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 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're 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
  - 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?
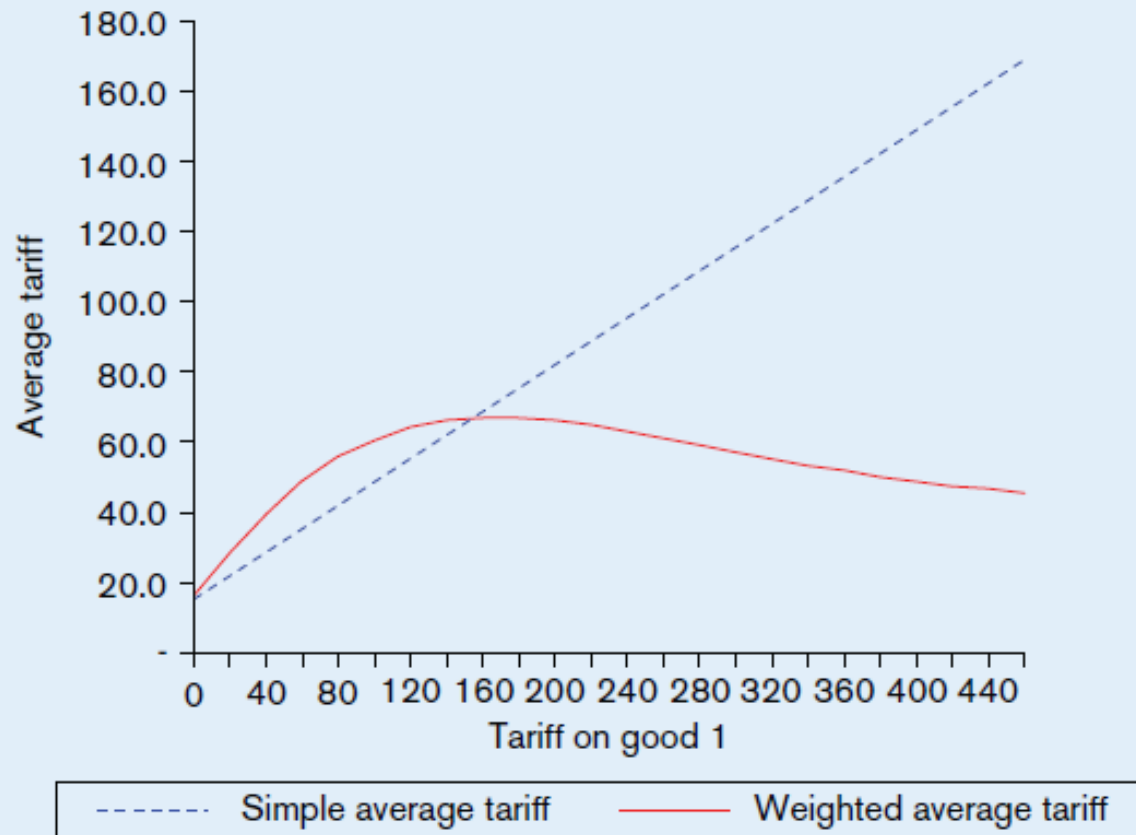
Detailed instructions on what kind of data each databases has and how to access it:

- WTO IDB CTS
- UNCTAD TRAINS
- World Bank WITS
- ITC MACMAP
- Many other databases

Concepts / Constructions / Examples

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

- Show how to compute tariff profiles
  - Simple / weighed
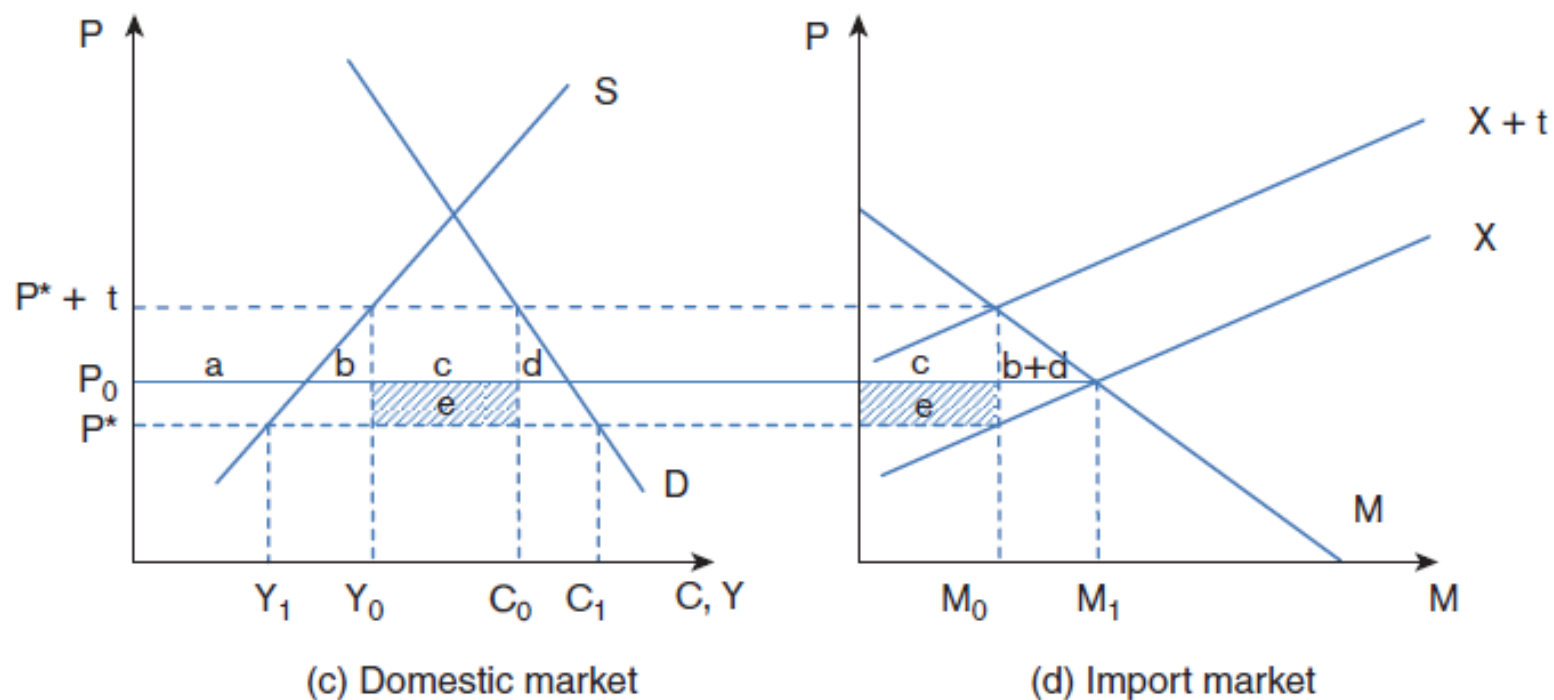 - Peaks / dispersion
  - Effective protection

Illustration of basic concepts

Figure 2.1   Bias of trade-weighted average tariffs

Simple, 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

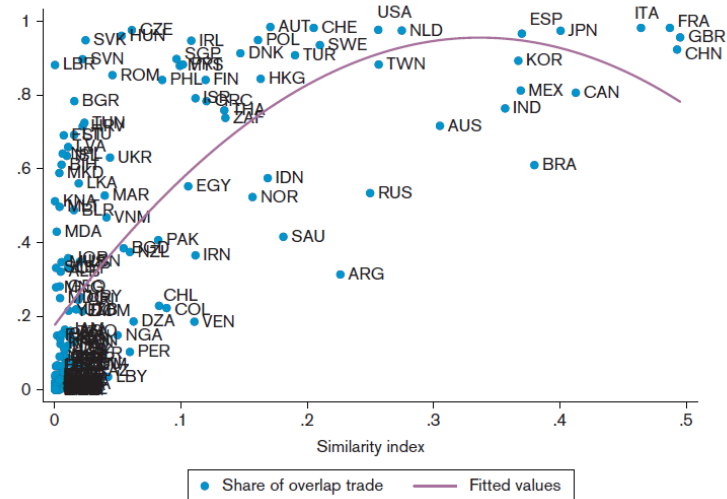- Intuition / what the index is useful for

- How to / Formulas

$$GL_k^{ij} = 1 - \frac{\left| X_k^{ij} - M_k^{ij} \right|}{X_k^{ij} + M_k^{ij}} \qquad SI^{ij} = 1 - \left[\frac{GDP^i}{GDP^i + GDP^j} \right]^2 - \left[\frac{GDP^j}{GDP^i + GDP^j} \right]^2$$

- 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")
```


Figure 1.2   Overlap trade and country-similarity index *vis-à-vis* Germany, 2004
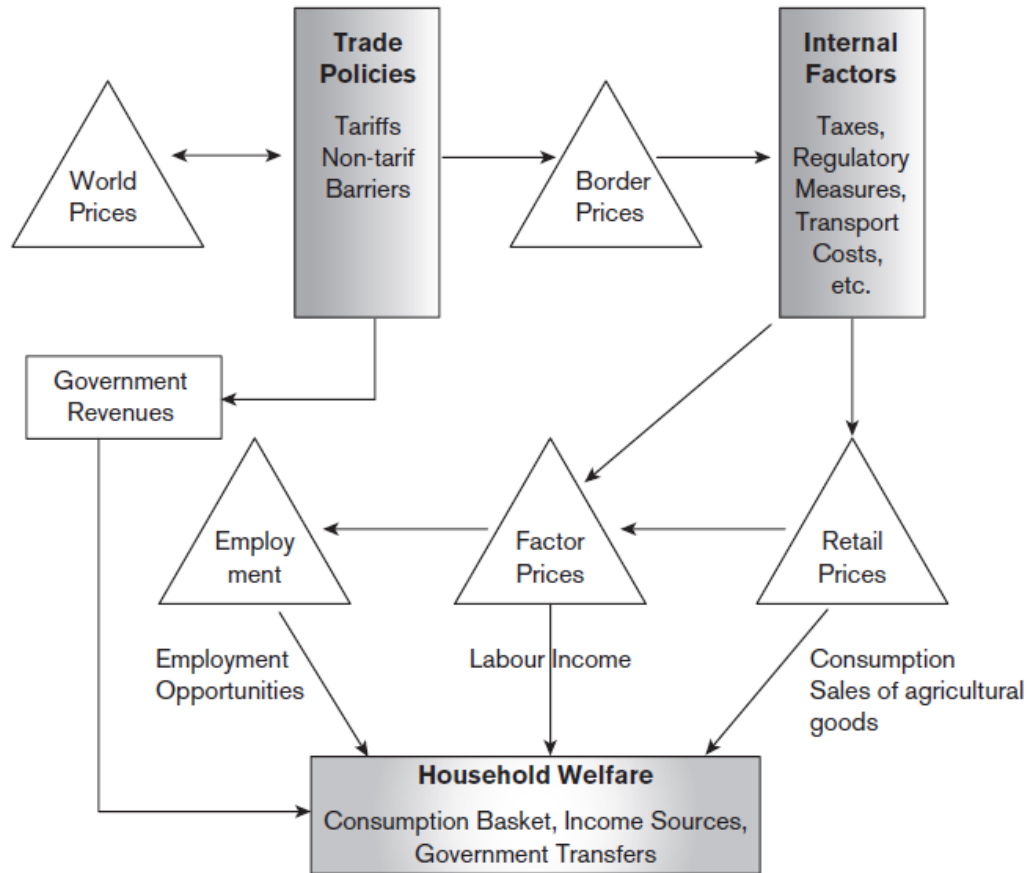
Advanced topics: Gravity

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

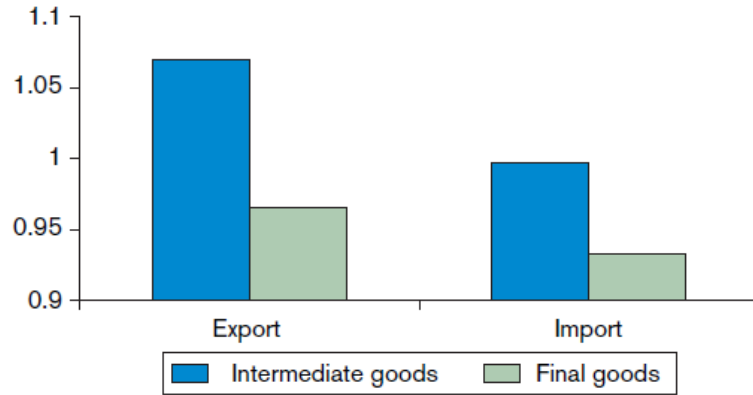# How to illustrate the results

Figure 1.6   EU Regional intensity of trade indices with the CEECs
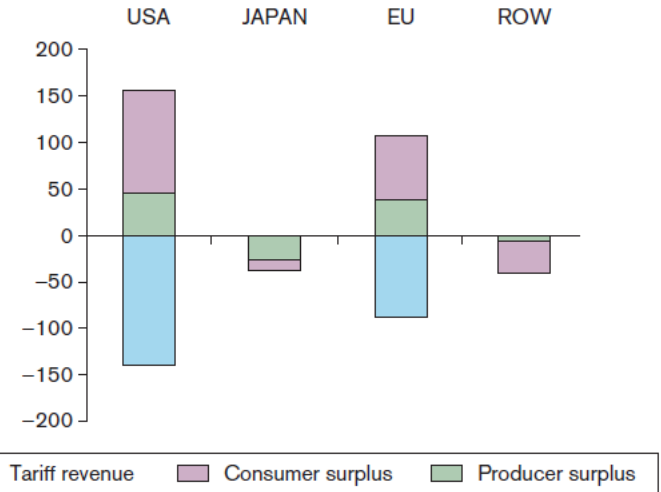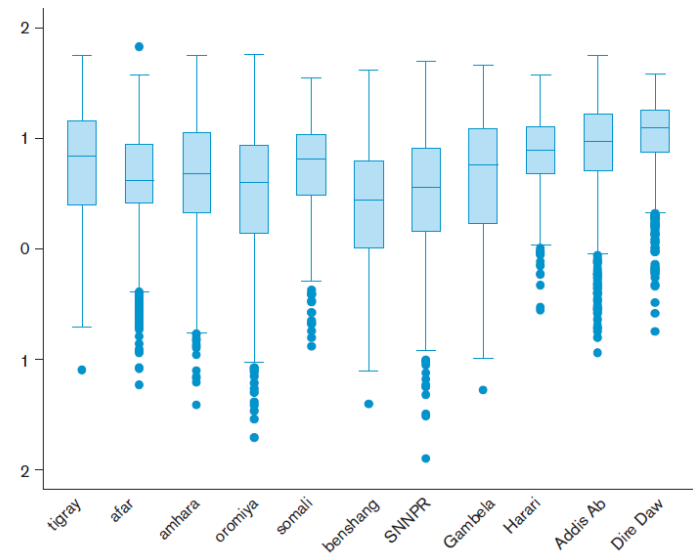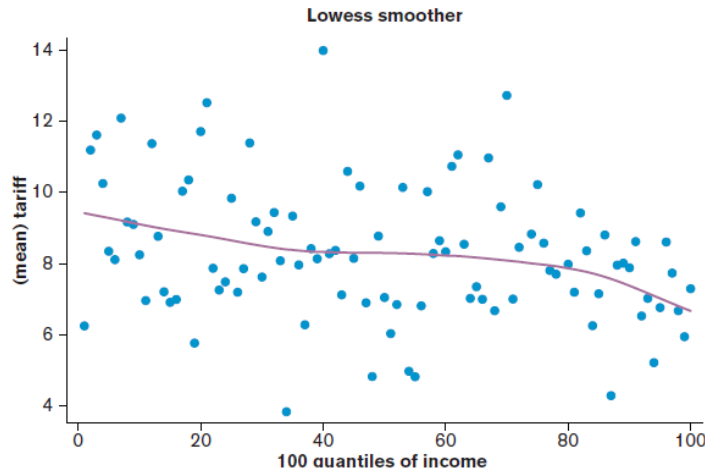
Figure 4.5   Total welfare effects in GSIM

Figure 6.6   Tariff on consumption

A user-friendly website

http://vi.unctad.org/tpa