imports: total, bilateral
  - Goods, services

- Data on trade policies
  - Tariffs
    - Non-tariff Measures (NTMs)

- Trade indicators

- Micro-data (firms, households)
Trade data have been recorded according to several product nomenclatures depending on the database and year:

- Harmonized Commodity Description and Coding System (HS)
- Standard International Trade Classification (SITC)
Last revised in 2012

Four harmonized levels, by decreasing degree of aggregation:
- Sections (21 lines)
- Chapters (99 lines, also called "HS 2" because chapter codes have two digits)
- Headings (HS 4, 1243 lines)
- Subheadings (HS 6, more than 5000 lines including various special categories)

Levels beyond HS 6 (HS 8 and 10) are not harmonized so the description of product categories and their number differs between countries

HS2 and HS4 are the same in all revisions
MAIN DRAWBACK OF THE HARMONIZED SYSTEM

- Originally designed to organize tariff collection
- Traditional products like textile and clothing (Section XI) are over-represented in terms of number of subheadings compared to newer products in machinery, vehicles and instruments (Sections XVI, XVII and XVIII)
STANDARD INTERNATIONAL TRADE CLASSIFICATION (SITC)

- SITC Revision 4 in 2006

- Five levels:
  - Sections (1 digit, 10 lines)
  - Divisions (2 digits, 67 lines)
  - Groups (3 digits, 262 lines)
  - Subgroups (4 digits, 1’023 lines)
  - Basic heading (5 digits, 2’970 lines)

- Concordance tables between HS 6 2007 subheadings and SITC Rev. 4 basic headings (in both directions) are available on the UN Statistics Division webpage
Some Key Issues

- **Missing export data**
  - Export data monitored less carefully by customs administrations than import data
  - Use import data from partner countries - "mirroring"

- **Confounding missing values and zero trade flows**
WHERE TO FIND TRADE DATA?
AGGREGATE TRADE DATA

- WTO databases provide aggregate data on trade in goods and services
  - Annually
  - Quarterly
  - Monthly

https://www.wto.org/english/res_e/statis_e/looking4_e.htm#top
### What are you looking for?

<table>
<thead>
<tr>
<th>Trade and tariff information by economy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariff profiles</td>
<td></td>
</tr>
<tr>
<td>Trade profiles</td>
<td></td>
</tr>
<tr>
<td>Services profiles</td>
<td></td>
</tr>
</tbody>
</table>

#### Merchandise trade statistics

<table>
<thead>
<tr>
<th>Short-term merchandise trade (quarterly and monthly data)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total merchandise trade values</td>
<td></td>
</tr>
<tr>
<td>Total merchandise trade indices</td>
<td></td>
</tr>
<tr>
<td>Merchandise trade by commodity</td>
<td></td>
</tr>
<tr>
<td>World merchandise exports by main product, origin and destination</td>
<td></td>
</tr>
<tr>
<td>Trade of selected regional integration arrangements</td>
<td></td>
</tr>
<tr>
<td>World and regional export profiles</td>
<td></td>
</tr>
<tr>
<td>World commodity profiles</td>
<td></td>
</tr>
</tbody>
</table>

#### Trade in commercial services statistics

<table>
<thead>
<tr>
<th>Short-term trade in commercial services (quarterly and monthly data)</th>
<th></th>
</tr>
</thead>
</table>
DATABASES FOR BILATERAL TRADE FLOW ANALYSIS

• Aggregated bilateral trade data are available from the IMF Direction of Trade Statistics (DOT).

• DOTs provide bilateral import (c.i.f.) and import data of all products on subscription.
DATABASES FOR DISAGGREGATED TRADE DATA

a.  **UN Comtrade**
   - Covers bilateral trade flows at up to the HS 6 level for almost all countries up to 1962
   - All trade values are in thousands of current US dollars
   - UN Comtrade also reports volumes (in physical units) so that unit values can, at least in principle, be calculated for each good
   - Monthly (aggregated) data are free, but annual (bilateral) data are not. (Annual data are available through the World Bank’s [WITS](#) portal.)

b.  **Base Analytique du Commerce International (BACI)**
   - Created by CEPII *(Centre d'Etude Prospectives et d'Informations Internationales)*, a Paris-based institute, to reconcile discrepancies between UN Comtrade’s import and export data
   - BACI trails UN Comtrade with a two-year lag
   - BACI is freely available online to subscriber of COMTRADE database
   - BACI resolves zero vs. missing values problems
c. **Trade, Production and Protection (TPP) database**

- Merges trade flows, production and trade protection data available from different sources into ISIC Rev. 2 data.
  - It includes annual data on trade flows (exports and imports), domestic production (output, value-added, employment, etc), and trade protection (tariffs and non-tariff barriers).

- Data potentially cover 100 developing and developed countries over 1976-2004, but data availability varies by country and year.

d. **CEPII Trade, Production and Protection database**

- Combines bilateral trade from BACI. Production figures are based on the TPP dataset, and complemented with figures by OECD and UNIDO. Bilateral protection data comes from the MACMap project.

- Proposes bilateral trade and production covers from 1980 to 2006 and 26 industrial sectors in the ISIC Revision 2.
TRADE IN SERVICES DATA

- World Bank Databases on trade in services provides information on annual bilateral services trade flows in Mode 1 (cross-border trade) and Mode 2 (consumption abroad) for 199 countries across a multitude of sectors and years spanning 1985 and 2011.

- It consolidates multiple sources of bilateral trade data in services using mirror techniques, including the OECD, Eurostat, UN and IMF, as to provide a broader coverage of developed and developing countries over time.

- Mirror-technique is a method to retrieve export trade flows of a reporter by using information on imports of the partner country.

- The quality of trade data in services is still far away from being comparable to trade data for merchandise goods.
Where to find trade-policy data?
TARIFF DATA

a. Tariff data

- WTO integrated database (IDB) and Consolidated Tariff Schedules database (CTS): MFN applied tariffs and imports of WTO Members at the tariff-line level which often means 8 digits, sometimes even 10 digits, starting in 1996
  - WTO Tariff Analysis Online (TAO)

- CEPII and ITC's MAcMap database: a set of files at the tariff line level of the bilateral measurement of applied tariff duties, taking regional agreements and trade preferences exhaustively into account.

- WITS provides access to trade and tariffs databases:
  - The WTO's IDB and CTS databases
  - UN Comtrade
  - UNCTAD's TRAINS database
  - Global Preferential Trade Agreements Database
DATA ON NON-TARIFF MEASURES

- WTO databases: based on notifications
  - SPS
  - TBT (and also this database on Specific Trade Concerns)
- Several limitations

- Historical UNCTAD TRAINS database
  - WTO notifications + other national sources
  - 1992-2010

- New TRAINS database
  - UNCTAD+TNT+ITC+ Other IOs
  - Harmonized data collection on NTMS using UNCTAD 2012 classification of NTMs
  - Covers 56 countries accounting for 80 per cent of world trade
  - http://i-tip.unctad.org/
TRADE RESTRICTIVENESS DATA SETS
The Temporary Trade Barriers Database (TTBD) website hosts newly collected, freely available, and detailed data on more than thirty different national governments' use of policies such as antidumping (AD), global safeguards (SG), China-specific transitional safeguard (CSG) measures, and countervailing duties (CVD). The information provided in this detailed database will cover over 95% of the global use of these particular import-restricting trade remedy instruments. More >>

NEW! Temporary Trade Barriers Data updated through 2015 (available June 2016)

- Temporary Trade Barriers Monitoring Update through 2013
- Monitoring during the Global Economic Crisis
- Introduction and history
- As described in chapter 1 of The Great Recession and Import Protection: The Role of Temporary Trade Barriers
- Funding and support
- News coverage and dissemination
- Published academic research
- Policy research
- Working papers
- Academic supporters
- Working paper (PDF) describing data and sources

NEW! Links to Raw Data Files

- Global Antidumping Database (GAD), 1980s-2015
- Global Countervailing Duties Database (GCVD), 1980s-2015
- China-Specific Safeguards Database (CSGD), 2002-2015
- Global Safeguards Database (GSGD), 1995-2015
- WTO Disputes Database (DSUD), 1995-2015
- Raw Data Files (TTBD) (.zip - 4.1mb), 1980s-2015
Technical Barriers to Trade database

Authors: John S. Wilson

Web Address: Trade Research

Topics: Trade

Citation:
The World Bank has completed a new database on technical barriers to trade and standards, based on a survey of 689 firms in 17 developing countries. The World Bank Technical Barriers to Trade (TBT) database includes information on both mandatory technical regulations, as well as the use of voluntary standards. For example, the data include information on the costs of meeting standards and technical barriers required in major export markets. The data also include firms' experiences with product testing and their responses to questions regarding mutual recognition agreements. Preliminary analysis that draws on the database is underway at the Bank and the data set with additional information, including the survey instrument and background description, are available through the database, below.

Search functionality of survey results using MS Access back end and ASP front end:

- Existing Excel data will be imported into MS Access format
- ASP Search Functionality Search will be built to allow viewing of summary data
  - Search will provide ability to select multiple groups, i.e. Financial, Export, etc
  - Search will allow selection of Country or Region to view only data related to that selection
  - Search will allow multiple grouping options including Region and Country
- ASP Survey Results will display question, possible answers and results, as well as percentage of total
Global Trade Alert provides real-time information on state measures taken during the current global downturn that are likely to affect foreign commerce.

- It identifies the trading partners likely to be harmed by these measures.
SERVICE TRADE RESTRICTIONS

- OECD SERVICE TRADE RESTRICTIVENESS INDICES (UPDATED IN 2015)
  - http://www.oecd.org/tad/services-trade/services-trade-restrictiveness-index.htm

- WORLD BANK SERVICE TRADE RESTRICTIVENESS
TRADE AGREEMENTS DATA SET

- WTO databases on RTA Database and PTA Database
- ARTNeT supported Asia Pacific Trade and Investment Database (APTIAD) managed by ESCAP
WHERE TO FIND READY-TO-USE TRADE AND TRADE POLICY INDICATORS?
a. ITC Trade Map

- Basic trade indicators based on UN COMTRADE data
- Tables, graphs and maps –on export performance, international demand, alternative markets and competitive markets, as well as a directory of importing and exporting companies.
b. ITC Trade Competitiveness Map

For each country, Trade Competitiveness Map offers:

<table>
<thead>
<tr>
<th>GENERAL PROFILE</th>
<th>CHANGE RELATED (LAST 5-YEAR PERIOD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports in value</td>
<td>Growth of exports in value (% p.a.)</td>
</tr>
<tr>
<td>Exports as share of total exports (%)</td>
<td>Growth of exports in volume (% p.a.)</td>
</tr>
<tr>
<td>Exports as share of world exports (%)</td>
<td>Growth of world exports in volume (% p.a.)</td>
</tr>
<tr>
<td>Number of exported products</td>
<td>Growth of world exports in value (% p.a.)</td>
</tr>
<tr>
<td>Share of top 3 exported products (%)</td>
<td>Growth of share in world exports (% p.a.)</td>
</tr>
<tr>
<td>Share of top 3 export markets (%)</td>
<td></td>
</tr>
<tr>
<td>Net trade</td>
<td></td>
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<tr>
<td>Specialisation (Balassa index / RCA index)</td>
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<tr>
<td>Specialisation (Lafay index)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Current performance*</th>
<th>General profile</th>
<th>Decomposition of changes in world market share (last 5 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1. Value of net exports</td>
<td>G1. Value of exports</td>
<td>C1. Relative change of world market share decomposed into:</td>
</tr>
<tr>
<td>P2. Per capita exports</td>
<td>G2. Trend growth of exports (last 5 years)</td>
<td>(C1a) Competitiveness effect</td>
</tr>
<tr>
<td>P3. Share in world market</td>
<td>G3. Share in national exports</td>
<td>(C1b) Initial geographic specialisation</td>
</tr>
<tr>
<td>P4.a Product diversification</td>
<td>G4. Share in national imports</td>
<td>(C1c) Initial product specialisation</td>
</tr>
<tr>
<td>P4.b Product concentration</td>
<td></td>
<td>(C1d) Adaptation effect</td>
</tr>
<tr>
<td>P5.a Market diversification</td>
<td>G5. Growth in per capita exports (last 5 years)</td>
<td>C2. Matching with dynamics of world demand</td>
</tr>
<tr>
<td>P5.b Market concentration</td>
<td>G6. Level in relative unit values</td>
<td></td>
</tr>
</tbody>
</table>

*Current performance includes net exports, per capita exports, share in world market, product diversification, and market diversification.
WITS TRADE OUTCOME INDICATORS

- Calculate at country level using UN COMTRADE data
- 21 indicators of trade indicators to analyze trade performance
- Divided into four categories:
  (i) composition, orientation, and growth of exports and imports,
  (ii) degree of export diversification across products and markets,
  (iii) technological sophistication of exports, and
  (iv) survival rate of export relationships
ITC MARKET ACCESS MAP

Offers current and historical data on:

- General, MFN and preferential tariff rates
- Applied tariff rate quotas, including quota contingents and administration methods
- Final bound tariffs of WTO member countries
- Non-tariff measures (not in quantitative measurements but legal text)
  - Trade remedies including antidumping, countervailing and safeguard duties
  - Rules and certificates of origin
  - Other non-tariff measures (market requirements), e.g. technical requirements and conformity assessments
- Yearly export and import trade flows
- These are based on various data sources: ITC, UNCTAD, World Bank, WTO
INTEGRATED PLATFORMS
• ITC:  http://www.intracen.org/
• WITS:  http://wits.worldbank.org/
• WTO:
  https://www.wto.org/
  https://www.wto.org/english/res_e/statis_e/looking4_e.htm
List of products at 2 digits level exported by Sri Lanka in 2015

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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td></td>
<td>All products</td>
<td>10,439,730</td>
<td>-8,527,501</td>
<td>3</td>
<td>-8</td>
<td>-2</td>
<td>0.1</td>
<td>84</td>
</tr>
<tr>
<td>61</td>
<td>61</td>
<td>Articles of apparel and clothing accessories, knitted or crocheted</td>
<td>2,562,430</td>
<td>2,482,494</td>
<td>7</td>
<td>-2</td>
<td>3</td>
<td>1.1</td>
<td>17</td>
</tr>
<tr>
<td>62</td>
<td>62</td>
<td>Articles of apparel and clothing accessories, not knitted or crocheted</td>
<td>1,985,281</td>
<td>1,779,628</td>
<td>2</td>
<td>-3</td>
<td>2</td>
<td>0.9</td>
<td>22</td>
</tr>
<tr>
<td>09</td>
<td>09</td>
<td>Coffee, tea, maté and spices</td>
<td>1,666,549</td>
<td>1,534,694</td>
<td>1</td>
<td>-10</td>
<td>-1</td>
<td>3.5</td>
<td>9</td>
</tr>
<tr>
<td>40</td>
<td>40</td>
<td>Rubber and articles thereof</td>
<td>790,452</td>
<td>391,832</td>
<td>-7</td>
<td>-16</td>
<td>-6</td>
<td>0.5</td>
<td>31</td>
</tr>
<tr>
<td>71</td>
<td>71</td>
<td>Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad...</td>
<td>240,485</td>
<td>81,535</td>
<td>-14</td>
<td>-38</td>
<td>-1</td>
<td>0</td>
<td>75</td>
</tr>
<tr>
<td>85</td>
<td>85</td>
<td>Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television...</td>
<td>227,734</td>
<td>-839,618</td>
<td>4</td>
<td>-22</td>
<td>2</td>
<td>0</td>
<td>79</td>
</tr>
<tr>
<td>08</td>
<td>08</td>
<td>Edible fruit and nuts; peel of citrus fruit or melons</td>
<td>211,773</td>
<td>144,269</td>
<td>17</td>
<td>-19</td>
<td>5</td>
<td>0.2</td>
<td>52</td>
</tr>
<tr>
<td>89</td>
<td>89</td>
<td>Ships, boats and floating structures</td>
<td>188,860</td>
<td>119,033</td>
<td>4</td>
<td>111</td>
<td>-2</td>
<td>0.1</td>
<td>39</td>
</tr>
</tbody>
</table>
Growth of national supply and international demand for products exported by Sri Lanka in 2015
Welcome

WITS application is aimed to help users find trade values and quantities for products on various nomenclatures; find tariff rates for products in different markets based on various product classifications; compare tariffs across markets; analyze protection levels for countries and products over time; compare scenarios of changes to applied or bound tariffs; or simulate economic impacts of various market access conditions. List of available data include:

**What is new:**
- Generate Trade Indicators charts
- eLearning
- Tariff Cuts & Trade Simulator
- Offline tool
- Tariff Bulk download
- Tariff Indicators module

- MFN and preferential rates
- Bound tariffs for WTO member countries
- Ad valorem equivalents (AVEs) of specific tariffs using different methodologies

- Trade values and quantities from UNSD’s COMTRADE database
- Tariff simulations
- Predefined country and product groups (various product nomenclatures: HS, SITC, ISIC, CPC, GTAP etc)
MICRO DATA FOR IMPACT EVALUATIONS
Central Microdata Catalog

Search by Keyword

in study description
sri lanka

in variable description

Search
Reset

Filter by Year

Show studies conducted between
1890 and 2016

Filter by Data Access

- All
- Open data access
- Direct data access
- Public use data files
- Licensed data files
- Data available from external repository
- Data not available

Found 16 studies out of 2255

sri lanka

Sort results by: Relevance | Country ▲ | Year | Title | Popularity

Showing 1-15 of 16 studies

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World Bank Group Country Survey 2015
Sri Lanka, 2015

By: Public Opinion Research Group - World Bank Group
Collection: The World Bank Group Country Opinion Survey Program (COS)

Created on: Jul 06, 2016  Last modified: Jul 06, 2016

Global Financial Inclusion (Global Findex) Database 2014
Sri Lanka, 2014

By: Development Research Group, Finance and Private Sector Development Unit - World Bank
Collection: Global Financial Inclusion (Global Findex) Database

EXAMPLE: MICRO DATA

- 2011 firm-level ITC NTM survey of Sri Lanka
DATA VISUALIZATION TOOLS
An Example:

The Observatory of Economic Complexity, MIT Media Lab,
http://atlas.media.mit.edu/en/

TOTAL: $11.5B

Textiles: 48%

Vegetable Products: 18%

Plastics and Rubbers: 9.6%

Machines: 4.8%

Animal Products: 3.0%

Precious Metals: 1.5%

Foodstuffs: 3.2%

Chemical Products: 2.2%

Mineral Products: 1.2%

Miscellaneous: 1.1%

Total: $11.5B

**Non-Knit Women's Suits**
- 5.1%

**Other Women's Undergarments**
- 5.0%

**Knit Women's Undergarments**
- 4.6%

**Non-Knit Men's Suits**
- 4.1%

**Knit Women's Suits**
- 1.7%

**Knit Men's Suits**
- 2.5%

**Knit Gloves**
- 2.4%

**Knit Men's Shirts**
- 1.9%

**Non-Knit Men's Shirts**
- 3.8%

**Knit T-shirts**
- 3.7%

**Tea**
- 12%

**Used Rubber Tires**
- 3.3%

**Rubber Apparel**
- 2.1%

**Coconut Oil**
- 1.6%

**Other Items**
- 3.3%

**Precious Stones**
- 0.46%

**Gold**
- 0.39%

**Fish Fillets**
- 0.82%

**Other Food**
- 0.76%

**Raw Materials**
- 0.68%
What does Sri Lanka export to the United Kingdom? (2000-2014)

TOTAL: $14.6B

- Non-Knit Women's Suits
- Non-Knit Men's Suits
- Knit Sweaters
- Women's Garments
- Other Women's Undergarments

Year: 2000 to 2014

Build Visualization
## SUMMARY

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade data</td>
<td>WTO (aggregated); UN Comtrade, BACI, (disaggregated); TPP, CEPII (production data); World Bank Databases on trade in services</td>
</tr>
<tr>
<td>Trade Policy Data</td>
<td></td>
</tr>
<tr>
<td>Tariffs</td>
<td>WTO Tariff Analysis Online (TAO), MAcMap, WITS</td>
</tr>
<tr>
<td>NTMS</td>
<td>SPS, TBT, <a href="http://i-tip.unctad.org/">http://i-tip.unctad.org/</a></td>
</tr>
<tr>
<td>Trade barriers</td>
<td>GTA; Temporary Trade Barriers database</td>
</tr>
<tr>
<td>Integrated platforms (including ready-to-use indicators)</td>
<td>ITC, WITS</td>
</tr>
<tr>
<td>Microdata</td>
<td>World bank catalogue</td>
</tr>
<tr>
<td>Data visualization</td>
<td>MIT</td>
</tr>
</tbody>
</table>
THANK YOU

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