A Practical Guide to Trade Policy Analysis

A joint UNCTAD – WTO publication

http://vi.unctad.org/tpa
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Diversity of approaches

- Chapters 1 and 2 present methodologies for the descriptive analysis of a country’s trade performance and its trade policy.
- Chapter 3 presents the work horse approach for ex post analysis of trade and trade policies.
- Chapters 4 to 6 discuss three different ex-ante approaches that can be used to assess various effects of trade policies.
If you want to assess a country’s trade performance

Chapter 1 *(Analyzing trade flows)* will:

- Help with key measurement issues (reliability, missing values, etc.)
- List the main indices used to assess the structural, sectoral and geographical composition of trade flows
- Suggest how to display trade data graphically in a clear and appealing way
If you want an analytical description of a country’s trade policy

Chapter 2 (*Quantifying trade policy*) will:

- Show how to present a tariff profile
- Explain how to calculate import coverage ratios and ad valorem tariff equivalents of NTMs
- Suggest how to assess the overall trade restrictiveness of a trade policy stance
If you are interested in the effect of NTMs on trade (ex post)

Chapter 3 (*Analyzing bilateral trade using the gravity equation*) will:

- Explain the logic of the gravity equation
- Instruct on how to build a gravity database
- Present various estimation methods of the gravity equation
- Explain how to handle zero-trade flows
If you wish to assess (ex ante) the effect of a sectoral tariff reform

Chapter 4 (*Partial-equilibrium trade-policy simulation*) will:

- Explain how and when to use four ready-made PE models:
  - SMART (single market analysis tool)
  - Global Simulation Analysis of Industry-Level Trade Policy (GSIM)
  - Tariff Reform Impact Simulation Tool (TRIST)
  - Agricultural Trade Policy Simulation Model (ATPS)
If you want to estimate (ex ante) the potential effects of the Doha round

Chapter 5 (*General equilibrium*) will:

- Explain how GE models work and why you may wish to use one to simulate the effect of Doha proposals...
- ...But not provide the tools and the techniques to actually run an economically meaningful GE model
If you want to estimate (ex ante) the distributional effects of a trade reform

Chapter 6 (*Analyzing the distributional effects of trade policies*) will:

- Explain how to think about the transmission of trade shocks to individual households in simple terms
- List the data you will need
- Introduce the statistical techniques used to deal with household survey data
Into the Practical Guide
Where is the data?

Detailed instructions on what kind of data each database has and how to access it:

- WTO IDB CTS
- UNCTAD TRAINS
- World Bank WITS
- ITC MACMAP
- World Bank Trade, Production and Protection
- Many other databases
Tariffs

- Applied, MFN, bound
- Specific duties, ad-valorem

Show how to compute tariff profiles

- Simple / weighed
- Peaks / dispersion
- Effective protection
Illustration of basic concepts

Figure 2.1  Bias of trade-weighted average tariffs

- Simple average tariff
- Weighted average tariff
Simple, graphical intuitions

Figure 4.2  Tariff reduction in the large country case

(c) Domestic market

(d) Import market
Trade-related indices

- Trade over GDP
- Import content of exports and external orientation
- Trade in intermediate goods
- Offshoring
- Vertical specialization
- Intra-industry trade
- Export diversification
- Regional Trade
Step by step approach

- Intuition / what the index is useful for

- How to / Formulas

\[ GL_k^{ij} = \frac{|X_k^{ij} - M_k^{ij}|}{X_k^{ij} + M_k^{ij}} \]

\[ SI^{ij} = \left[ \frac{GDP^i}{GDP^i + GDP^j} \right]^2 - \left[ \frac{GDP^j}{GDP^i + GDP^j} \right]^2 \]
Step by step approach (ct’d)

- Plots / interpretation

- STATA commands

```
use "overlap.dta", replace
twoway (scatter overlap simil_index, mlabel(partner))
* (lfit overlap simil_index),
*/ title("Overlap trade and country-similarity index vis a vis Germany, 2004")
*/ legend(lab(1 "Share of overlap trade")) xtitle(""Similarity index")
```
Advanced topics: gravity

- How to set up a gravity database and estimate the model
- Step by Step approach with examples:
  - Where to get the data
  - Basic theoretical foundations
  - Setting up the model
  - Running the model in STATA
  - Understanding the results
  - Translating the results into policy
Advanced topics: distribution

Figure 6.1  Trade policies and households' welfare
How to illustrate the results

Figure 6.6  Tariff on consumption
Figure 1.6  EU Regional intensity of trade indices with the CEECs
A user-friendly website and DVD

- STATA do files for all applications, exercises and Figures / Tables of Chapters 1, 2, 3 and 6 are provided
  - Solutions to applications and exercises of Chapter 4 are also provided
- Datasets are also provided
- All the material is easy to download (with a little help from the friendly user guide)