PRONTO

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Internal workshop on data collection

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EC Distribution	Public

PRONTO Workshop

Non-tariff measures: Data, methods, and future challenges

Co-organized by the International Trade Centre and ECORYS

Wednesday, September 24, 2014
Venue: World Trade Organization, Rue de Lausanne 154, Room S3, 1202 Geneva

Over the past fifty years, there has been significant progress in lowering tariff barriers to international trade. This has led to a growing awareness of the importance of what are termed the "new" Non-Tariff Measures (NTMs). The relevance of these new NTMs has grown with the rising importance of global sourcing and multinational enterprises. Today, with the dominance of global value chains and the increased tradability of non-tangible products, we are confronted with new and important question about the impact of NTMs on competitiveness and productivity.

The EC funded research project "Productivity, Non-Tariff Measures and Openness" (PRONTO) strives to develop new indicators, better methods, and a better understanding of these NTMs on international trade and investment.

This workshop is jointly organized by the International Trade Centre and Ecorys, and hosted by the WTO. Its purpose is threefold: First, to get a deep understanding of NTM data provided by international agencies (ITC, OECD, UNCTAD, WTO, and World Bank). Particularly, this concerns data collection methods, and geographical and indicator coverage. Second, a session will be dedicated to a summary of available methods measuring the presence and trade effects of NTMs. Attention will also be paid to how agencies' primary data collection has contributed to better analyses. And third, the workshop will close by looking at the trade-off of negative trade and positive environmental and social effects of certain NTMs, and how regulatory convergence can solve this puzzle. A policy panel will add further perspectives on this.

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no. 61350

Agenda

9.30 to 9.45 **Opening words**

- *Marion Jansen (ITC)*

9.45 to 11.00 **Session 1: Primary data collection**, chaired by Marion Jansen (ITC)

NTM-related data are the foundation for any methodological approach to measure the presence and impact of NTMs. International institutions (ITC, OECD, UNCTAD, WTO, and World Bank) have ample experience in gathering these type of data, making use of multiple collection methods. This session will not only give an overview of experiences with these collection methods, but also elaborate on the status quo of collection efforts, i.e. what has been achieved in the past and what activities are ongoing. A joint presentation by the different international institutions involved in data collection will form the core of this session.

- NTM Data Collection: status quo and ongoing collection efforts
  - *Joint Presentation by agencies (Lead speaker Ralf Peters, UNCTAD)*

11.00 to 11.15 Coffee break

- Discussion with:
  - *Alessandra Tucci (DG Trade)*
  - Olivier Cadot (HEC Lausanne)

12.00 to 13.00 Tour Centre William Rappard

13.00 to 14.00 Lunch
New Gallery

14.00 to 15.30 **Session 2: NTMs and trade effects**, chaired by Ron Davies (UCD)

Due to firm heterogeneity, the impact of NTMs will differ among exporters. Not all firms will be affected evenly. Their adjustment to the presence of the NTM will differ accordingly, impacting the extensive and intensive margins of exports. NTM presence is also shaping competition in the protected markets, with expected impacts on the pricing strategies of exporters. Finally, the product mix, or the destination served by exporters offer additional margins of adjustment. Properly addressing these issues is very data demanding, constraints heavily the country coverage of the studies and raises difficult econometric issues (e.g. endogeneity). Notwithstanding these challenges, firm level evidence on the impact of NTMs is usefully complementing more aggregated approaches and related data collection should be prioritized. Both, aggregated and firm-level approaches will be discussed in this session.

- NTMs and firm-level evidence
  - *Presentation by Lionel Fontagné (PSE/CEPII)*
- Gravity, NTMs, and CGE

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- *Presentation by Joseph Francois (UBERN/WTI)*

- Discussant:
  - *Alessandro Nicita (UNCTAD)*

15.30 to 15.45 Break

15.45 to 16.45: Session 3: Sustainability perspectives on NTMs,
chaired by Koen Berden (ECORYS)

While ongoing research by and large focusses on expressing NTMs as trade cost equivalents, only limited attention has been given to the interaction of possible trade restricting effects and the positive effects intended by establishing these measures in the first place (e.g. health and safety standards, environmental regulation, etc.). However, within the scope of future trade agreements these aspects will become more and more relevant. PRONTO sets out to start filling this analytical gap.

- Evaluating the interaction of environmental, social, and trade effects of NTBs
  - *Presentation by Chad Bown (World Bank)*
- Discussant:
  - *Marc Bacchetta (WTO)*

16.45 to 17.00 Coffee break

17.00 to 18.00: Session 4: NTM policy panel,
chaired by Bernard Hoekman (EUI)

- Panel discussion with
  - *Lucian Cernat (DG Trade)*
  - *Robert Koopman (USITC)*
  - *Ken Kawasaki (GRIPS)*
  - *Christopher Alexander (UKBIS ITEC)*

18.00 to 18.15 Break

18.15 to 18.30: Closing

- Closing words - Outlining the road ahead
  - *Koen Berden (ECORYS)*

19.00 to 21.00 Dinner
La Perle Du Lac

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PRONTO Consortium Meeting

Thursday, September 25, 2014, 9.00 to 12.00
Venue: International Trade Center, 54-54 Rue de Montbrillant, Geneva

Agenda

9.00 to 10.00 **Session 1: Overall consortium matters**

1. Consortium agreement – outstanding issues
2. Collaboration and dissemination
    a. Document/deliverable templates
    b. Website
        i. Content profile
        ii. Admin/access rights
    c. Collaboration/admin platform (e.g. Dropbox)
3. News and issues from the WPs – stock-taking
4. Roundtable

10.00 to 10.15 **Break**

10.15 to 12.00 **Session 2: WP 1 matters**

1. Work-plan and task-split
2. Discussion of deliverables
    a. D1.1: Workshop
    b. D1.2: Methodological inventory
        i. Discussion draft methodological inventory – categorization
        ii. Review mechanism
        iii. Updating and integration into PRONTO – living document
    c. D1.3: GAP analysis
    d. D1.4: Data compilation and integration
        i. Sequence of tasks
        ii. Database allocation
        iii. Collaboration with agencies
3. Embedding WP1 into PRONTO
4. Roundtable

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PRONTO Workshop
Non-tariff measures: Data, methods, and future challenges

Session 1: Primary data collection

Joint Presentation by Agencies
Ralf Peters, UNCTAD
Chad Bown, World Bank
Mondher Mimouni, ITC
Jürgen Richtering, WTO

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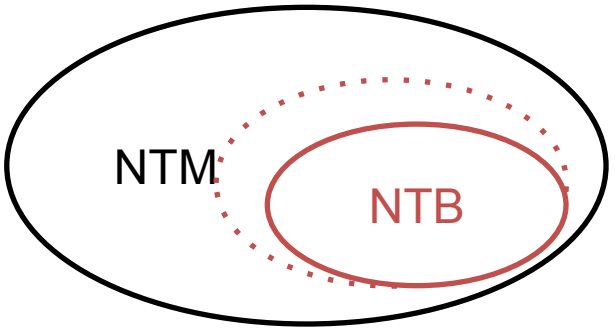
Outline

1. Overview: NTM Data
2. Presentation by agencies of different data sets
   - NTM-goods data
     - NTM classification
     - Inventory data based on national legislation
     - Notifications and other WTO data
     - Antidumping database
     - Data from private sector perspective
   - Services data
3. Summary: Way forward and Role of Pronto

NTM Definition(s)



Non-tariff measures are

- policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both. (GNTB MAST, UNCTAD 2009)

clear

NTBs are

- NTMs that have a 'protectionist or discriminatory intent'. (Suggested by GNTB MAST, UNCTAD 2009)
- the "evil" form of NTMs, wherein trade restrictiveness, whether or not deliberate, exceeds what is needed for the measure's non-trade objectives. (World Bank, 2012)

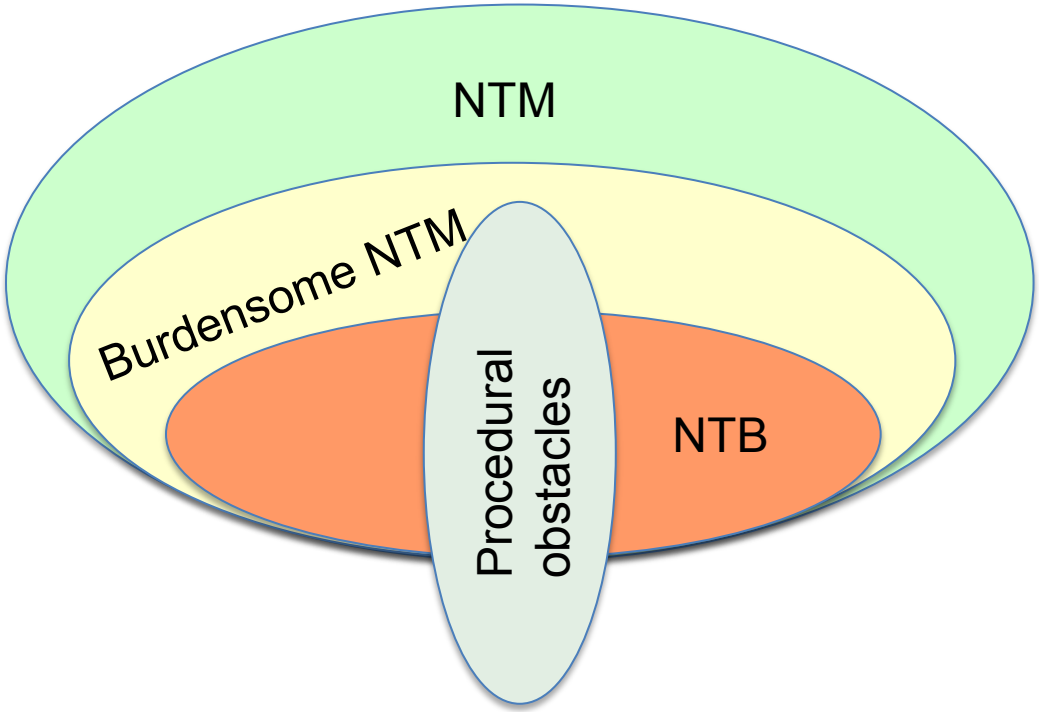
Not so clear

Procedural Obstacles are

- practical challenges and processes that makes compliance with the measures difficult. (ITC 2014)
- issues related to the process of application of an NTM, rather than the measure itself. (GNTB MAST, UNCTAD 2009)

clear

NTM Data Basics: The Universe



NTM Data Basics: What data

	Goods	Services
National legislation	• Inventory data • Notifications • (STC)	• Inventory data • Notifications • (STC)
Private sector perspective	• Business survey • Complaints portal	• Business survey • Complaints portal

Collaboration initiatives

- **Multi-Agency Support Team** (MAST): FAO, IMF, ITC, OECD, UNIDO, UNCTAD, World Bank and WTO (Observer EC, USDA, USITC)
- **Transparency in Trade Initiative** (TNT): AfDB, ITC, UNCTAD, WB; WTO linked
  - UNCTAD leads on official NTM data for goods. ITC contributes. In Africa AfDB and UNCTAD.
  - WB leads on services and on antidumping data
  - ITC leads on tariff data
- **I-TIP services** collaboration between WB and WTO
- **I-TIP goods** collaboration between WTO and UNCTAD

International NTM classification: The common language

- The Multi Agency Support Team (MAST) initiated by Group of Eminent Persons on NTB updated old UNCTAD NTM classification
- WTO (all rel. Divisions) and UNCTAD revised MAST proposal

➡ International NTM Classification, Version 2012

- Discussing a single referral document

Imports	Technical measures	A SANITARY AND PHYTOSANITARY MEASURES
		B TECHNICAL BARRIERS TO TRADE
		C PRE-SHIPMENT INSPECTION AND OTHER FORMALITIES
	Non technical measures	D CONTINGENT TRADE-PROTECTIVE MEASURES
		E NON-AUTOMATIC LICENSING, QUOTAS, PROHIBITIONS AND QUANTITY-CONTROL MEASURES OTHER THAN FOR SPS OR TBT REASONS
		F PRICE-CONTROL MEASURES, INCLUDING ADDITIONAL TAXES AND CHARGES
		G FINANCE MEASURES
		H MEASURES AFFECTING COMPETITION
		I TRADE-RELATED INVESTMENT MEASURES
		J DISTRIBUTION RESTRICTIONS
		K RESTRICTIONS ON POST-SALES SERVICES
		L SUBSIDIES (EXCLUDING EXPORT SUBSIDIES UNDER P7)
		M GOVERNMENT PROCUREMENT RESTRICTIONS
		N INTELLECTUAL PROPERTY
		O RULES OF ORIGIN
	Exports	P EXPORT-RELATED MEASURES

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International NTM Classification

Tree structure – Example

A SANITARY AND PHYTOSANITARY MEASURES
- A1 Prohibitions/restrictions of imports for SPS reasons
- A2 Tolerance limits for residues and restricted use of substances
- (…)
- A8 Conformity Assessment related to SPS
  - A81 Product registration requirement
  - A82 Testing requirement
  - A83 Certification requirement
  - A84 Inspection requirement
  - A85 Traceability requirement
    - A851 Origin of materials and parts
    - A852 Processing history
    - A853 Distribution and location of products after delivery
    - A859 Traceability requirements n.e.s.
  - A86 Quarantine requirement
  - A89 Conformity assessments related to SPS n.e.s
- A9 SPS Measures n.e.s.

B TECHNICAL BARRIERS TO TRADE
C PRE-SHIPMENT INSPECTION AND OTHER FORMALITIES
D CONTINGENT TRADE PROTECTIVE MEASURES
E NON-AUTOMATIC LICENSING, QUOTAS, PROHIBITIONS …
F PRICECONTROL MEASURES INCLUDING ADDIT. TAXES …
G FINANCE MEASURES
H MEASURES AFFECTING COMPETITION
I TRADE-RELATED INVESTMENT MEASURES

At this level of coding: 122 measures in the classification

Progress on NTM Goods Data Collection

- Eminent Persons, MAST Group, WTO - UNCTAD
- Classification, widely accepted, committee
- ITC – UNCTAD pilot project
- Guidelines: Standardized approach
- Better coordination when working in partnerships
- Better data quality checking process
- Training on NTM data collection: Online course
- WTO notifications in i-TIP
- Business survey data using same classification

MAST Classification of Procedural Obstacles

A. ARBITRARINESS OR INCONSISTENCY
1. Behaviour of public officials.
2. Product classification and/or valuation.
3. Application of procedures, regulations, or requirements (including
inconsistencies between local and national procedures or regulations).

B. DISCRIMINATORY BEHAVIOUR FAVOURING SPECIFIC PRODUCERS OR SUPPLIERS
1. Local suppliers or producers in the destination market.
2. Suppliers from other countries.
3. Large (or small) companies.

C. INEFFICIENCY OR OBSTRUCTION
1. Excessive documentation requirements.
2. Strict/detailed/redundant testing, certification or labelling.
3. Administrative delay (e.g., in authorization, approval).
4. Complex clearance mechanisms (e.g., several entities have to approve).
5. Short submission deadlines for required information or forms.
6. Outdated procedures, (e.g., lack of automation).
7. Lack of resources, (e.g., understaffing, scarce equipment in destination
markets).

D. NON-TRANSPARENCY
1. Inadequate information on laws/regulations/registration.
2. Unannounced change of procedures, regulations or requirements.
3. Lack of inquiry points.
4. Non-transparent government bid or reimbursement processes.
5. Non-transparent dispute resolution.
6. Informal payment expected or required.

E. LEGAL ISSUES
1. Lack of enforcement, e.g., patents, copyrights, trade marks, confi dentiality.
2. Inadequate due process/appeals process/dispute resolution.
3. Inadequate legal infrastructure.

F. UNUSUALLY HIGH FEES OR CHARGES
(e.g. for stamps, testing or other services rendered)

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Services Classification

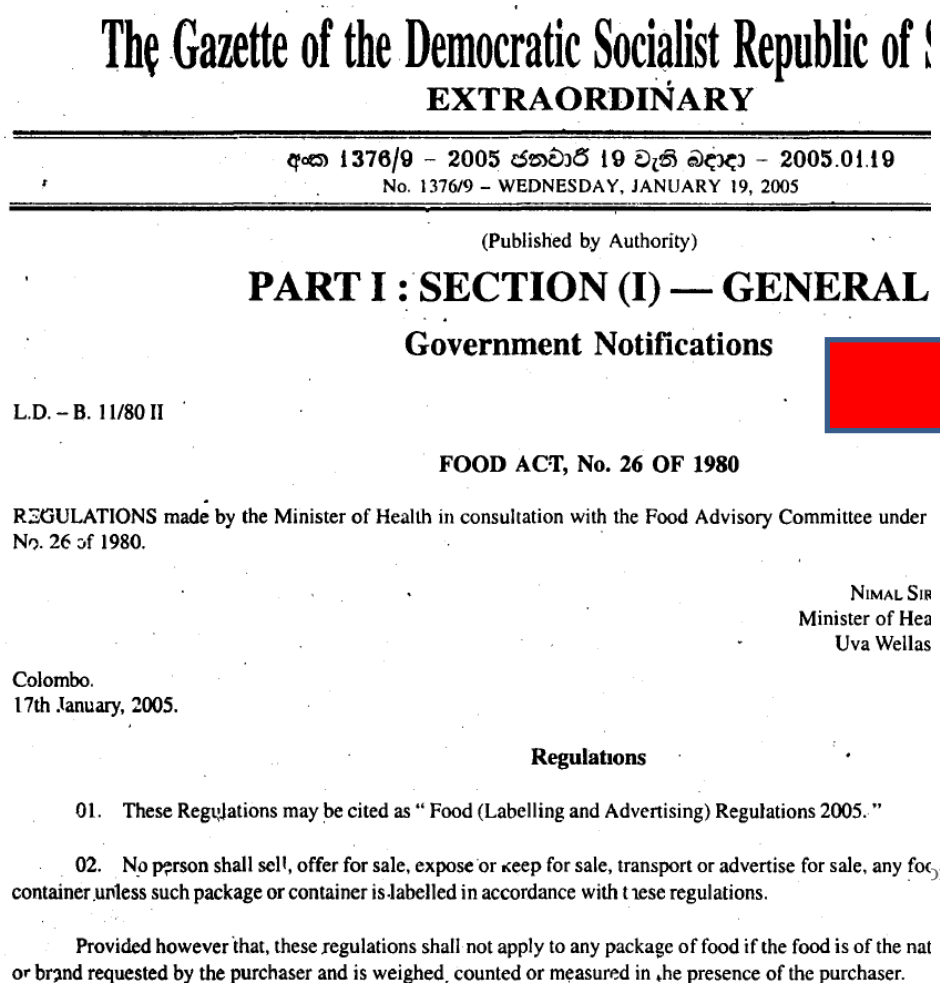
- Is there scope for common services classification?

NTM Data

	Goods	Services
National legislation	• Inventory data • Notifications • (STC)	• Inventory data • Notifications • (STC)
Private sector perspective	• Business survey • Complaints portal	• Business survey • Complaints portal

Official NTM data collection

- From here… …to here



The Gazette of the Democratic Socialist Republic of S

EXTRAORDINARY

අංක 1376/9 – 2005 ජනවාරි 19 වැනි බදාදා – 2005.01.19

No. 1376/9 – WEDNESDAY, JANUARY 19, 2005

(Published by Authority)

PART I : SECTION (I) — GENERAL

Government Notifications

L.D. – B. 11/80 II

FOOD ACT, No. 26 OF 1980

REGULATIONS made by the Minister of Health in consultation with the Food Advisory Committee under No. 26 of 1980.

NIMAL SIR
Minister of Hea
Uva Wellas

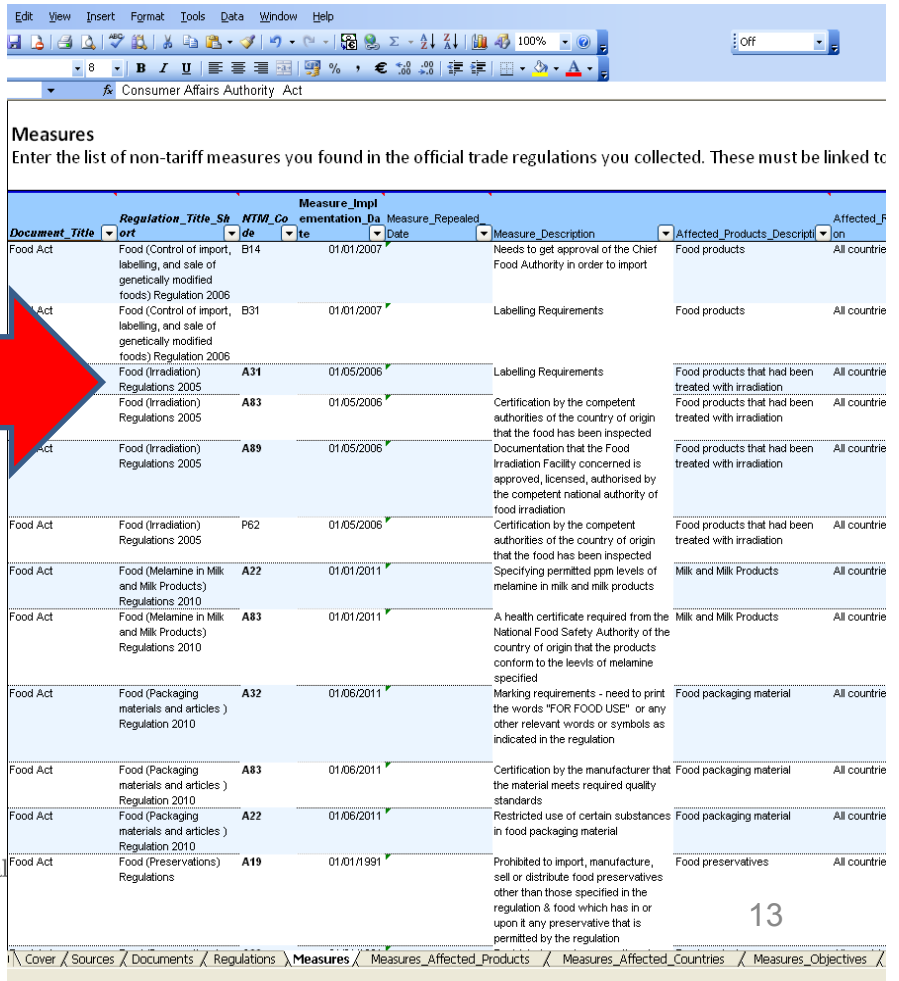
Colombo.
17th January, 2005.

Regulations

01. These Regulations may be cited as " Food (Labelling and Advertising) Regulations 2005. "

02. No person shall sell, offer for sale, expose or keep for sale, transport or advertise for sale, any fo container unless such package or container is labelled in accordance with these regulations.

Provided however that, these regulations shall not apply to any package of food if the food is of the nat or brand requested by the purchaser and is weighed, counted or measured in the presence of the purchaser.



Edit View Insert Format Tools Data Window Help

Consumer Affairs Authority Act

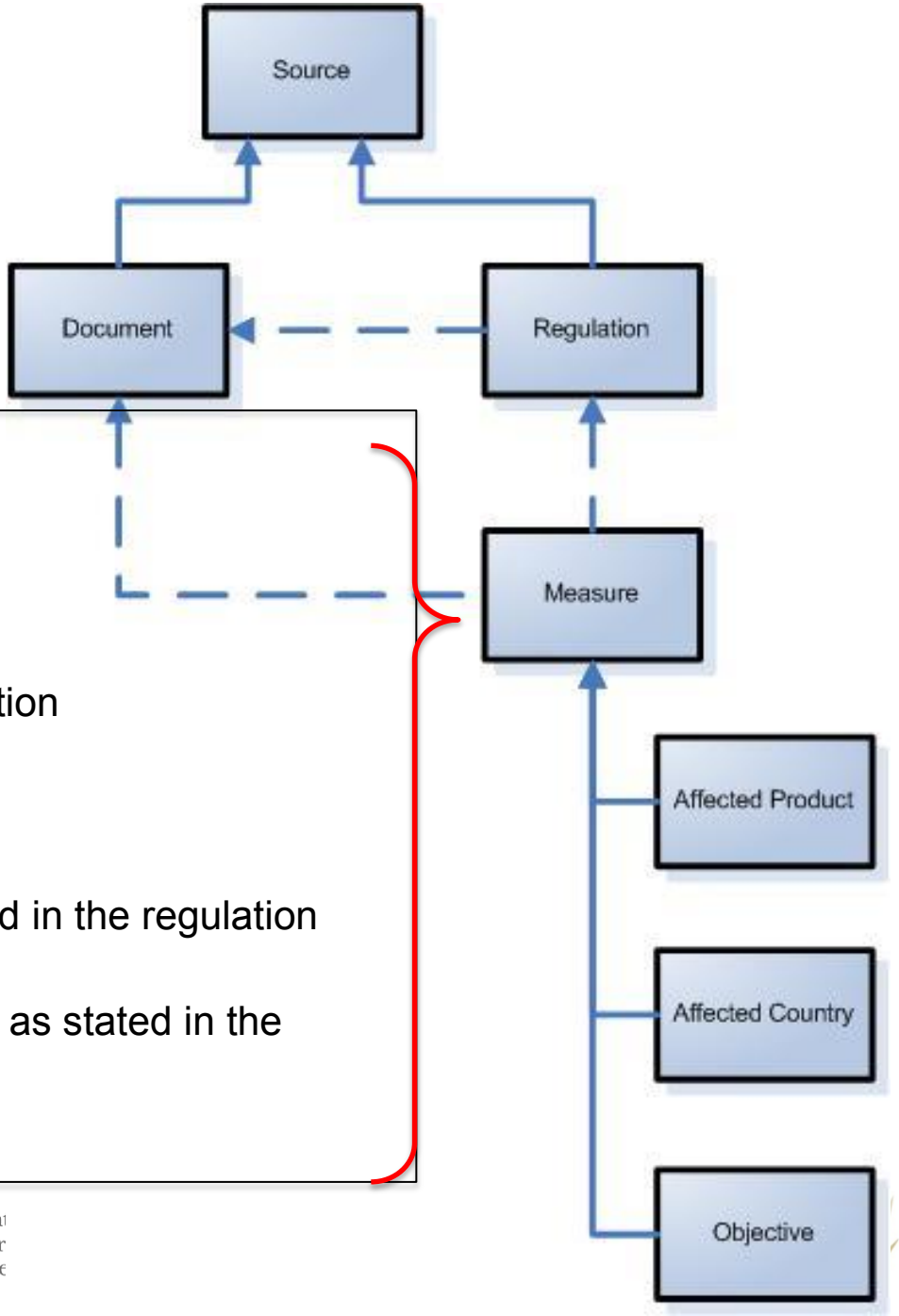
Measures

Enter the list of non-tariff measures you found in the official trade regulations you collected. These must be linked to

Document_Title	Regulation_Title_Short	NTM_Code	Measure_Implementation_Date	Measure_Repealed_Date	Measure_Description	Affected_Products_Descripti	Affected_R on
Food Act	Food (Control of import, labelling, and sale of genetically modified foods) Regulation 2006	B14	01/01/2007		Needs to get approval of the Chief Food Authority in order to import	Food products	All countrie
Act	Food (Control of import, labelling, and sale of genetically modified foods) Regulation 2006	B31	01/01/2007		Labelling Requirements	Food products	All countrie
	Food (Irradiation) Regulations 2005	A31	01/05/2006		Labelling Requirements	Food products that had been treated with irradiation	All countrie
	Food (Irradiation) Regulations 2005	A83	01/05/2006		Certification by the competent authorities of the country of origin that the food has been inspected	Food products that had been treated with irradiation	All countrie
Act	Food (Irradiation) Regulations 2005	A89	01/05/2006		Documentation that the Food Irradiation Facility concerned is approved, licensed, authorised by the competent national authority of food irradiation	Food products that had been treated with irradiation	All countrie
Food Act	Food (Irradiation) Regulations 2005	P62	01/05/2006		Certification by the competent authorities of the country of origin that the food has been inspected	Food products that had been treated with irradiation	All countrie
Food Act	Food (Melamine in Milk and Milk Products) Regulations 2010	A22	01/01/2011		Specifying permitted ppm levels of melamine in milk and milk products	Milk and Milk Products	All countrie
Food Act	Food (Melamine in Milk and Milk Products) Regulations 2010	A83	01/01/2011		A health certificate required from the National Food Safety Authority of the country of origin that the products conform to the leevls of melamine specified	Milk and Milk Products	All countrie
Food Act	Food (Packaging materials and articles) Regulation 2010	A32	01/06/2011		Marking requirements - need to print the words "FOR FOOD USE" or any other relevant words or symbols as indicated in the regulation	Food packaging material	All countrie
Food Act	Food (Packaging materials and articles) Regulation 2010	A83	01/06/2011		Certification by the manufacturer that the material meets required quality standards	Food packaging material	All countrie
Food Act	Food (Packaging materials and articles) Regulation 2010	A22	01/06/2011		Restricted use of certain substances in food packaging material	Food packaging material	All countrie
Food Act	Food (Preservations) Regulations	A19	01/01/1991		Prohibited to import, manufacture, sell or distribute food preservatives other than those specified in the regulation & food which has in or upon it any preservative that is permitted by the regulation	Food preservatives	All countrie

Cover / Sources / Documents / Regulations / Measures / Measures_Affected_Products / Measures_Affected_Countries / Measures_Objectives

UNCTAD NTM Data Model



- **NTM Code** (NTM classification)
- **Measure Implementation Date**
- Measure Repeal Date
- **Measure Description**
  Description of the measure in the regulation
- **Measure Reference**
  Specific place within the regulation
- **Affected Products Description**
  Description of affected products as stated in the regulation
- **Affected Regions Description**
  Description of affected countries/regions as stated in the regulation
- Notes, Optional additional notes.

Data Availability

Caution:
Partly different classification versions

Latin America and the Caribbean	North America	Europe and Central Asia	Middle East and North Africa	Sub-Saharan Africa	South Asia	East-Asia and the Pacific
Argentina	US	E.U.	Egypt	Burkina Faso	Afghanistan	China
Bolivia	Canada	Kazakhstan	Lebanon	Cote d'Ivoire	India	Japan
Brazil		Russia	Morocco	Guinea	Nepal	Lao PDR
Chile			Tunisia	Madagascar	Pakistan	Hong Kong, C
Colombia			Algeria	Mauritius	Sri Lanka	Australia
Costa Rica			Jordan	Namibia		New Zealand
Cuba			Palestine	Senegal		
Ecuador				Tanzania		
Guatemala				Kenya		
Mexico				Malawi		
Paraguay				Rwanda		
Peru				Nigeria		
Uruguay				Benin		
Venezuela				Cape Verde	Liberia	
El Salvador				Gambia	Mali	
Honduras				Ghana		
Nicaragua				Guinea Bissau		

Data Collection and Dissemination

Data collection is a collaborative effort

- UNCTAD, ITC, World Bank, AfDB (TNT partners)
- With other partners involved (Regional Secretariats, WTO, …)

Data dissemination

Organization	Website	What	Registration
UNCTAD	wits.worldbank.org (TRAINS data)	Official NTM data (and other data)	Yes, no fee
ITC	www.macmap.org	Official NTM data (and other data)	Yes, no fee
WTO	i-tip.wto.org	Notifications	No, no fee

The same NTM data

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WTO

Notifications of trade policy measures

- Government submit official legislation, regulations, other measures
- Mainly measures applied to imports
- Fairly comprehensive coverage of most types of NTMs
- Full public dissemination via WTO documents
- Move towards online notification systems and database storage
- Analytical online dissemination increasingly through **I-TIP**

Reporting gaps, late reporting, inconsistent reporting &
Missing information: HS codes, in-force dates (SPS TBT only)

For a **mapping of WTO notification requirements on MAST NTM classification** see: Baccetta, Richtering, Santana (2012), "How Much Light Do WT notifications Shed on NTMs?"; in Cadot, Malouche (eds), "NTMs – A Fresh Look at Trade Policy's New Frontier", WB and CEPR

WTO

Peer review of trade policy measures
Monitoring government "complaints" and questions

- Committee based opportunity for peer review
- Covers notifications, TPRs and also not notified measures
- Can cover also implementation / procedural issues
- Q&A processes, sometimes more formalized: STCs in SPS/TBT
- Full public dissemination via committee meeting reports and/or dedicated documents
- Some specialized online disseminations systems (STCs, AG Q&As)
- Analytical online dissemination through **I-TIP** for now only STCs (SPS/TBT)

The need to report and disseminate Q&As in a more structured and easily accessible way is currently under discussion.

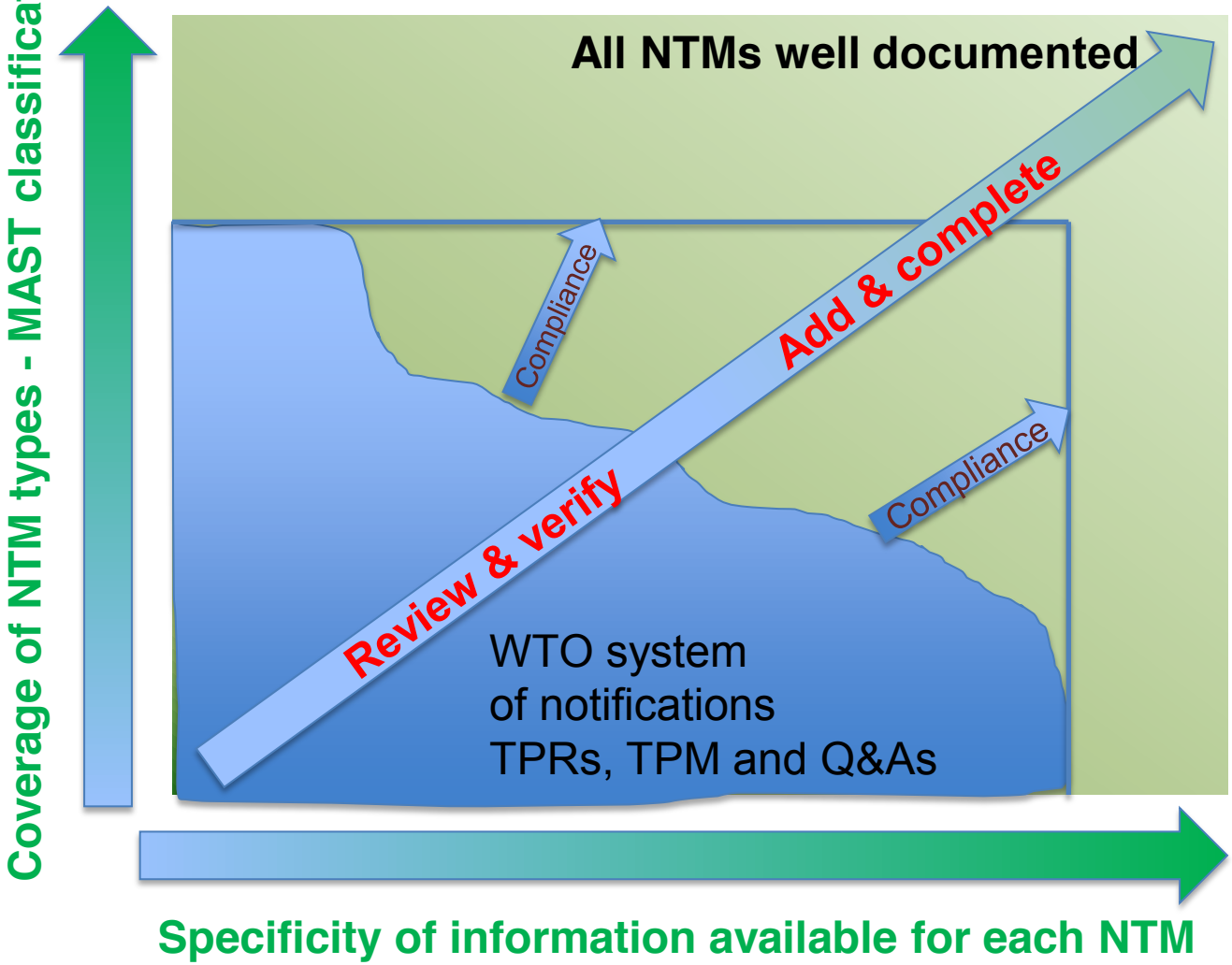
WTO

Secretariat review of trade policy measures

- Trade policy reviews complemented by Government reports
  - Covers entire trade policy of a given country (Goods, Services, IP, …)
- Trade policy monitoring
  - Covers also export measures for which no notification requirements exist
  - Measures (Notified, officially validated, not validated)

TPR information needs to be compiled in a more structured and easily accessible way linked as much as possible to specific trade policy measures (currently under discussion).

How **WTO** fits into global **NTM** reporting



WTO NTM information gathering is part of its:

- **mandate**
- **budget**
- therefore **sustainable**

World Bank

Temporary Trade Barriers Database (TTBD)

– Expanded from *Global Antidumping Database* (available since 2005)

1. **Antidumping** (31 countries), **CVDs** (17 countries)
   - Data compiled from national government announcements (Federal Register, Official Journal) and administrative authority websites
   - Historical data, with various start dates (some as early as 1980s), comprehensive within a country once data availability starts
   - AD/CVD "removal" data (dates/years) supplemented with what is reported to relevant WTO committees
2. **Safeguards** (WTO Agreement on Safeguards, all WTO members), some **China-specific safeguards** (reporting requirements different for China-safeguards)
   - Data taken from what is reported to WTO Committee on Safeguards

For all 4 policies…

- Dates of initiation, investigations, decisions, outcomes, including types of measures imposed
- Tariff-line product codes for each investigation
- For AD and CVD only: also available information (names) of petitioning firms, industry organizations, or labor groups; firm-specific outcomes for foreign firms named as targets (e.g., firm-specific duties)
- Updates now collected and made publicly available annually at http://econ.worldbank.org/ttbd/

Other Data Sources

- OECD Product Market Regulation index
- …

NTM Data

	Goods	Services
National legislation	• Inventory data • Notifications • (STC)	• Inventory data • Notifications • (STC)
Private sector perspective	• Business survey • Complaints portal	• Business survey • Complaints portal

ITC

The International Trade Centre supports SMEs in their efforts to internationalize.

In this context ITC:

1. Contributes to providing information on NTMs in destination countries with a view on facilitating exports:

   ➔ Collection of NTMs based on official legislation in collaboration with UNCTAD under the TnT

2. Contributes to identifying priority obstacles for companies in the form of regulations and procedures

   ➔ Business surveys

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ITC-NTM regulations in MAcMap

Legislation regulating non-tariff measures (NTMs) applied by **Russian Federation**.

Product: **010110 - Pure-bred breeding horses and asses**
Partner: **World**
Year: **2009**
Data source: **ITC (MAcMap)**
Credits: **N/A**
Product nomenclature: **HS10**
NTM classification revision: **NTM rev. 2008**

<< New search | << Modify search

Selected national tariff line (NTL) code:

0101101000 - Pure-bred breeding horses and asses: horses

Official title of the legislation (English)
Administrative Regulation to be accomplished by Federal Service for veterinary and phytosanitary supervision, on granting permissions for importation to the RF and exportation from the RF, as well as transit from its territory of animals, products of animal origin, pharmaceuticals, feedstuff and feedstuff additives for animals, under quarantine products, affirmed by the order og Ministry of Agriculture of the RF, 9 Jnauary 2008, N 1
Federal Law of the Russian Federation dated on 14 may 1993 N 4979-1 About veterinary
The Decree of the Government of the RF On the ffirmation of the Standing on Federal Service for veterinary and phytosanitary supervision 30 June 2004, N 327
The Decree of the Government of the RFOn Customs Fees for customs formalities of products, 28 December 2004, N 863
The letter of the Federal Customs Service of RF On the list of products subject to border veterinary supervision, 20 December 2006, N 06-73/45065
The Order of the RF On the Affirmation of Rules of transportation of animals by railway 18 June 2003
The Order On the Affirmation of Rules on transportation by railway of perishable (fast-spoiling) freight

1 Page size: 10

Three approaches to NTM data presentation:

1. By regulation (SME oriented - see screenshot)
2. By NTM and product (analytical)
3. Bulk download

ITC

Business Survey motivation/objectives

- Capture perception of exporters and importers
- Provide de facto (instead of de jure) evidence on NTMs
- Look at the specific role of NTMs implementation (related procedural obstacles)
- Compile a unique set of surveys realized with a common methodology across countries
- Complement other approaches (direct and indirect approaches) to measure revealed ‘costs’ of NTMs.

ITC

Firm level survey data

- MAST classification used (adapted version to capture companies' perspectives)
- Captures NTM-related obstacles perceived by companies by product (HS6) and partner country
- Covers firms accounting for at least 90% of total export value of each survey country (excl. arms and minerals)
- Survey data collected in 23 countries plus 15 countries ongoing
- Survery data disseminated through country reports and stakeholder meeting
- Development of data dissemination tool linking surveys' data to official regulations and WTO notifications

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ITC – Firm level survey data online

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50 YEARS of TRADE IMPACT FOR GOOD

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Market info & tools ► Market information ► Non-tariff measures ► NTM business surveys ► Kenya

Kenya

NTM BUSINESS SURVEYS

- Bangladesh
- Burkina Faso
- Colombia
- Kenya
- Malawi
- Mauritius
- Morocco
- Peru
- Sri Lanka
- Thailand

A large-scale business survey in Kenya interviewing over 750 companies
(Photo credit: DEMOSH)

NTM BUSINESS SURVEYS

Choose the country

OFFICIAL NTM DATA

MORE DETAIL

PUBLICATIONS

NTM Survey Overview:

The ITC NTM survey in Kenya aims to identify burdensome non-tariff obstacles to trade faced by the Kenyan business community. The survey was implemented in collaboration with a local company, Synovate Kenya Ltd in 2011. A total of 764 exporting and importing companies across various sectors were interviewed about their experiences dealing with NTMs.

NTM Data

	Goods	Services
National legislation	• Inventory data • Notifications • (STC)	• Inventory data • Notifications • (STC)
Private sector perspective	• Business survey • Complaints portal	• Business survey • Complaints portal

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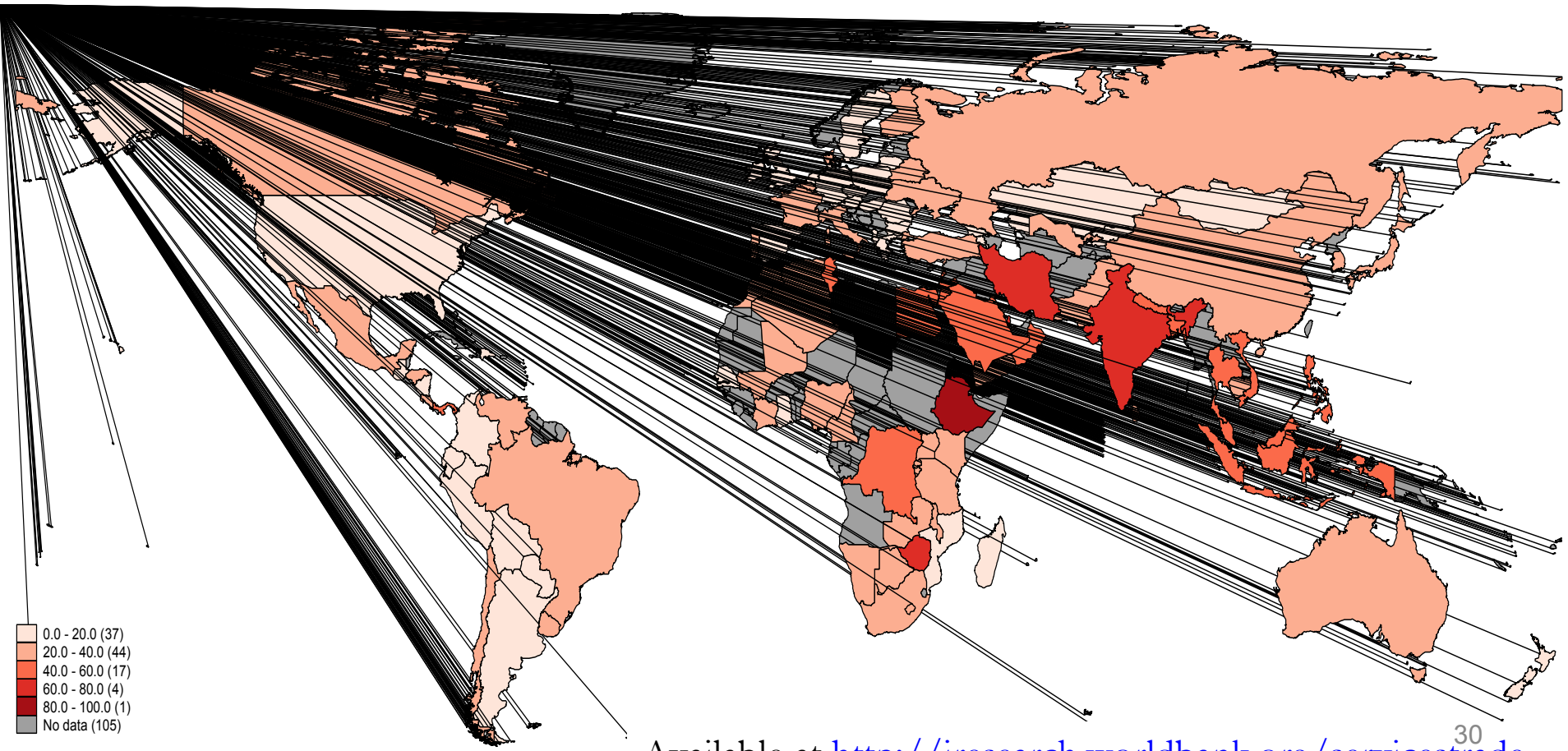
World Bank Services Trade Restrictions Database: country coverage

103 countries (of which 79 developing)



UNCTAD

Productivity, Non-Tariff Measures and Openness

Available at http://iresearch.worldbank.org/servicestrade

Data: sector/mode coverage

Sectors/Sub-sectors	Mode 1	Mode 3	Mode 4
Banking			
Bank lending	x	x	
Deposit acceptance	x	x	
Insurance			
Automobile insurance	x	x	
Life insurance	x	x	
Reinsurance	x	x	
Telecom			
Fixed-line		x	
Mobile		x	
Retailing			
Retail distribution		x	
Transport			
Air passenger domestic		x	
Air passenger international	x	x	
Maritime shipping international	x	x	
Maritime auxiliary services		x	
Road trucking		x	
Railway freight		x	
Professional Services			
Accounting	x	x	x
Auditing	x	x	x
Legal advice foreign law	x	x	x
Legal advice dom law		x	x
Court representation		x	x

Borchert/Gootiiz/Mattoo - Services Trade Restrictions Database

Data: policy coverage

Policy dimensions covered:

- Barriers to foreign entry and ownership
- Licensing requirements
- Restrictions on operations
- Regulatory environment

Focus is on measures that discriminate against foreign services and service providers; but we also cover certain non-discriminatory measures which significantly affect trade.

Policy information was collected through detailed questionnaires administered by local law firms and governments were given the opportunity to comment.

Borchert/Gootiiz/Mattoo - Services Trade Restrictions Database

Measuring policy restrictiveness

Real value of the Database is the rich information on a range of policy variables. But there is also a need for measures that facilitate depiction of patterns and empirical analysis.

Three approaches:

- The Services Trade Restrictiveness Index (STRI)
  → scores based on expert judgment
  → on a five-point scale from completely open to completely closed [0, 25, 50, 75, 100]

- Ordinal Ranking of Policy Combinations
  → ranks different combinations of policy at the country-sector level in terms of relative openness

- Measuring restrictiveness by impact using econometric approaches
  → estimates the restrictiveness of policies based on their impact on some outcome variable of interest, controlling for other determinants

Borchert/Gootiiz/Mattoo - Services Trade Restrictions Database

The OECD services trade restrictiveness index (STRI)

Why the STRI? Access to information on services regulations relevant for trade

To obtain the information gathered for the STRI, you have to look at 16,000 laws and regulations

There are 135 GATS schedules with more than 100,000 commitments and 113 RTAs in force covering services

The US federal laws and regulations on banking alone are 9949 pages long

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OECD STRI: What is the STRI?

A regulatory database

- Filled in by the Secretariat, verified and peer reviewed by Members
- Information on regulation, link to source (law/regulation), explanation where needed
- Online, frequently updated, 16000 laws and regulations
- Interactive

STRI indices

- A snapshot of trade restrictiveness
- Binary scoring of individual measures
- Scoring and weighting automated
  - Qualitative information transformed to indicators using a fixed set of rules codified in computer algorithms
- The index takes values between 0 and 1

Policy Tool

- A compare your country tool
- An interactive policy simulator

OECD STRI coverage

Sectors

- Computer services
- Construction
- Distribution
- Financial services
  - Commercial banking
  - Insurance
- Professional services
  - Accounting
  - Architecture
  - Engineering
  - Legal services
- Telecommunications
- Transport
  - Air
  - Maritime
  - Rail
  - Road
  - Courier
- Audiovisual services
  - Motion pictures
  - broadcasting
  - sound recording
- [Logistics]

Countries

- The 34 OECD members
- Brazil, China, India, Indonesia, Russia, South Africa
- [Colombia, Latvia, Costa Rica]

Policy areas:

- Restrictions on foreign entry
- Restrictions on movement of people
- Other discriminatory measures (national treatment)
- Barriers to competition
- Regulatory transparency

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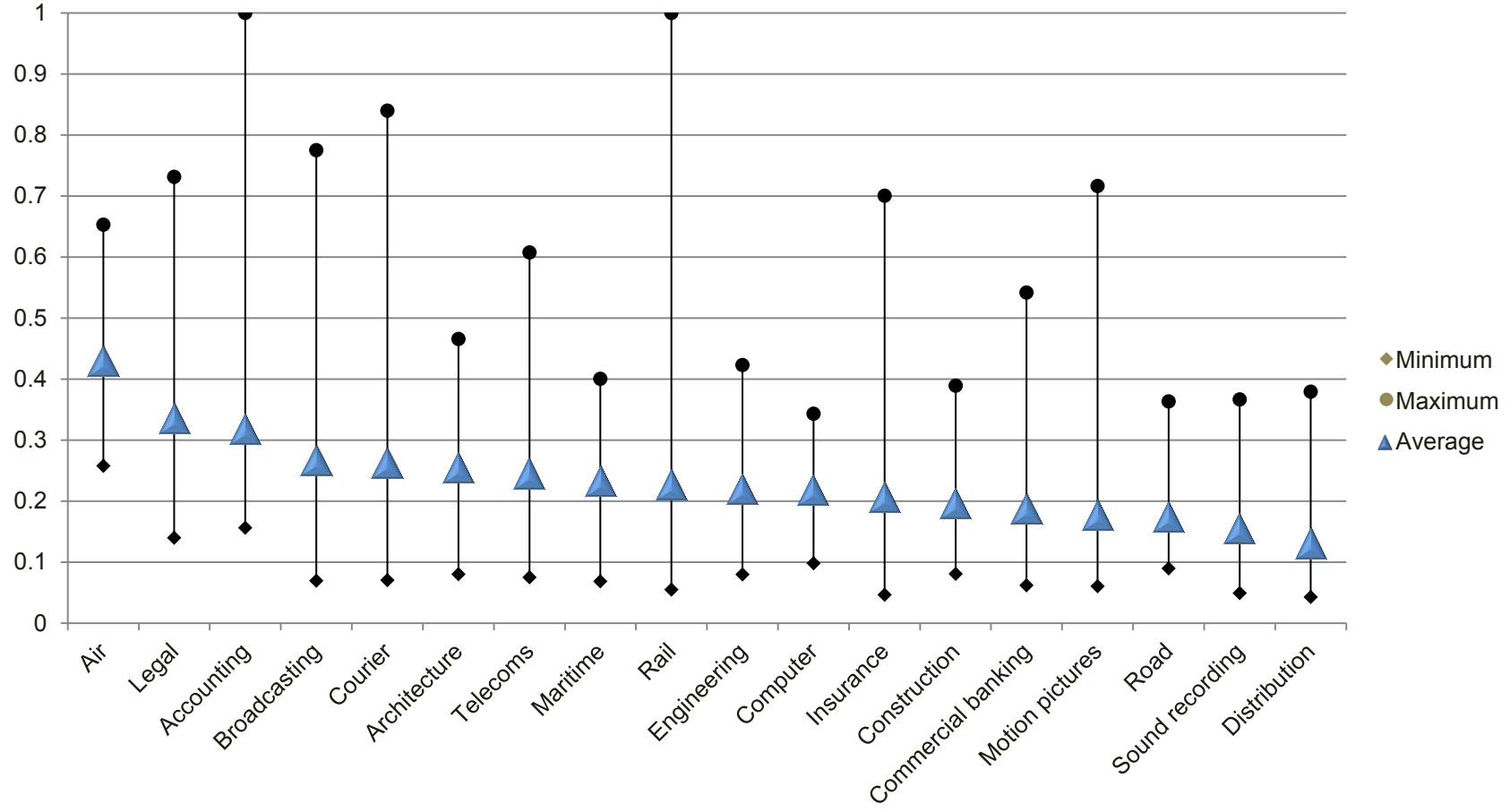
STRI (average, minimum and maximum scores by sector)



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Services Data

Organization	Website	What
World Bank	iresearch.worldbank.org/servicetrade/	Services trade policy measures and key modes of delivery - incl. implemented/enforced measures - 103 countries - 5 sectors (19 subsectors) - 344 variables
OECD	http://oe.cd/stri	Trade restrictive policy measures (trade, investment barriers, domestic regulations) - incl. de jure restrictions (legal obligations) - 40 countries (OECD, BRIICS) - 18 sectors - 375 variables
WTO	i-tip.wto.org/services	WTO and World Bank: GATS, RTA commitments, Applied Regimes, …

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Summary and Way Forward

- Challenges

Coverage	Some important countries missing Some measures missing
Time series	Comparable data mostly not available for several years
Integrating data	Different sources not all integrated Different levels of detail
Services data	No commonly used classification; coverage issue
Survey data	Linking them to official data could be interesting

- Limitations …

Way forward

- Part of PRONTO's objectives are:
  - *"Mapping and integrating compiled and generated data on a common platform that is built on earlier efforts and aligned to ongoing initiatives"*
  - And in order to make effort sustainable *"… options are explored to undertake this task in cooperation with institutions active in this domain"*
- Thus, PRONTO primarily tackles the integration challenge and can provide valuable insights and support to policy makers, researchers and agencies in solving other challenges, as well

NTMs and Firm Level Evidence

Lionel Fontagné[1]

Sept. 24 - ITC (UNCTAD-WTO), Geneva

[1] PRONTO, (Productivity, Non-Tariff Measures and Openness), Grant agreement # 613504

1. Introduction
2. Literature survey
3. Evidence from STCs and alerts
4. Survey based evidence of restrictiveness of NTMs

Introduction

- Direct evidence on protection: world average (applied) tariff protection in manufacturing: 3.2% in 2007 (MacMap-HS6)
- Indirect evidence suggests a different picture:
  - Qualitative information from business community says market access is often difficult.
  - Distribution of exporters is skewed
  - Overall protection revealed by *indirect* measure like border effects still very high: $\gg 100\%$, controlling for tariffs (De Sousa, Mayer & Zignago 2012).
- Regulations, standards: NTMs.
- Enforcement
- Procedural obstacles
- Compliance capacity of individual exporters

Introduction

The four big question marks:

1. Sorting NTMs favouring trade (in presence of informational problems) versus negatively affecting exporters
2. Impact of restrictive NTMs on heterogeneous exporters': participation and behavior in export markets?
3. Relevant source of information?
4. Net welfare effect of NT*Barriers* actually protecting health or safety of consumer?

Introduction

Four tentative answers:

1. Sorting: keep only NTMs negatively affecting exporters
2. Impact of restrictive NTMs on heterogeneous exporters: rely on micro evidence
3. Combination of qualitative info, administrative info, surveys
4. Net welfare effect: round-table this afternoon and Beghin, Disdier, Marette & Van Tongeren (2013) on shrimps:
   - The optimum is not necessarily the absence of regulation
   - The reinforcement of a food safety standard can be socially preferable to the status-quo

Introduction

A simple economic analysis of the impact of regulations on exporters

- NTMs may represent a fixed cost (e.g. product adaptation)
  - Increases cost of entry
  - Less productive firms may be driven out of the export market
  - Large firms may see their market share increased cet. par.
- Or a variable cost (e.g. systematic inspection of shipments)
  - Affects domestic and foreign producers differently
  - Affects equally exporters of different size
  - Affects less exporters of high-quality products
- Heterogenous exporters face shock to NTM-related fixed and variables costs differently

Introduction

Is the relevant info present in available data?

- Fixed cost of product adaptation: survey
  - *Large exporters see their market share increased*: custom confidential data
  - *Less productive firms driven out of the export market*: exporters balance sheets & custom confidential data
- Variable costs of systematic inspection of shipments: survey
  - *Affect domestic and foreign producers differently*: hardly observable (need info on domestic VA and import using same product classification)
  - *Affect equally exporters of different size*: custom confidential data
  - *Affect less exporters of high-quality products*: quality and UV differ.

Introduction

Is the relevant info present in available data (cont.)?

- Additional cost but also *increased demand* if informational problems
  - Higher cost + larger market = ?
  - Focus on sub-sample of barriers
- Uncertainty on enforcement
  - Survey (e.g. questions regarding procedural obstacles)
  - Specific identification strategy (see "alerts" below)

Introduction

Broad types of direct sources of information of NTMs:

- Comprehensive list of measures (de jure) imposed by countries at product level.
  - TRAINS (notifications) or MAST data (see session this morning)
  - Perinorm: information on the most important national standards and technical rules enforced in/by EU, US, Australia, South-Africa, Japan , as well as on standards of international organizations (ISO, etc.).
- Surveys on the perception by exporters of obstacles on foreign markets (ITC, Geneva).
- Indirect evidence:
  - WTO information on trade concerns
  - EU info on alerts & US info on monthly imports refusals

Literature survey

- Chen, Otsuki & Wilson (2006) "Do Standards Matter for Export Success?"
  - Published as "Standards and export decisions: Firm-level evidence from developing countries", Journal of International Trade & Economic Development, 2008.
- Examine firm's export performance in two dimensions: export propensity (overall export share), and market diversification (number of export markets)
  - World Bank Technical Barrier to Trade Survey (2004)
  - 619 firms in 24 agricultural and manufacturing industries in 17 developing countries exporting in 5 developed markets
  - Different types of standards exhibit distinct relations with firms' intensive and extensive margins of exports
  - Quality standards and labelling requirements: extensive +, intensive +
  - Certification procedures: extensive -, intensive -
  - Domestic firms impacted by testing procedures have a 16% smaller export share

Literature survey

- Maskus, Otsuki & Wilson (2005), "The Cost of Compliance with Product Standards for Firms in Developing Countries: An Econometric Study"
- Econometric estimation of the incremental production costs for firms in developing countries to comply with standards imposed by importing countries
  - Rely on same TBT database as Chen et al.
  - 159 firms (out of 619) in 12 (out of 24) industries located in 16 developing countries
  - A 1 % increase in investment to meet compliance costs in importing countries raises variable production costs by between 0.06 and 0.13%
  - The fixed cost of compliance is USD 425,000 per firm, or 4.7% of value added on average

Literature survey

- Reyes (2011) "International Harmonization of Product Standards and Firm Heterogeneity in International Trade"
  - Response of US manufacturing firms in the electronic sector to a reduction of TBT (in the EU)
  - 1996 CENELEC-IEC agreement to harmonize European product standards to international norms: EU specific standards driven to 25% from 50% of total
  - US Longitudinal Firm Trade Transaction Database (1992-2004)
  - World Bank EU Electrotechnical Standards Database (EUESDB), which provides an inventory of the stock of active standards published by CENELEC and their link with standards issued by the IEC (1990-2007)

Literature survey

- Reyes (2011), cont.
- Harmonization of European product standards to international norms in the electronic sector:
  - Increases the probability that higher-productivity firms enter the EU market
  - And the more so for firms already exporting to other markets
  - Impact is negative for the intensive margin of trade for surviving trade relationships
- $\Rightarrow$ Combination of selection and competition effects on the EU market

Literature survey

- Rau and Van Tongeren (2009), "Heterogeneous firms and homogenising standards in agri-food trade: the Polish meat case", European Review of Agricultural Economics
- Slaughterhouses, cutting plants and processing firms have to comply with Directive 77/99/EEC and 64/433/EEC (= EU meat standards + additional provisions regarding product testing, transportation and administrative matters)
- Firms that comply receive an EU export licence, whereas non-complying firms can sell their product on the Polish market only

Literature survey

Rau and Van Tongeren (2009), cont.

- Partial equilibrium trade model with heterogeneous firms
- Data on shape of productivity distribution from Eurostat Business Statistics
- Parameters estimated to measure impact of compliance with the EU food standards
- $\Rightarrow$ Homogenizing standards tend to increase the concentration of production and exports among the more productive and larger firms

Literature survey

- Schuster & Maertens (2013), Food Standards, Heterogeneous Firms and Developing Countries' Export Performance, WP KE Leuven
- How the adoption of *private* food standards by individual firms affects their export performance at the IM and EM of trade
  - Custom data and tax administration data on 567 asparagus export firms for the period 1993-2011
  - Stratified random sample of 95 export firms
  - Likelihood of certification is 7% in 2001 and 37% in 2011
  - Control for reverse causality (certification decision might be determined by current export performance)
  - Certification to private standard schemes does neither improve firms' propensity to export, nor their export volumes and values

STCs as proxy for NTMs

- Problem of sorting-out restricting NTMs can be solved by focusing on the subset of regulatory measures that are considered as sizeable barriers by exporters
- Fontagné, Orefice, Piermartini & Rocha (2013) rely on Specific Trade Concerns (STC): sub-sample of *restrictive* NTMs
  - Affected exporters manage to incentive their origin country to bring the case to Geneva.
  - Country raises a concern in SPS committee of the WTO.
  - Forum to discuss issues related to an SPS measure taken by other members.
  - These concerns and their resolution are recorded by the WTO.
  - $\rightarrow$ WTO dataset on Specific Trade Concerns (STCs) on SPS.

STCs as proxy for NTMs

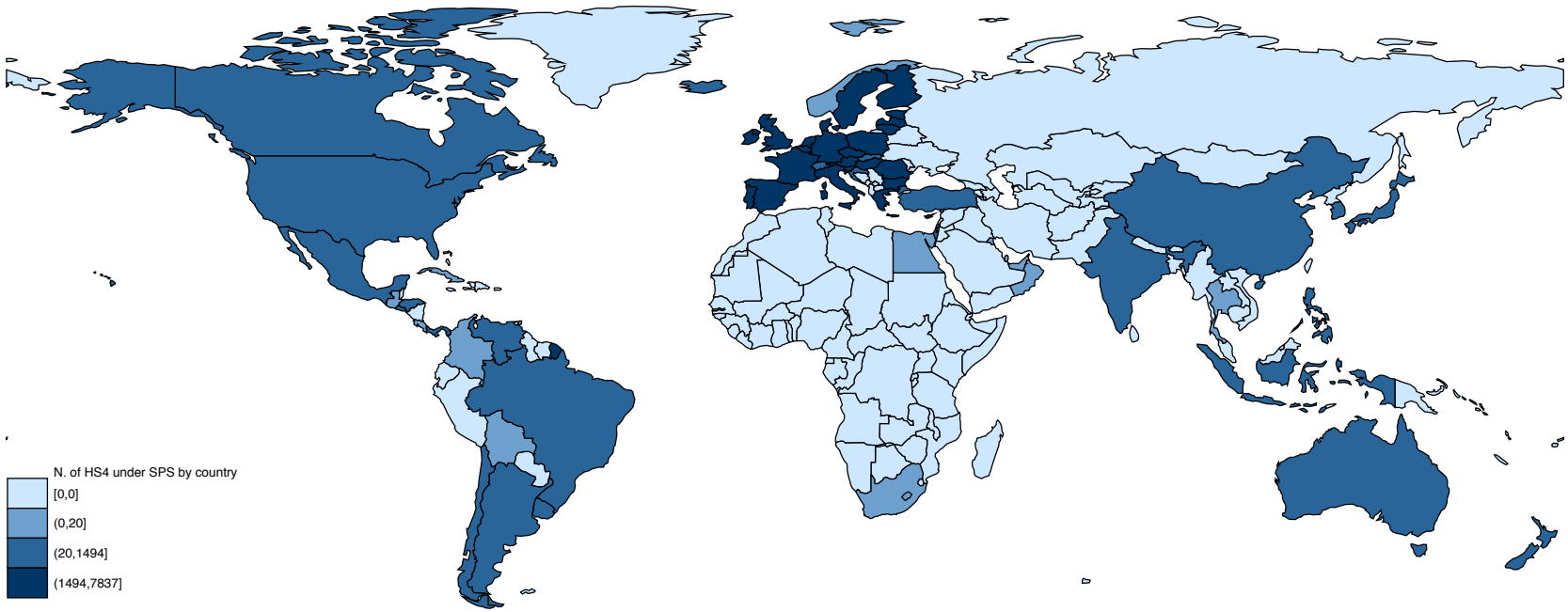
- EU - USA concern: an example of conformity assessment SPS measure
  - Raised in June 2005 by the EU against USA
  - Fruits and vegetables lengthly inspection procedures in the US market $\rightarrow$ commercial losses because highly perishable nature of the products.
  - US Animal and Plant Health Inspection Service required that only US produced pesticides be used during the cultivation, some of which were not permitted in the EU.
- Not only Agri-food: EU - China case on cosmetics
  - Concern raised in June 2002 by the EU against China.
  - EU noticed that China had imposed (in March 2002) import restrictions on cosmetics (containing ingredients of bovine or ovine origin) from 18 exporting countries.
  - Justification: to prevent introducing BSE (Bovine Spongiform Encephalopathy) into China.
  - Discriminatory: did not apply in the same manner to all countries where identical sanitary conditions prevailed.

STCs as proxy for NTMs

- STCs dataset contains information on concerns raised in the SPS committee at the WTO by a claiming country against a potential trade partner, who imposes a non-tariff measure. The period covered is 1995-2010. For each concern, we have information on:
  - Claiming country and country imposing the measure
  - Product code (HS 4-digit) involved in the concern
  - Year in which the concern has been raised to the WTO
  - Whether the concern has been resolved
- 312 concerns related to SPS measures ivolving 203 HS-4 product lines
- 89 claiming countries; 58 countries imposing at least one SPS measure
- 21% of the measures challenged were imposed by the EU (US + Canada 13%; Japan 7.5%)
- Most sensitive industry is Meat and Edible Meat sector. Fresh fruit and vegetables also important

STCs as proxy for NTMs

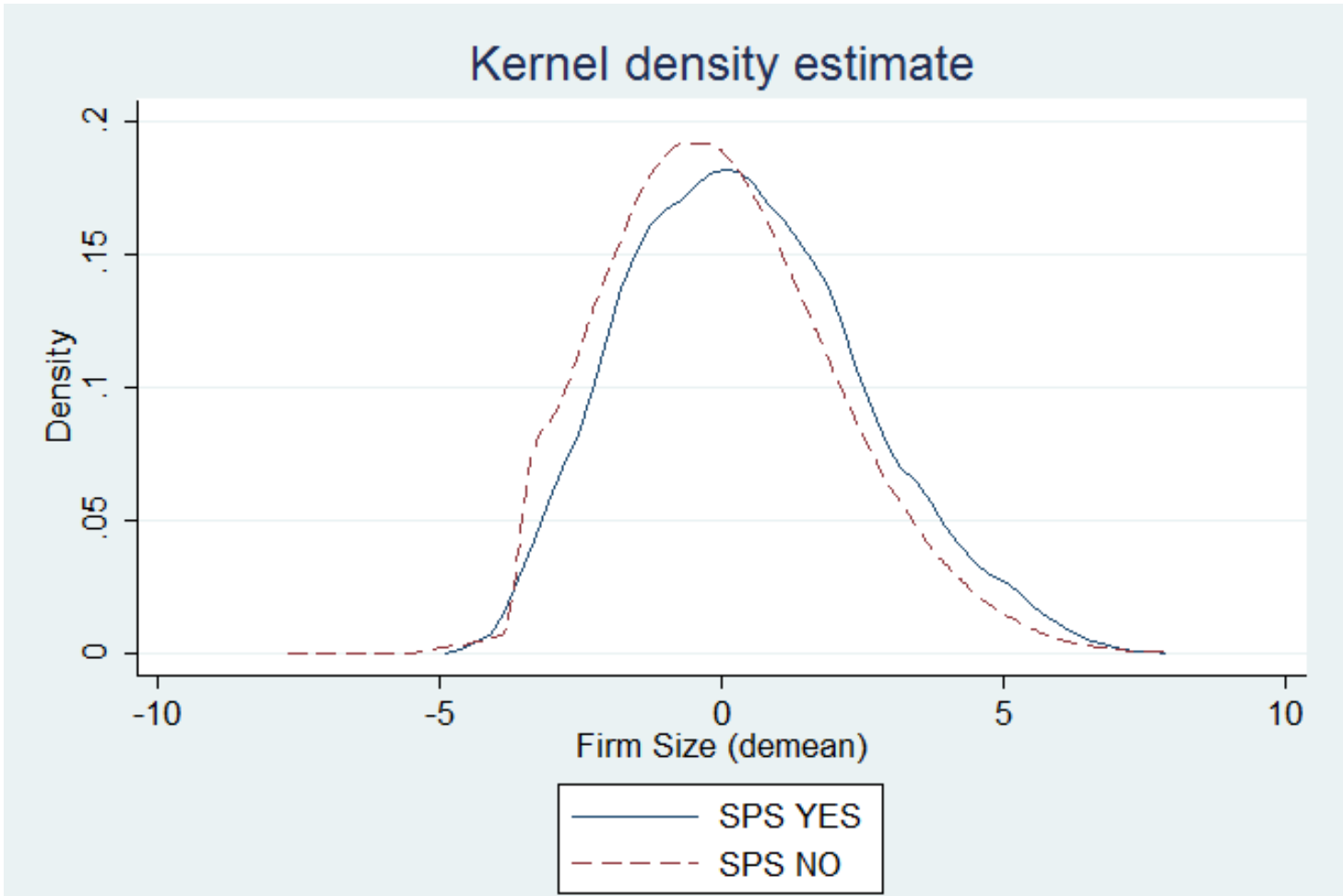
Figure: Number of HS4 lines under STCs by imposing country. Period 1996-2010



STCs as proxy for NTMs

Firms' size distribution has a larger mean value for firms exporting in markets subject to SPS concerns

Figure: Firm size distribution in presence/absence of SPS



STCs as proxy for NTMs

- Trade effect of restrictive product standards on the various margins of trade.
  - Probability to export (firm-product extensive margin - participation)
  - Probability to exit
  - Value exported (firm-product intensive margin)
  - Pricing strategy (trade unit values)
- Combination of two data sets
  - Specific Trade Concerns (WTO)
  - Individual exporter reporting to French Customs' Authority

STCs as proxy for NTMs

- SPS concerns:
  - $\rightarrow$ negative effect on the EM of trade
  - $\rightarrow$ negative effect on the IM of trade
  - Exporters upgrade their products (and/or increase their prices)
- Magnitude of effects is policy relevant:
  - At the EM:
    - SPS concern decreases the probability of exporting by 4%
    - A 10 % increase in the tariff reduces the probability of exporting by 2%
    - $\rightarrow$ SPS concern is equivalent to a 20% increase in the tariff
  - At the intensive margin:
    - SPS concern reduces export value (for firms staying in the market) by 18%
    - Mean tariff opposed to French exports is 6.4%: a 1 pp increase in tariffs reduces on average exports by 2%
- Heterogeneous effect across firms: big players less affected

Trade alerts and NTM-related uncertainty

- Beestermoeller, Disdier & Fontagné (ongoing)
  - Analyses of the impact of NTMs uncertainty on African export flows of agricultural and agro-food products
  - How i) the reputation of the exporting country, ii) the sector and iii) other countries may affect uncertainty and therefore export flows
  - Provide a more nuanced understanding of the impact of NTMs that fits in with the large literature on firm heterogeneity and trade

Trade alerts and NTM-related uncertainty

- Beestermoeller, Disdier & Fontagné (cont'd)
  - Problem of uncertainty caused by NTMs and their implementation:
    - Only a portion of shipments are inspected
    - Probability of inspections can vary with local concerns
  - Uncertainty may act as a barrier in the exporting decision (EM) and in the export value (IM)
  - Important issue for DCs & LDCs exporters:
    - Higher probability of border controls
    - Higher risk of the rejection of shipments

Trade alerts and NTM-related uncertainty

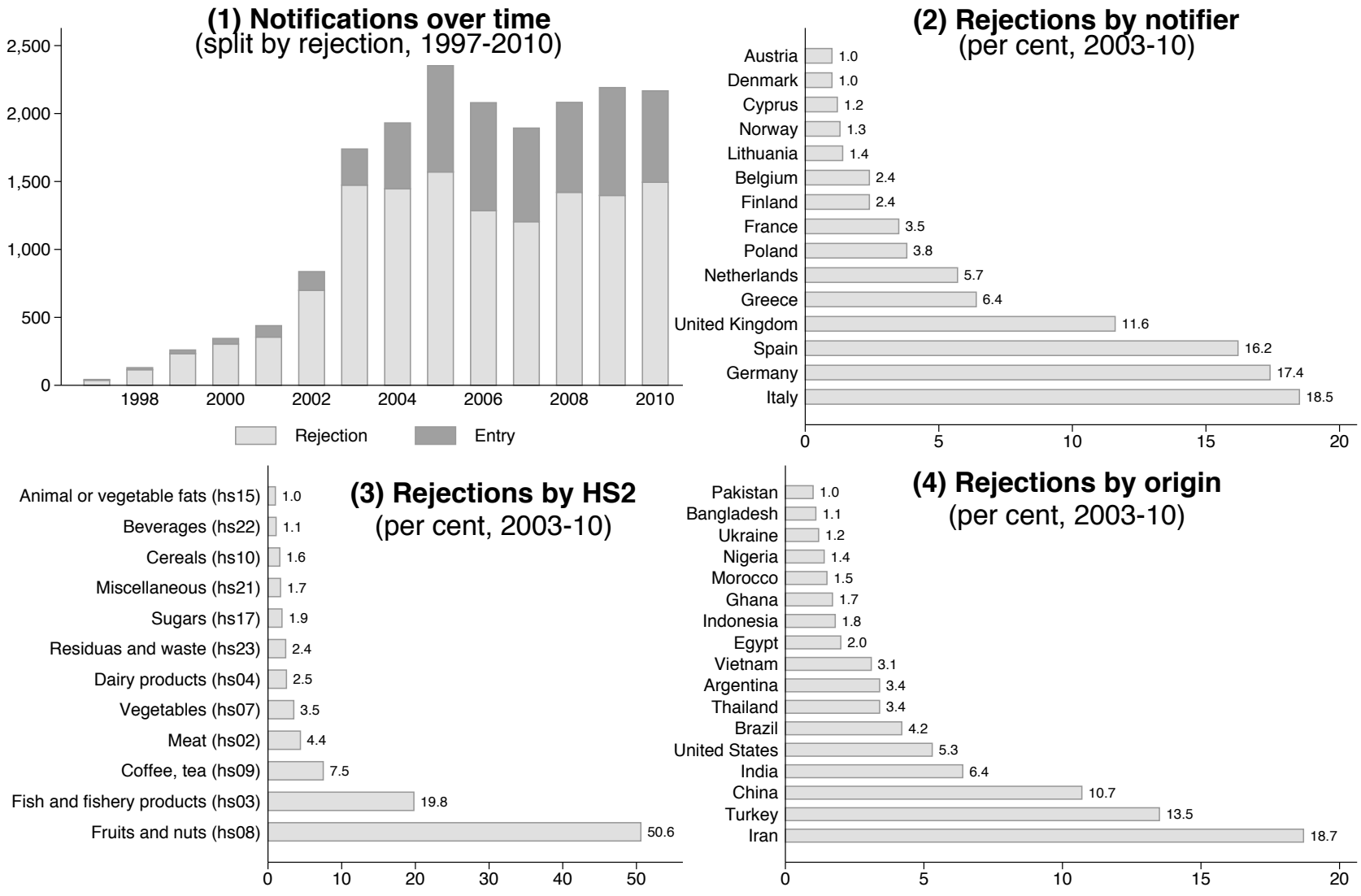
- Related literature: Jaud, Cadot & Suwa-Eisenmann (ERAE, 2013):
  - Impact of rising sanitary risk of agri-food products on the geographical concentration of EU food imports
  - Combine diversification of exporters to the EU at the product level & food alerts at the EU border
  - But, aggregate all exporters of a given country in a given product & ignore firm heterogeneity
  - In practice, impact of uncertainty in NTMs may differ across firms

Trade alerts and NTM-related uncertainty

- Data used in BDF:
  - African firm-level export data
    - World Bank's Exporter Dynamics Database
    - African countries: Burkina Faso (2005-10), Mali (2005-08), Malawi (2005-08), Senegal (2000-10) and Tanzania (2004-08)
    - Annual firm-level export data by HS6 product & destination
  - EU Food Alerts:
    - EUROSTAT's Rapid Alert System for Food and Feed (RASFF): notifications on emergency sanitary measures taken at the border by EU members
    - All notifications by EU countries regarding non-EU countries

Trade alerts and NTM-related uncertainty

Figure: RASFF: descriptive statistics



Survey based evidence of restrictiveness of NTMs

- Complements other approaches
- Captures perception of exporters
- Provides de facto (instead of de jure) evidence on NTMs
- Looks at the specific role of NTMs implementation (related procedural obstacles)
- ITC (Geneva) compiled a set of surveys implemented with a common methodology in a sample of developing countries

Survey based evidence

- Focus on NTMs which companies experience as barriers to trade
- Underlying reasons making turning NTMs into barriers for companies
- At most detailed level: by product (HS6) and partner country
- Survey all sectors that cumulatively account for 90% of the surveyed country export value (excluding minerals and arms)
- All sectors which $>$ 2% of total exports
- Stratification (13 sectors) based on national registers (and development of those registers if necessary)
- 23 countries; 11,567 phone interviews; 3,390 face-to-face interviews
- Weighting to account for sample design

Survey based evidence

- SSA: Burkina Faso, Cote d'Ivoire, Guinea, Kenya, Madagascar, Malawi, Mauritius, Rwanda, Senegal, Tanzania
- MENA: Egypt, Morocco, Palestine, Tunisia
- Asia: Cambodia, Indonesia, Kazakhstan, Sri Lanka
- Latin America: Jamaica, Paraguay, Peru, Trinidad & Tobago, Uruguay
- NTM classification developed by international organizations (16 main chapters)
- Survey ran by local companies trained by ITC
- 7,641 NTM *cases* identified (see definition below)

Survey based evidence

- NTMs representing a serious impediment for their operations
- PO related to NTMs
- PO *only*: disregarded
- NTMs applied by home or partner country
- Same for NTM-related POs

Survey based evidence

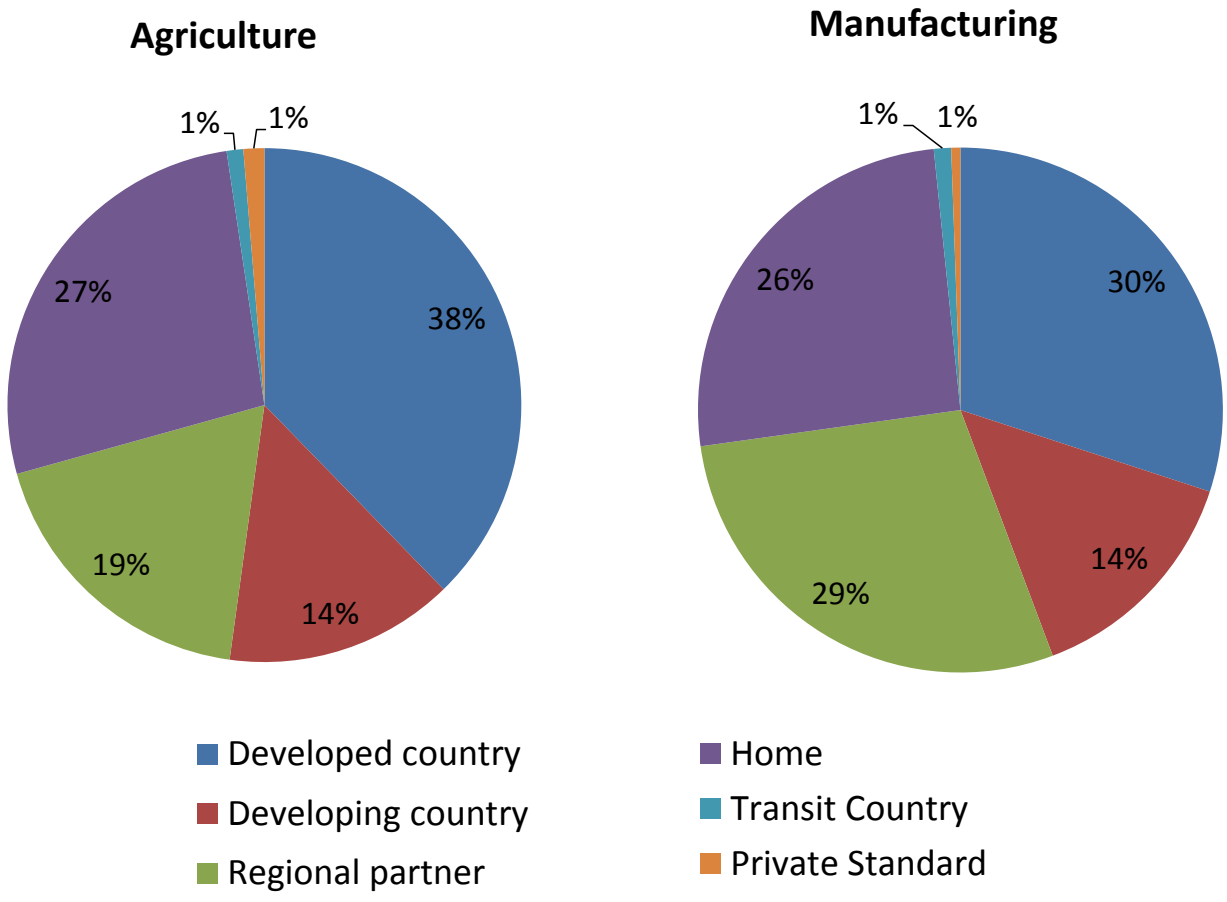
- Example of treatment of F2F:
  - An Egyptian exporter of electric appliances (3 different HS6) to Saudi Arabia
  - Verbatim: *Product registration is very difficult and should be renewed every 2 years. The registration process itself is usually delayed for almost one year and is relatively expensive (USD 2,850) per registration of product.*
  - "Product registration difficult" $\times$ 3 products $\times$ 1 destination $\Rightarrow$ 3 NTM *cases*
  - "Registration is delayed for one year"; "Registration is expensive"; : 2 NTM-related POs
  - 3 NTM $\times$ 2 POs $\Rightarrow$ 6 PO cases

Survey based evidence

- Issues arising when combining country-level results
  - Different size of firm sample
  - Different propensity to participate in F2F
  - Assumptions: 1) adjust the number of companies in the PS of each country 2) Adjust participation rate to F2F 3) Keep affectedness
  - Removes differences due to size in the PS and propensity to participate to the FTF
- Intrinsic limits:
  - Perception data implies differences in scaling obstacles between countries
  - Non-exporters not surveyed and might be deterred by NTMs
  - Affected exporters (according to PS) might not accept the F2F
  - Sectoral composition effects
  - Barriers reported mainly by least productive firms: counterfactual of firms *not* affected absent
  - Private standards absent

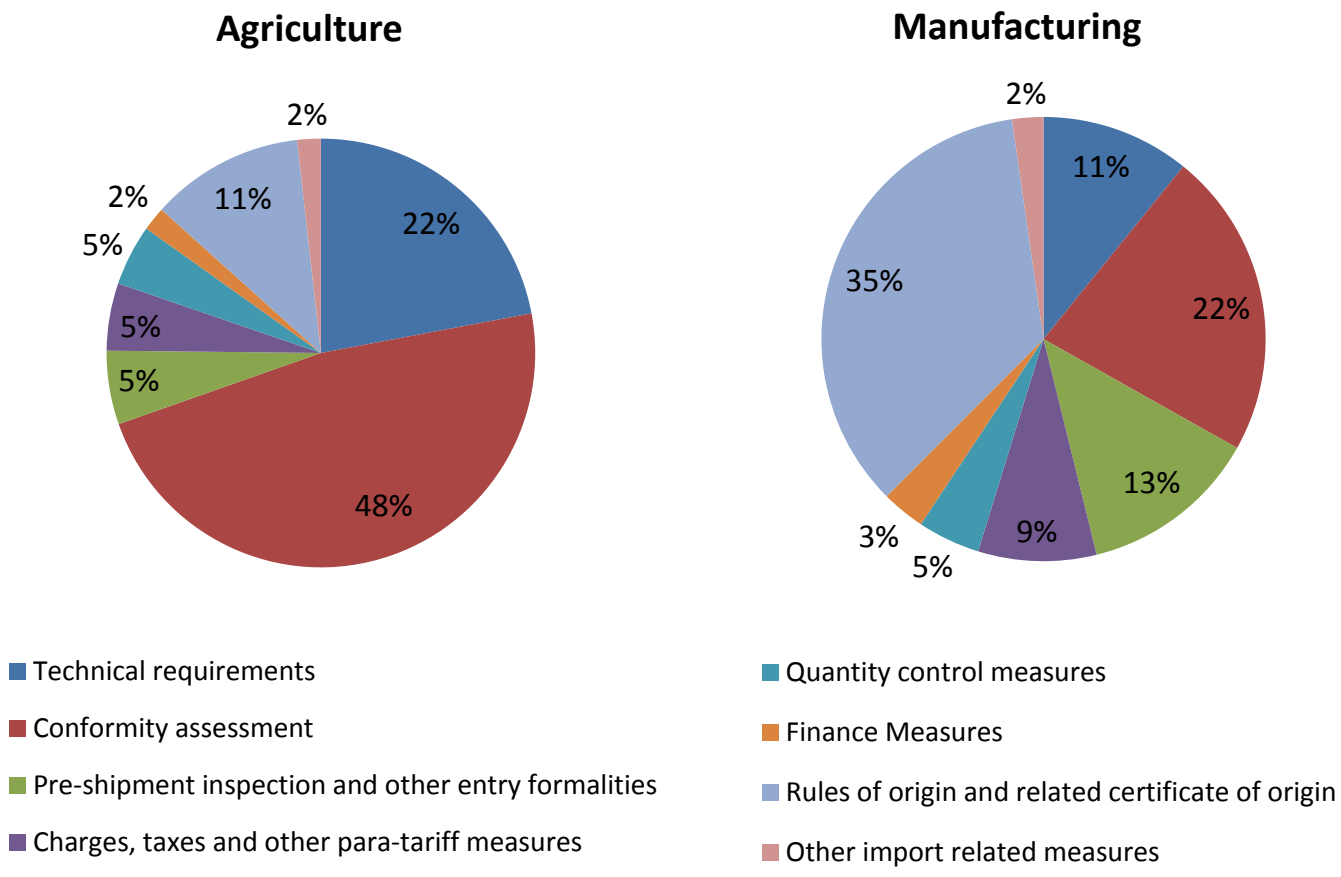
Survey based evidence

Figure: Distribution of NTM cases by sector and country applying the NTM



Survey based evidence

Figure: Types of burdensome NTMs by sector



Thank You

SEVENTH FRAMEWORK PROGRAMME

PRONTO
Productivity, Non-Tariff Measures and Openness

world trade institute

UNIVERSITÄT BERN

Gravity, NTMs, and CGE

Joseph Francois
WTI--University of Bern

PRONTO WP1 workshop
Geneva, September 2014

We appreciate support under the EU FP7 project Productivity, Non Tariff Barriers, and Openness, Grant agreement no: 613504.

PRONTO
Productivity, Non-Tariff Measures and Openness

Overview

- "Easy" questions we would like to answer: a wish list
- Mapping available data for econometrics
- Moving from gravity to ex post and ex ante assessments
  - Econometrics
  - CGE etc
- Talking points for moving forward

PRONTO
Productivity, Non-Tariff Measures and Openness

Dear Santa

I've been very ☑ Good ☐ Bad

My trading partner has been ☐ Good ☑ Bad

- What is the impact of current regulatory barriers?
- How important is regulatory divergence?
- Can we tell if agreements on NTBs have worked (do we have, or will we have, time series to look at?)
- Which NTBs matter the most?
- How do we include regulatory benefits (consumer safety, lower rate of industrial accidents, etc) in NTM assessments on a consistent basis?
- How do we distinguish discriminatory and non-discriminatory measures?
- To what extent do we expect NTB reductions to be discriminatory?
- How do we assess "aggregate effect" of a basket of measures? (or can we really look at measures in isolation?)
- What about regime uncertainty?

PRONTO
Productivity, Non-Tariff Measures and Openness

"Easy" Questions w.r.t. NTBs

- What is the impact of current regulatory barriers?
- How important is regulatory divergence?
- Can we tell if agreements on NTBs have worked (do we have, or will we have, time series to look at?)
- Which NTBs matter the most?
- How do we include regulatory benefits (consumer safety, lower rate of industrial accidents, etc) in NTM assessments on a consistent basis?
- How do we distinguish discriminatory and non-discriminatory measures?
- To what extent do we expect NTB reductions to be discriminatory?
- How do we assess "aggregate effect" of a basket of measures? (or can we really look at measures in isolation?)
- What about regime uncertainty?

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Mapping from data to gravity

- Firm and regulatory survey data
  - MFN regulatory assessments
  - Pairwise regulatory assessments
  - Integrating questions
  - Soft concepts that are otherwise relevant
- Issues with gravity
  - Pairwise framework without pairwise data
  - Guiding structural estimation around pitfalls
  - Lack of data
- Going beyond gravity
  - Repeated firm and expert “subjective” assessments

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Mapping from data to gravity Firm and Regulatory Survey Data

- MFN vs Pairwise regulatory assessments:
  - The data we get do not usually provide pairwise scores
  - Interaction with FTA data may provide some information
  - Intra-EU and intra-FTA or intra-NAFTA and extra-NAFTA might provide a basis for comparison (so only need pairwise questions for limited set of countries) ➔ integrating questions

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Integrating Questions: example

2. EXPORTING FIRMS: impact of NTBs on exports

	IDN	PHL	THA	MYS	VNM	BRN	KHM	LAO	MMR	SGP
2.1 OPERATING COST IMPACT OF NTBs IN ASEAN Overall, on a scale of 0 to 10, where 0 is easiest to export to the market and 10 is prohibitively costly to export to the market, how would you rank each of these markets in terms of variable costs for exports? 0 ←x→ 10										
2.2 Please identify other important markets for your firm Examples: JPN, KOR, USA, CHN, UK										
2.3 OPERATING COST IMPACT OF NTBs OUTSIDE ASEAN Overall, on a scale of 0 to 10, where 0 is easiest to export to the market and 10 is prohibitively costly to export to the market, how would you rank each of these markets in terms of variable costs for exports? 0 ←x→ 10										

	IDN	PHL	THA	MYS	VNM	BRN	KHM	LAO	MMR	SGP
2.4 OVERHEAD COST IMPACT OF NTBs IN ASEAN Overall, on a scale of 0 to 10, where 0 is easiest to export to and 10 is prohibitively costly to export to due to regulations and access restrictions, how would you rank each of these markets in terms of overhead/fixed costs for exports? 0 ←x→ 10										
2.5 Please identify other important markets for your firm (same as in 2.2)										
2.6 OVERHEAD COST IMPACT OF NTBs OUTSIDE ASEAN Overall, on a scale of 0 to 10, where 0 is easiest to export to and 10 is prohibitively costly due to export to due to regulations and access restrictions, how would you rank each of these markets in terms of overhead/fixed costs for exports? 0 ←x→ 10										

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Mapping from data to gravity: soft concepts that matter

- The origin of barriers is not always deliberate. Legitimate goals can be reached in different ways. This in turn can lead to regulatory divergence. Examples include regulation of chemicals and motor vehicles.
- Not all regulatory barriers can actually be negotiated and reduced. For example, the Japanese require legal documents in Japanese. This concept is called actionability.
- Barriers can be grouped broadly into those are cost raising barriers, and those that instead are rent generating barriers (i.e. they generate rents by limiting competition and market access).
- Semantics matter: NTBs and NTMs.

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Issues with NTB data and gravity

- FTA effects might not, even when interacted with NTB indicators, answer the questions we wanted to ask:
  - High NTBs might also mean less trade within in FTAs
  - Exisiting FTAs might not cover "new issues" like regulatory divergence. (example: REACH and intra-EU chemicals trade)
- NTB data and restriction indexes (like OECD vs World Bank STRIs) might not provide a breakdown between discriminatory vs. non-discriminatory regulations.
  Example: lots of laws vs. a lawless regime. What do counts tell us in this case?
- Structural estimation can get AVEs quite wrong if structure is wrong (new-fangled residual methods), so we want methods that do not assume all things unexplained are NTBs.

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Issues with NTB data and gravity: Coverage of Regional Agreements

Summary of trade and PTA depth

Depth of FTA	dyad count	trade million USD
1	162	383,618
2	666	1,067,643
3	289	376,583
4	322	227,156
5	223	500,067
6	149	178,809
7	680	3,882,378
total FTA pairs	2,491	6,616,254
non FTA paris	9,706	7,022,810
total	12,197	13,639,065

Source: Dür et al (2014), Egger and Francois (2014)

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Issues with NTB data and gravity: estimates using WTO notifications

Total Goods Trade 2011 (GLM logistic regressions)
regressions with generic FTA, FTAxNTB interactions, and FTA depth

	A	B	C	D
ln(1+tariff)	-4.500	-4.841	-4.789	-4.828
	(3.05)***	(3.00)***	(3.60)***	(2.95)***
ln(distance)	-0.755	-0.785	-0.740	-0.768
	(18.19)***	(19.59)***	(17.79)***	(18.81)***
polity index	-60.277	-59.733	-59.633	-58.512
	(1.90)*	(1.94)*	(1.94)*	(1.91)*
common colony	0.296	0.294	0.239	0.266
	(1.95)*	(1.93)*	(1.55)	(1.73)*
common language	0.493	0.516	0.445	0.505
	(5.72)***	(5.81)***	(5.26)***	(5.70)***
contiguous	0.499	0.499	0.504	0.493
	(4.55)***	(4.43)***	(4.71)***	(4.38)***
colony	0.674	0.684	0.662	0.675
	(5.44)***	(5.39)***	(5.63)***	(5.48)***
FTA	0.421		1.078	
	(3.71)***		(5.83)***	
EU	0.556	0.547	0.485	0.523
	(3.85)***	(3.73)***	(3.54)***	(3.66)***
FTA depth		0.092		0.239
		(3.69)***		(5.15)***
FTA x NTB			-0.155	
			(5.35)***	
Depth x NTB				-0.029
				(4.21)***
N	10,064	10,064	10,064	10,064
PseudoR2	0.8007	0.8000	0.8047	0.8016

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

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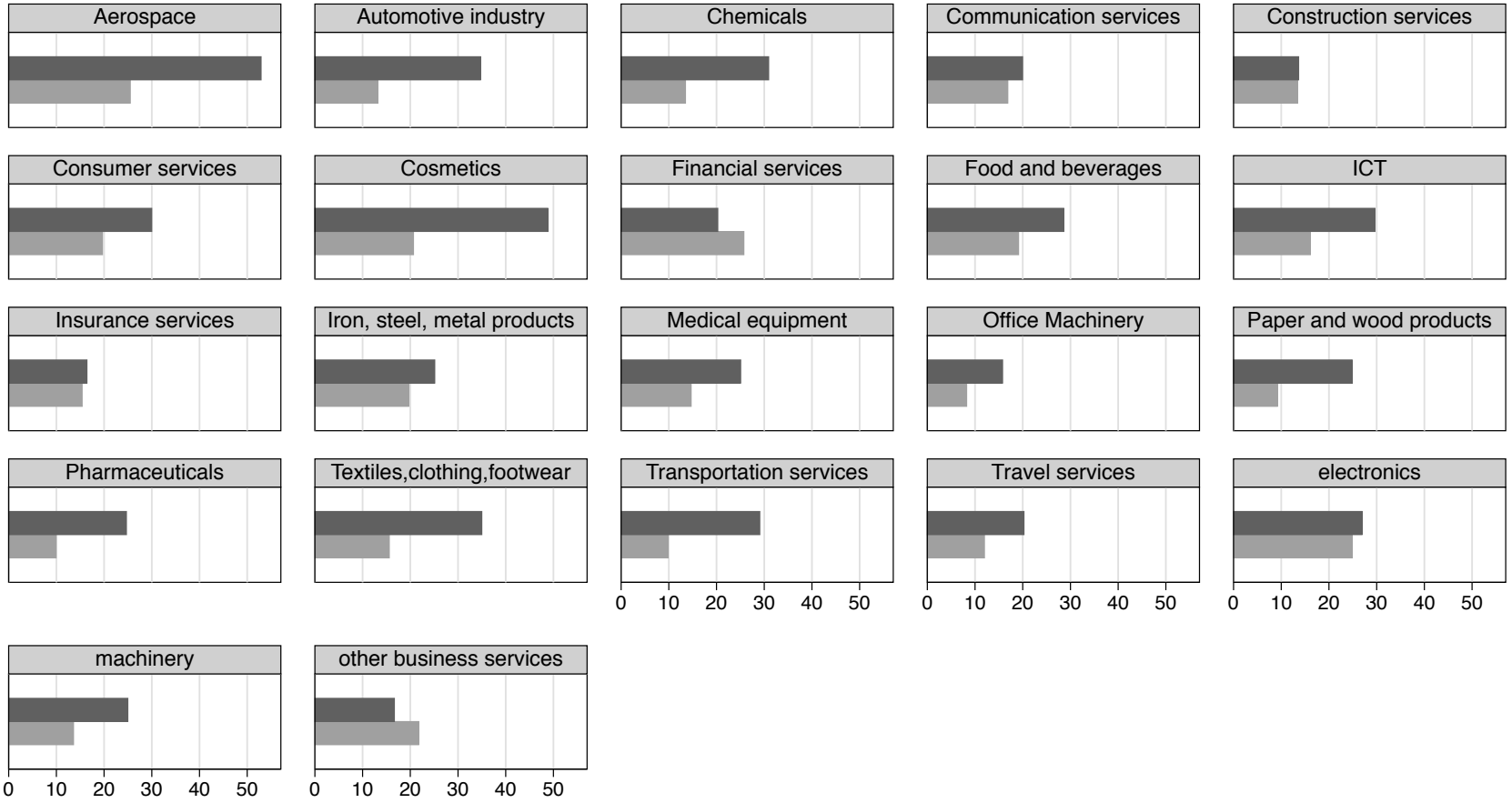
PseudoR2	0.8007	0.8000	0.8047	0.8016

* $p<0.1$; ** $p<0.05$; *** $p<0.01$

We really need rankings of intra- and extra-NTBs for specific agreements.

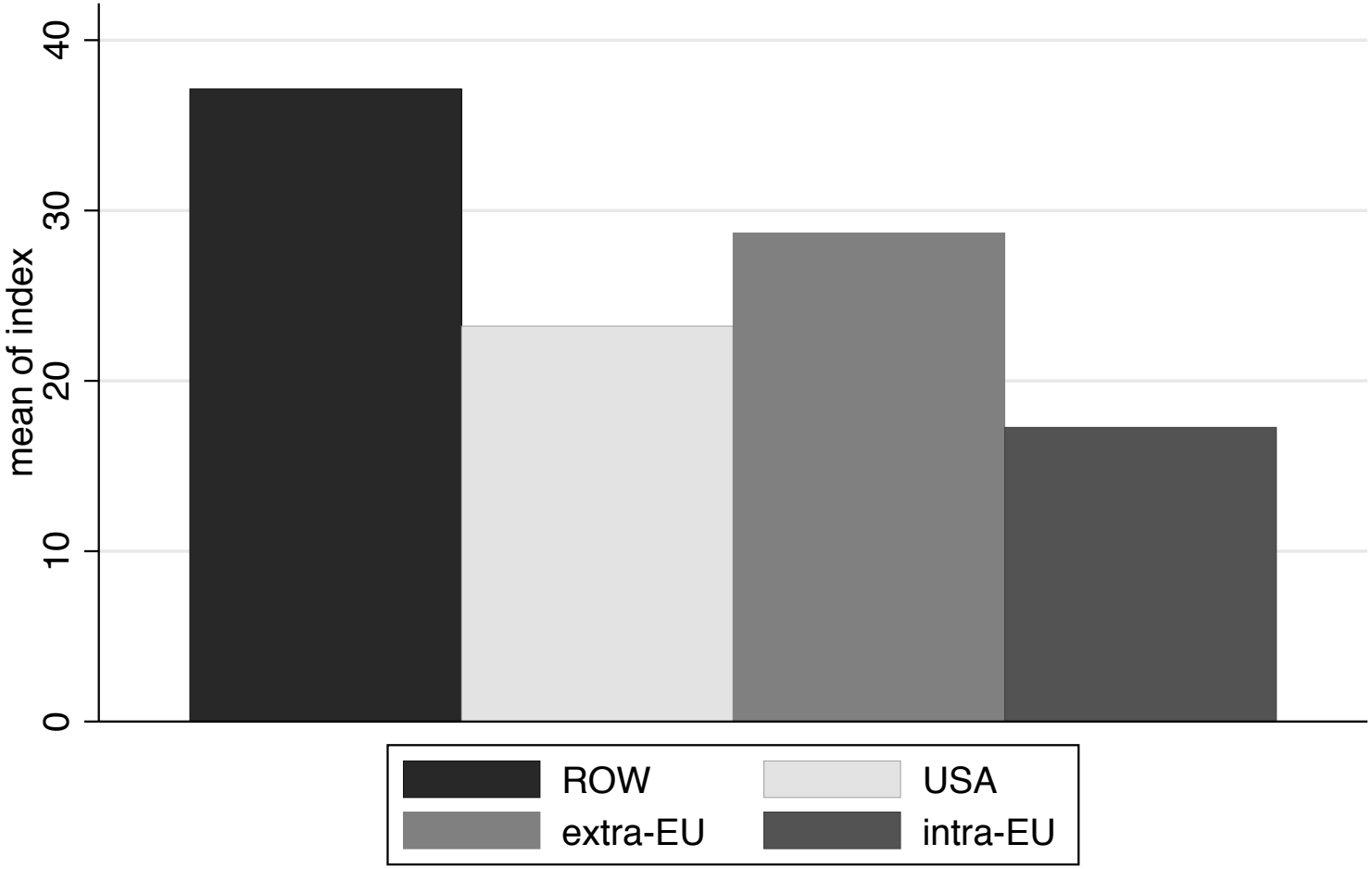
Issues with NTB data and gravity:

example of intra-EU and extra-EU trade NTB scores



Souce: CEPR(2013)

Issues with NTB data and gravity:
example of intra-EU and extra-EU FDI NTB scores

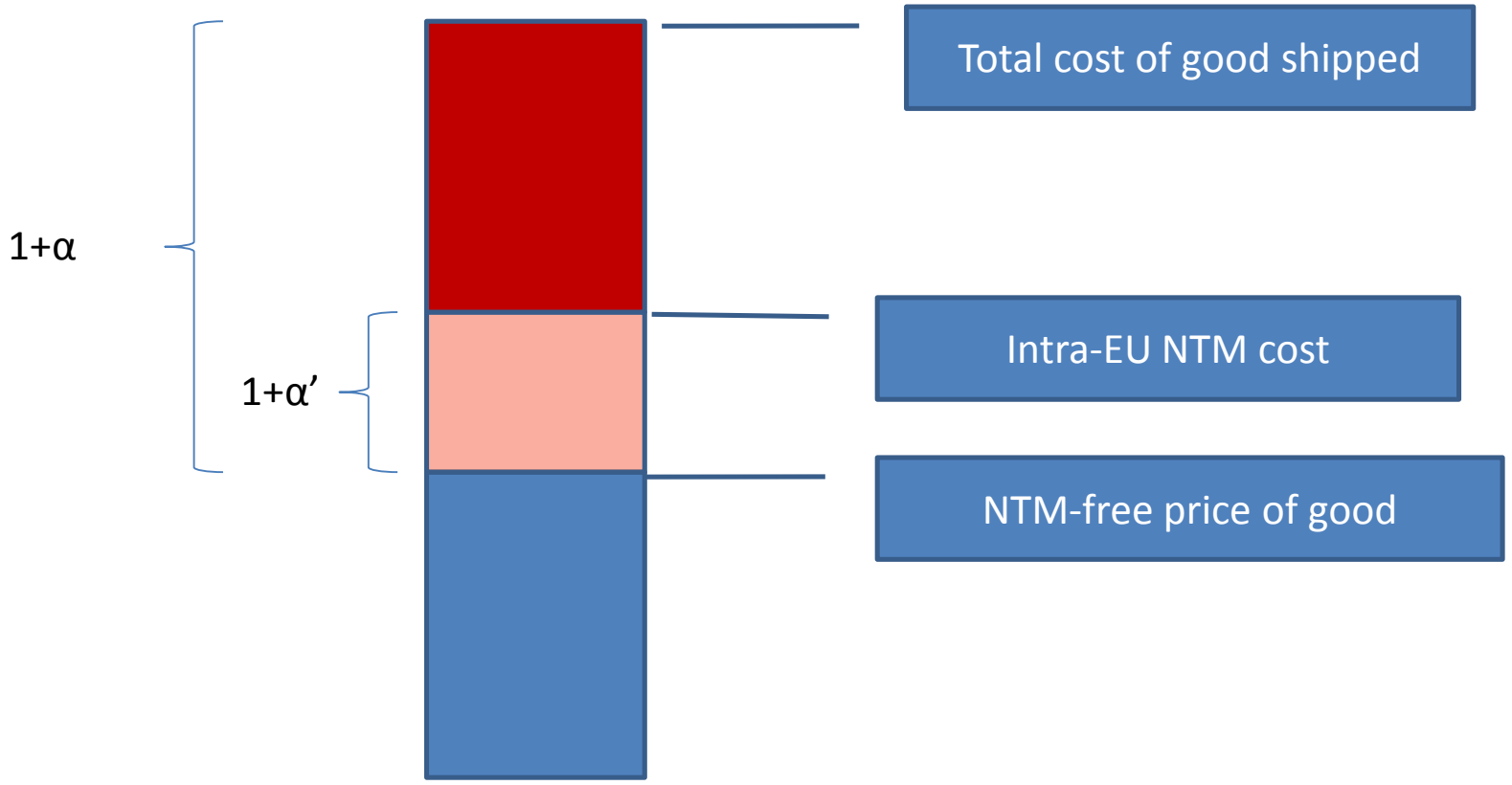


source:See text. Extra-EU(Intra-EU) refers to NTMs faced by non-EU(EU) firms operating in EU.

NTB survey data.

Issues with NTB data and gravity: interpretation of feasibility within FTAs/CUs

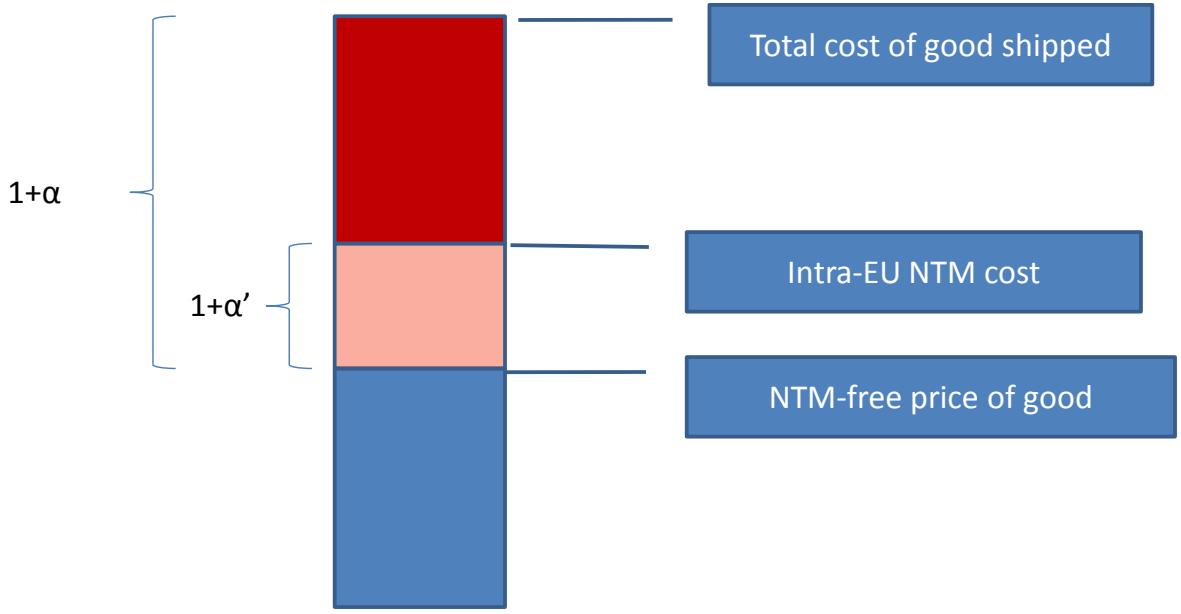
Feasible reductions



Reduction to zero infeasible (and does not maximize welfare): down to intra-EU level (1+α') should be attainable:
Efficiency gain: (α-α')/(1+ α)

Issues with NTB data and gravity: interpretation of feasibility within FTAs/CUs

Feasible reductions



Reduction to zero infeasible (and does not maximize welfare): down to intra-EU level (1+α') should be attainable:
Efficiency gain: (α-α')/(1+ α)

Questions on NTBs for modelling

- How big are the barriers (AVEs)?
- Can they be addressed?
- What is the impact in this case?
  - Fixed costs
  - Marginal costs
  - Market structure
  - Non-economic objectives
- What does this mean for other sectors?
  - Downstream effects
  - General equilibrium effects
- What does this mean for other countries?
  - Discriminatory or not
  - Compliance costs

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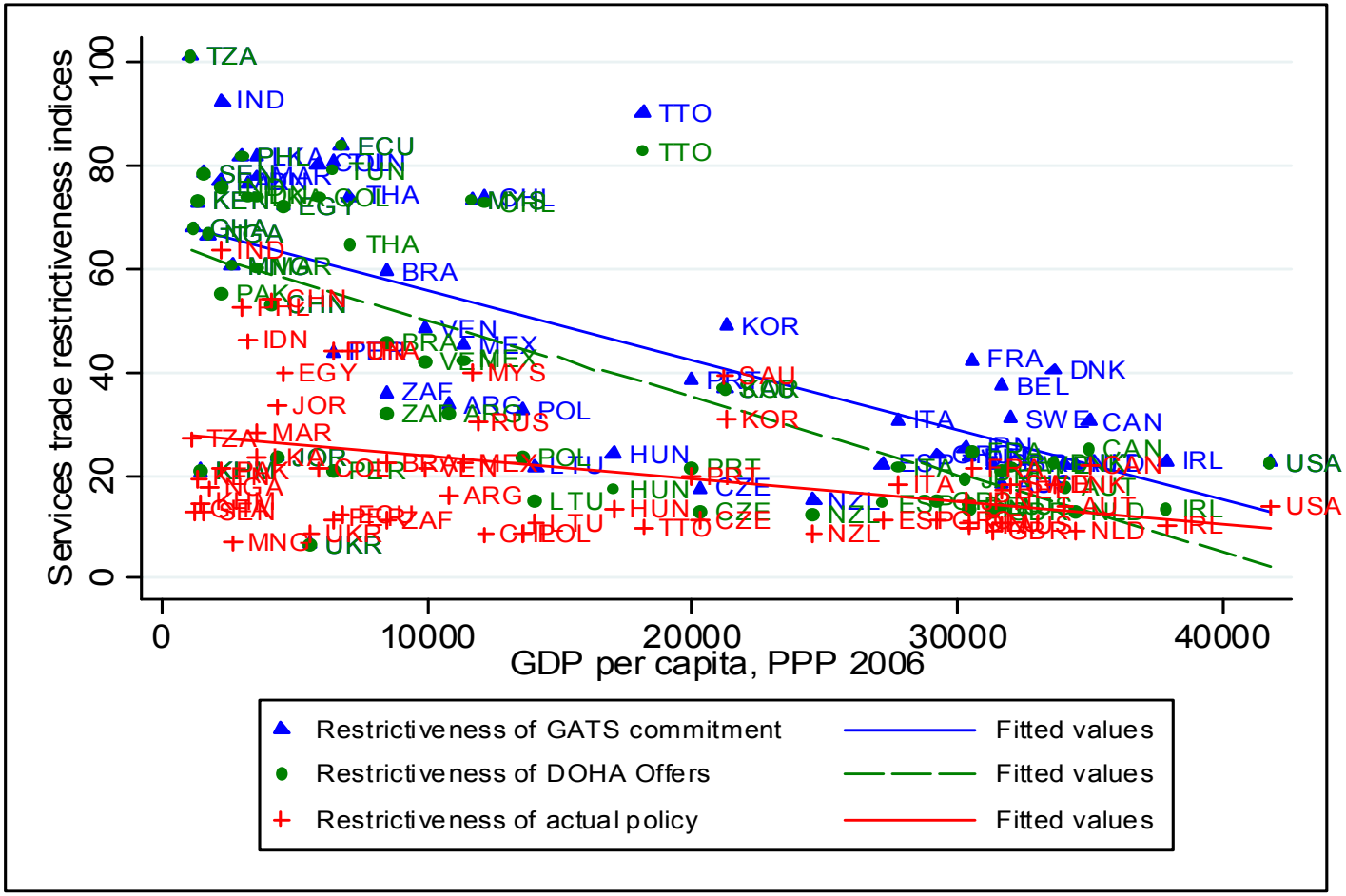
Issues with NTB data: bindings vs applied rates



Borchert, Ingo; Batshur Gootiiz and Aaditya Mattoo (2011)

Note: Francois and Martin (1997, 2002, 2004) obscure papers on bindings and uncertainty.

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CGE implementation

- Data and implementation challenges
  - rents vs iceberg costs
  - Interpretation of econometric evidence
    - Past FTAs as benchmarks
    - What about NTBs not in past FTAs (food, chemicals, regulatory divergence)
  - entry costs vs marginal costs
  - spillovers?
  - bindings vs applied rates
    - will we see policies change?
    - what about uncertainty?

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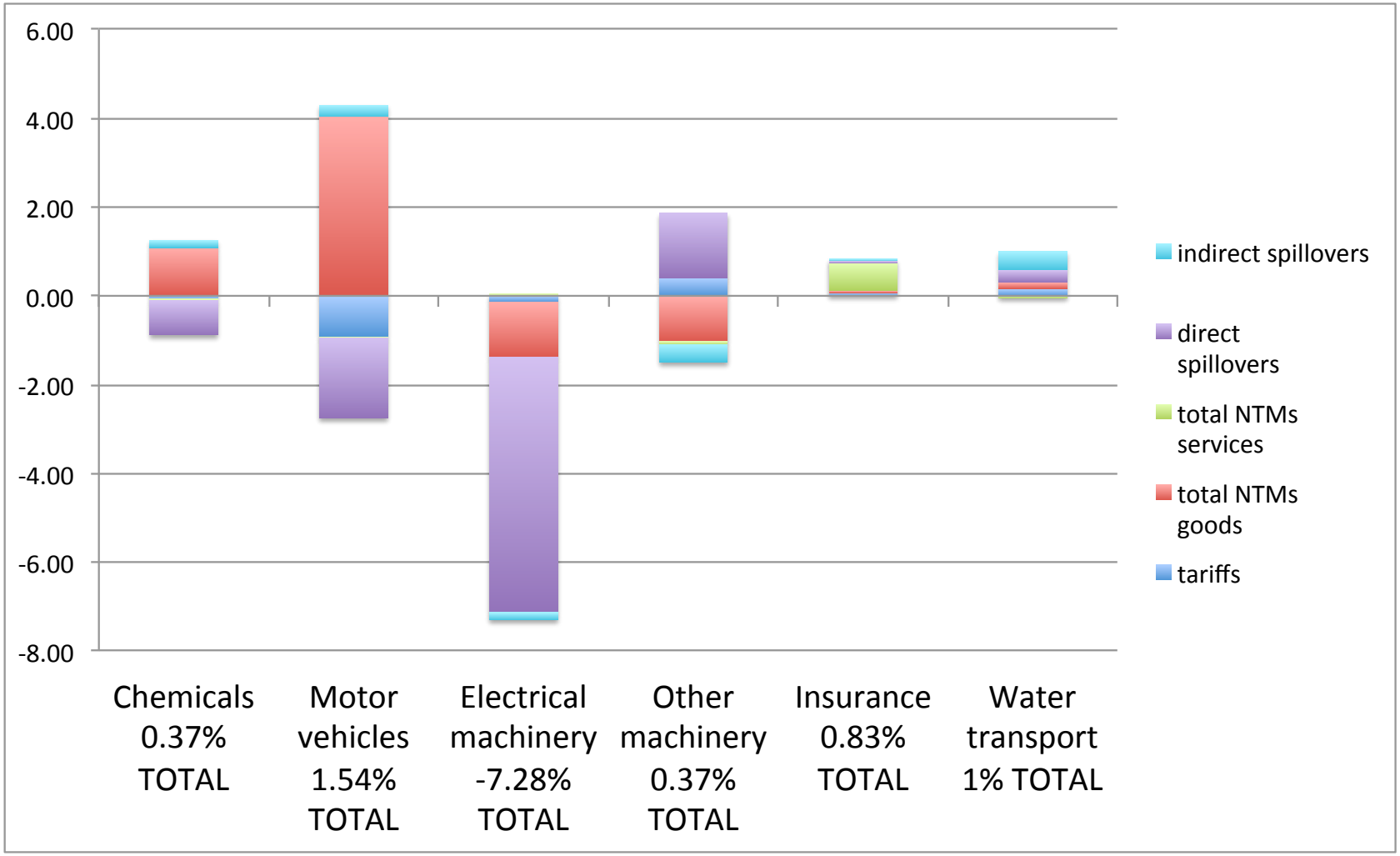
An example: various NTB effects

EU output effects from T-TIP



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Talking Points

- Firm and regulatory survey data
  - MAST-goods. Can we have MAST-services?
- Regulatory contents of PTAs (DESTA+?)
- Issues with gravity
  - Lack of data: can we offer an integration of trade flow, value, and data cube = COMTRADE+BACI+NTBs?
  - How do we focus on the questions we actually need to answer? (MFN vs. preferential, impact of convergence, mutual recognition, etc)
- Sustainability and looking past gravity
  - Is there a way to track progress consistently linked to specific agreements?

Brazil – Measures Affecting Imports of Retreaded Tyres: A Balancing Act

Chad P. Bown, The World Bank

Joel P. Trachtman, Tufts University

Published in ***World Trade Review*** (2009)

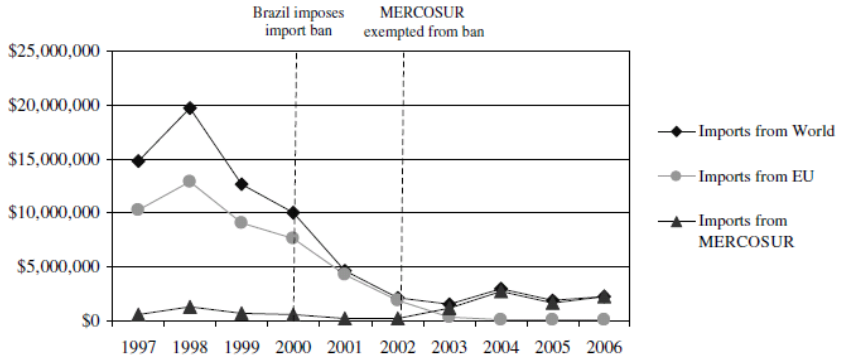
The American Law Institute
Reporter's Studies on WTO Case Law

Chain of Events

- **September 2000:** Brazil imposes ban on imports of retreaded tyres
- **January 2002:** MERCOSUR court rules in favor of a Uruguay legal challenge to Brazil's ban
- **March 2002:** Brazil complies with MERCOSUR ruling by exempting from the ban retreaded tyre imports from MERCOSUR members (Argentina, Paraguay, Uruguay)
- **November 2003:** EU tyre retreading association (BIPAVER) initiates a complaint under the EC's Trade Barriers Regulation
- **June 2005:** EU requests WTO consultations with Brazil under the Dispute Settlement Understanding (DSU); this results in a Panel Report, then Appellate Body Report

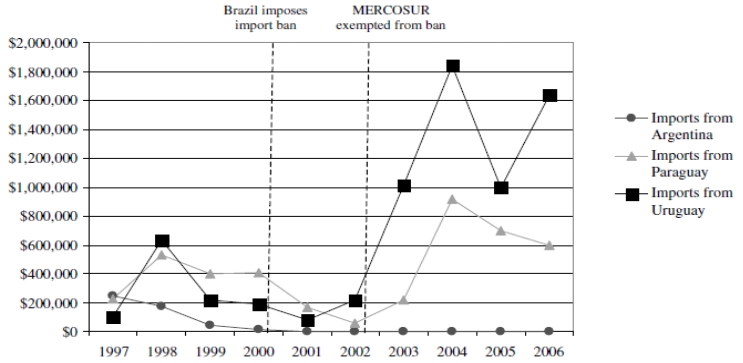
Brazil – Retreaded Tyres: The Markets and Trade at Stake

Figure 1. Brazil's imports of retreaded tyres, 1997–2006



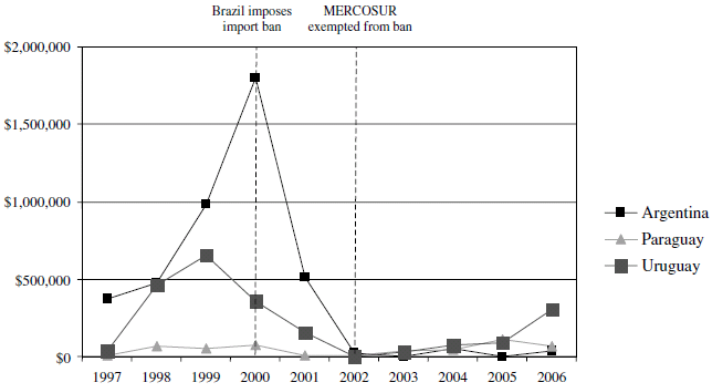
Source: Data collected by authors. Brazil imports under HS (1996) category 401210, data taken from the WTO's Integrated Database (IDB) via WITS.

Figure 2. Brazil's imports of retreaded tyres under MERCOSUR, 1997–2006



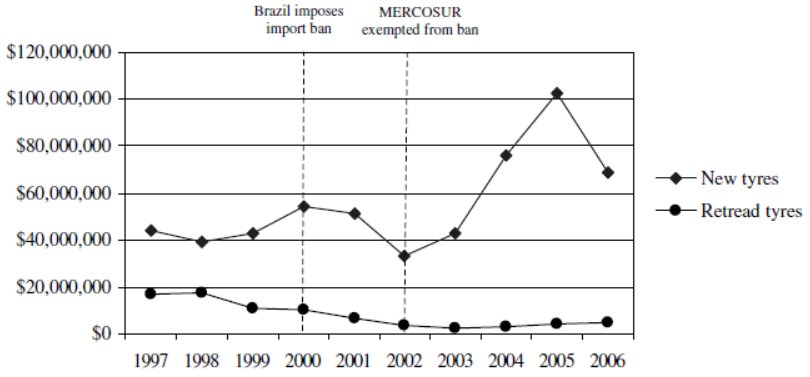
Source: Data collected by authors. Brazil imports under HS (1996) category 401210, data taken from the WTO's Integrated Database (IDB) via WITS.

Figure 3. EU exports of retreaded tyres to other MERCOSUR countries, 1997–2006



Source: Data collected by authors. EU exports under HS (1996) category 401210 (retreaded tyres), data taken from the WTO's Integrated Database (IDB) via WITS.

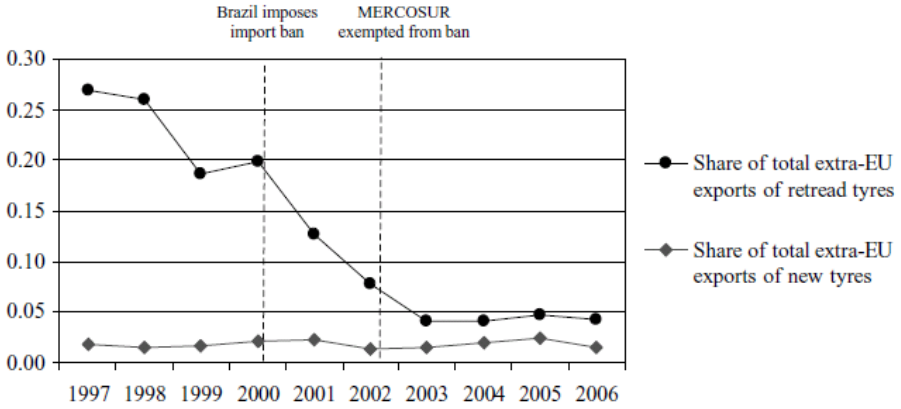
Figure 4. EU exports of tyres to Brazil, 1997–2006



Source: Data collected by authors. EU exports under HS (1996) categories 4011 (new tyres) 401210 (retreaded tyres), data taken from the WTO's Integrated Database (IDB) via WITS.

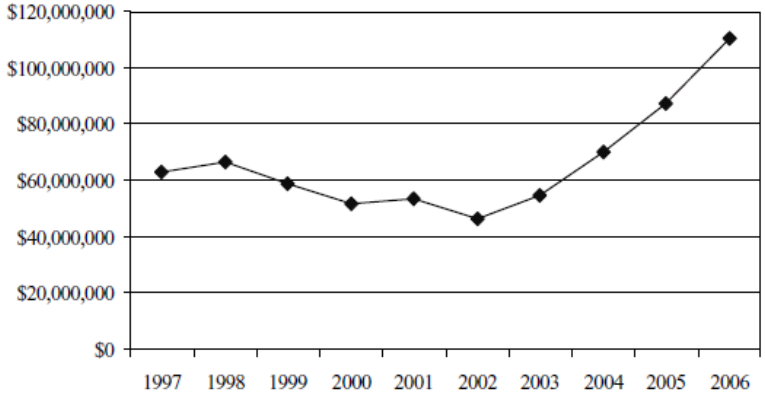
Additional Trade Data on Retreaded Tyres

Figure 5. EU reliance on the Brazilian market for retreaded and new tyre exports, 1997–2006



Source: Data collected by authors. EU exports under HS (1996) categories 4011 (new tyres) 401210 (retreaded tyres), data taken from the WTO's Integrated Database (IDB) via WITS.

Figure 6. Total extra–EU retreaded tyre exports, 1997–2006



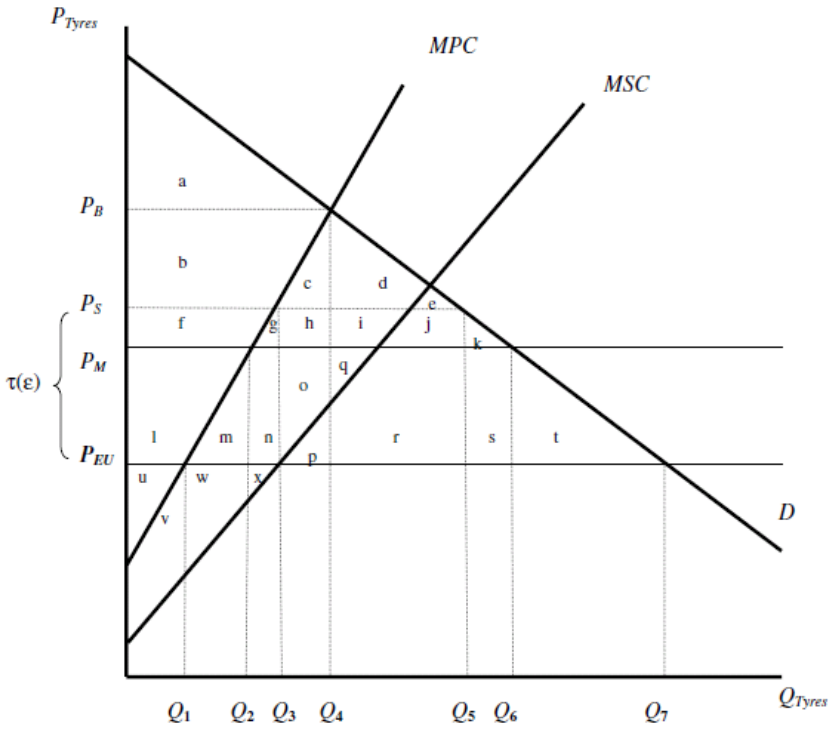
Source: Data collected by authors. EU exports under HS (1996) category 401210 (retreaded tyres), data taken from the WTO's Integrated Database (IDB) via WITS.

Potential Regulatory Concern

- Tyres require disposal after they are used, and this disposal leads to environmental and health costs to society not borne by the consumer (**negative consumption externality**)
- A "Brazilian once-used" tyre – defined as purchased new in Brazil and used one time in Brazil – can be re-treaded to obtain a second use, thereby **delaying disposal** of the tyre
- To (over-) simplify, we will model the production of re-treaded tyres as generating a **local positive production externality** – e.g., it delays the health/environmental costs of ultimate disposal

A Simple Model of Brazil's retreaded tyre market

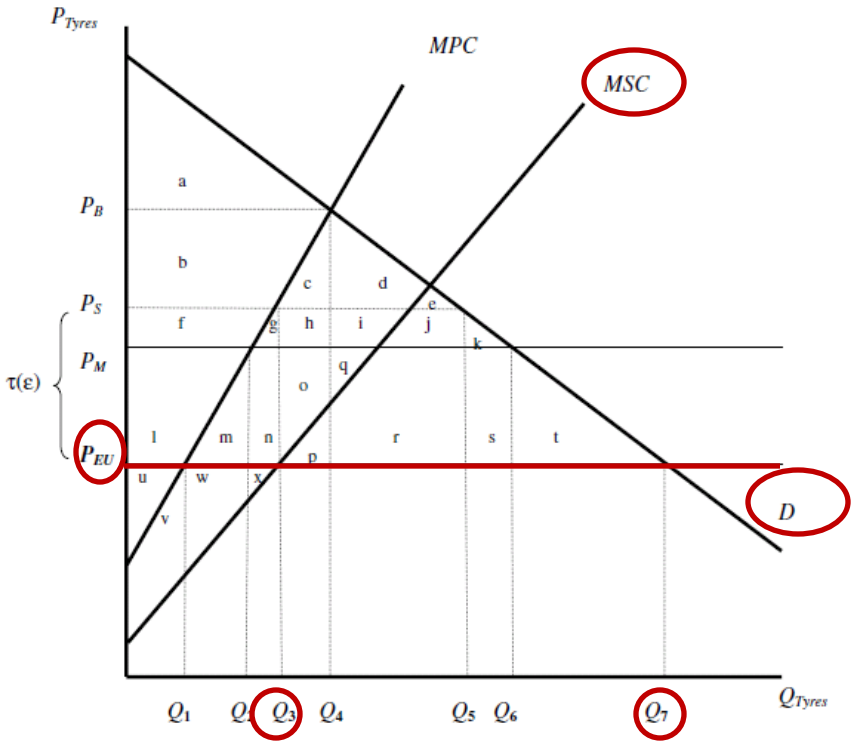
Figure 7. Positive production externality associated with retreading a once-used Brazilian tyre



- **MPC:** private supply curve
- **MSC:** social supply curve (including positive externality)
- **D:** domestic demand
- Brazil is a **small** (price-taking) **importer**
- The EU is a lower cost foreign supplier relative to the rest of MERCOSUR ($P_{EU} < P_M$)

A Simple Model of Brazil's retreaded tyre market (cont.)

Figure 7. Positive production externality associated with retreading a once-used Brazilian tyre

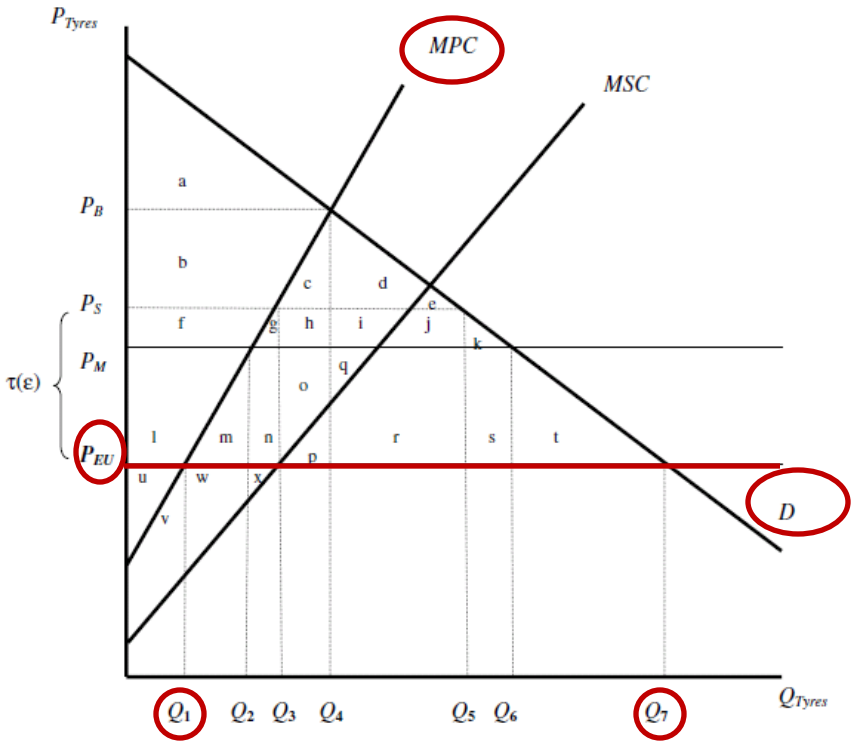


1. Social Optimum: equate MSC=MSB

- **Q_7:** consumption
- **Q_3:** domestic production
- **$M = Q_7 - Q_3$:** import from the low cost foreign provider (EU)

A Simple Model of Brazil's retreaded tyre market (cont.)

Figure 7. Positive production externality associated with retreading a once-used Brazilian tyre



2. Market Equilibrium: equate MPC=MPB

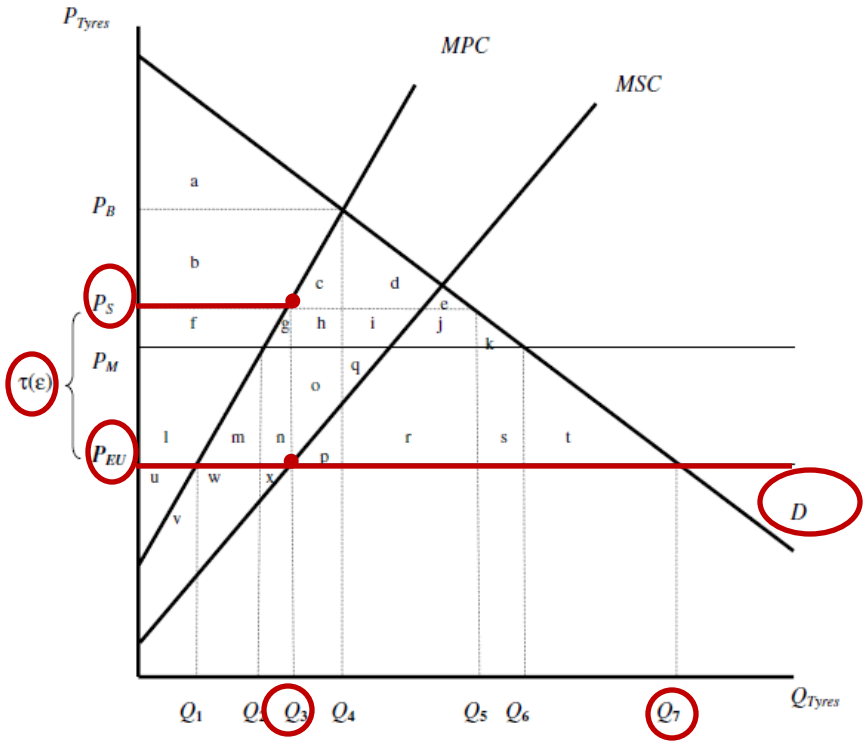
- **Q_7:** consumption
- **Q_1:** domestic production
- **$M = Q_7 - Q_1$:** import from the low cost foreign provider (EU)

Compared to social optimum:

- Imports too large
- **Inefficiency?** Too little domestic production (**$Q_1 < Q_3$**)

A Simple Model of Brazil's retreaded tyre market (cont.)

Figure 7. Positive production externality associated with retreading a once-used Brazilian tyre



3. First –Best Policy:

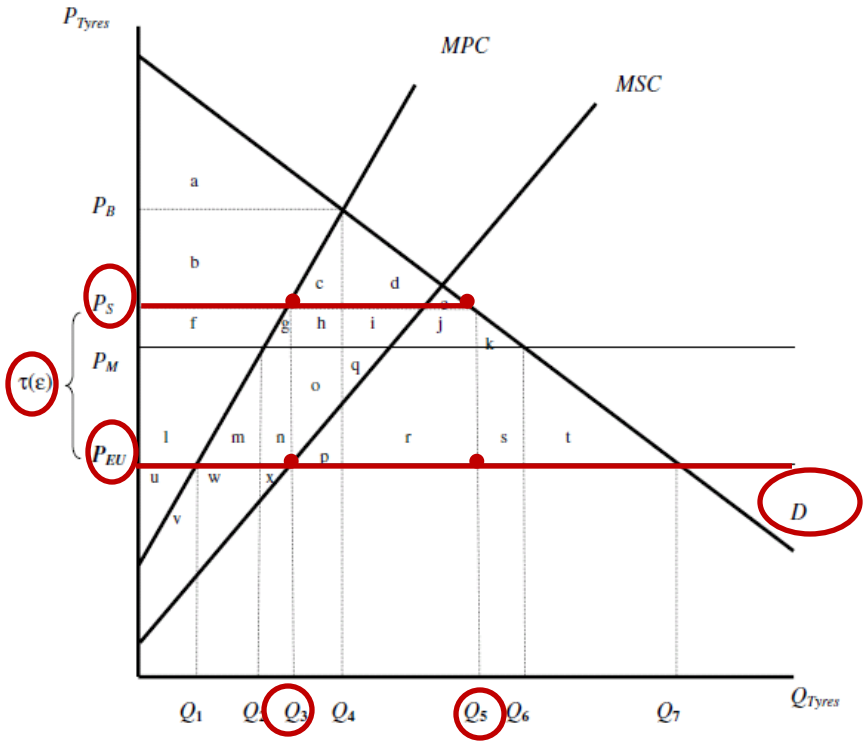
- '**Targeting principle**' (Bhagwati and Ramaswami, 1963)
- **Subsidy to production** of re-retreaded tyres of $\tau(\varepsilon) \equiv P_S - P_{EU}$
- Q_7: consumption
- Q_3: domestic production
- $M = Q_7 - Q_3$: import from the low cost foreign provider (EU)

Compared to market equilibrium:

- Imports are slightly smaller because domestic production is larger ($Q_3 > Q_1$)

A Simple Model of Brazil's retreaded tyre market (cont.)

Figure 7. Positive production externality associated with retreading a once-used Brazilian tyre



4. Second–Best Policy

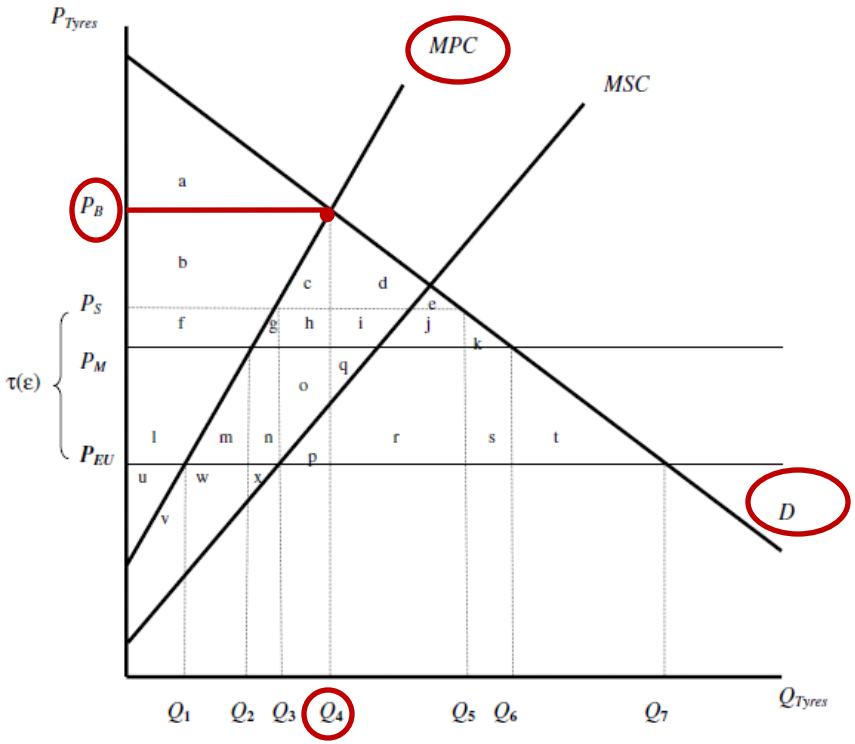
- **Import tariff on** re-retreaded tyres of $\tau(\varepsilon) \equiv P_S - P_{EU}$
- Q_5: consumption
- Q_3: domestic production
- $M = Q_5 - Q_3$: import from the low cost foreign provider (EU)

Compared to first-best:

- Imports are smaller because domestic consumption is smaller ($Q_5 < Q_7$)
- 'By-product' distortion introduced by second best policy which increases prices to consumers

Brazil's Actual Policies: potentially second best?

Figure 7. Positive production externality associated with retreading a once-used Brazilian tyre



5. Brazil's 2000 Import Ban as Second–Best?

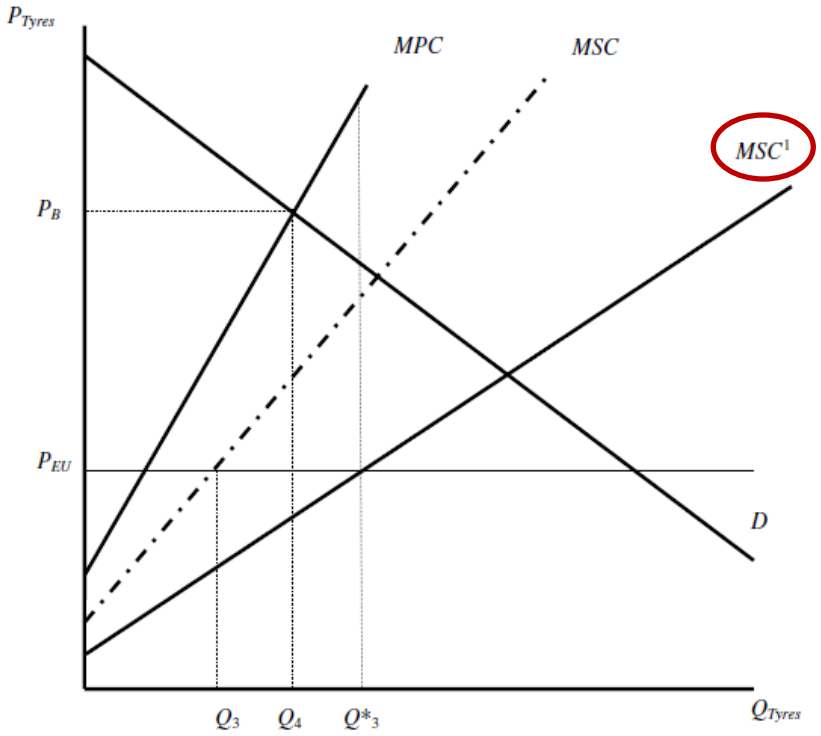
- **Import ban on** re-retreaded tyres creates scarcity so that price increases to P_B
- Q_4: consumption
- Q_4: domestic production
- **M = 0 :** zero imports

Compared to second-best tariff:

- Economic welfare falls
- Large loss in consumer surplus
- Loss of all government (tariff) revenue
- Too much domestic production of retreaded tyres ($Q_4 > Q_3$)

What would it take for Brazil's actual import ban policy to approach a second best policy?

Figure 8. Increasing the size of the externality



What if the externality is really large?

- **MSC^1** is marginal social cost (not MSC)
- Intersection of **MSC^1** and **P_{EU}** occurs at **$Q^*_3 \geq Q_4$**

Compared to social optimum:

- Large production subsidy (so large that Brazil would become a net exporter of retreaded tyres at **Q^*_3**)

Compared to a (prohibitive) import tariff:

- Same economic welfare

- **Conclusion: assessment of whether Brazil's import ban is "legitimate" second best policy requires information on the size of the underlying externality**

Is Brazil's import ban a "legitimate" second best policy?

- This requires information on the size of the underlying externality
- ***Specifically, what are the costs to Brazilian society of the disposal of tires?*** (I.e., how much additional social benefit is achieved by delaying disposal through re-treading?)
- Need to put a monetary figure on the externality to evaluate different policy options

Key implication for the NTM data work:

- Need to develop policy data sets so transparently so that they can be combined with other data sets (regulations, trade, production, externalities) to contribute useful information.

Additional problems not helping Brazil's argument:

- Brazil allows "exemptions" to MERCOSUR partners and so does not fully enforce the import ban, this leads to a further decrease in domestic production (Figure 10)
- Brazil allows imports of used tyres (substitution in consumption for re-treaded tyres); this shifts in demand for re-treaded tyres, decreasing domestic production further (Figure 9)

Figure 9. Imports of used tyres and impact on retreads of once-used Brazilian tyres

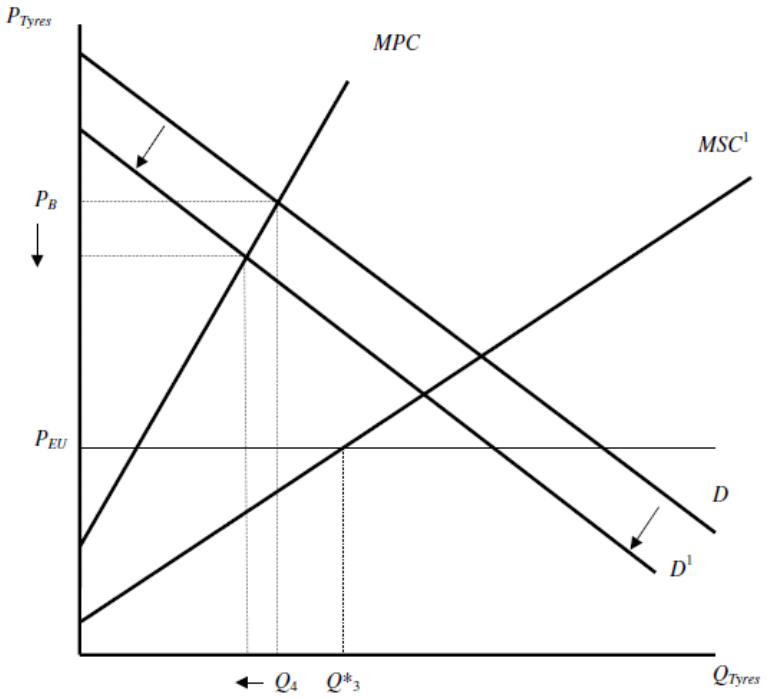
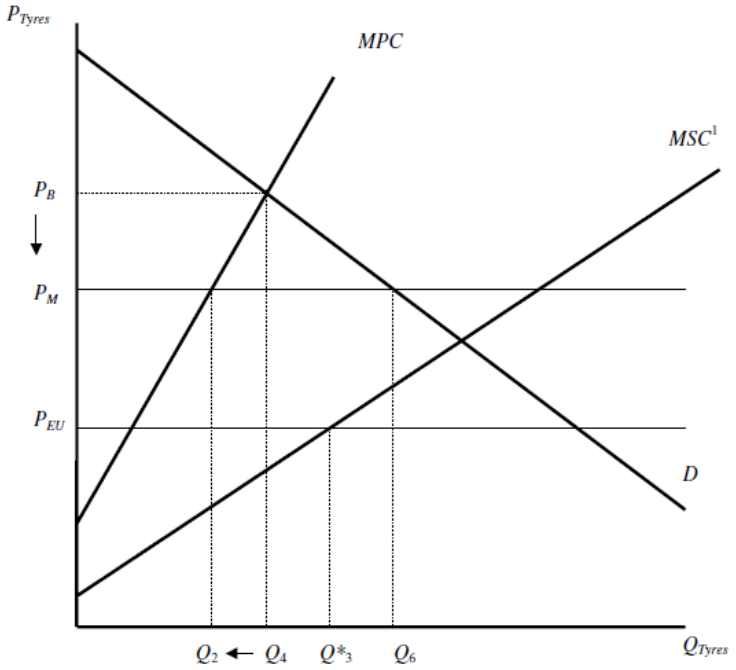


Figure 10. Import-ban exemption for MERCOSUR partners and impact on retreads of once-used Brazilian tyres



WP1: Methodology Inventory

Ronald B. Davies (University College Dublin)

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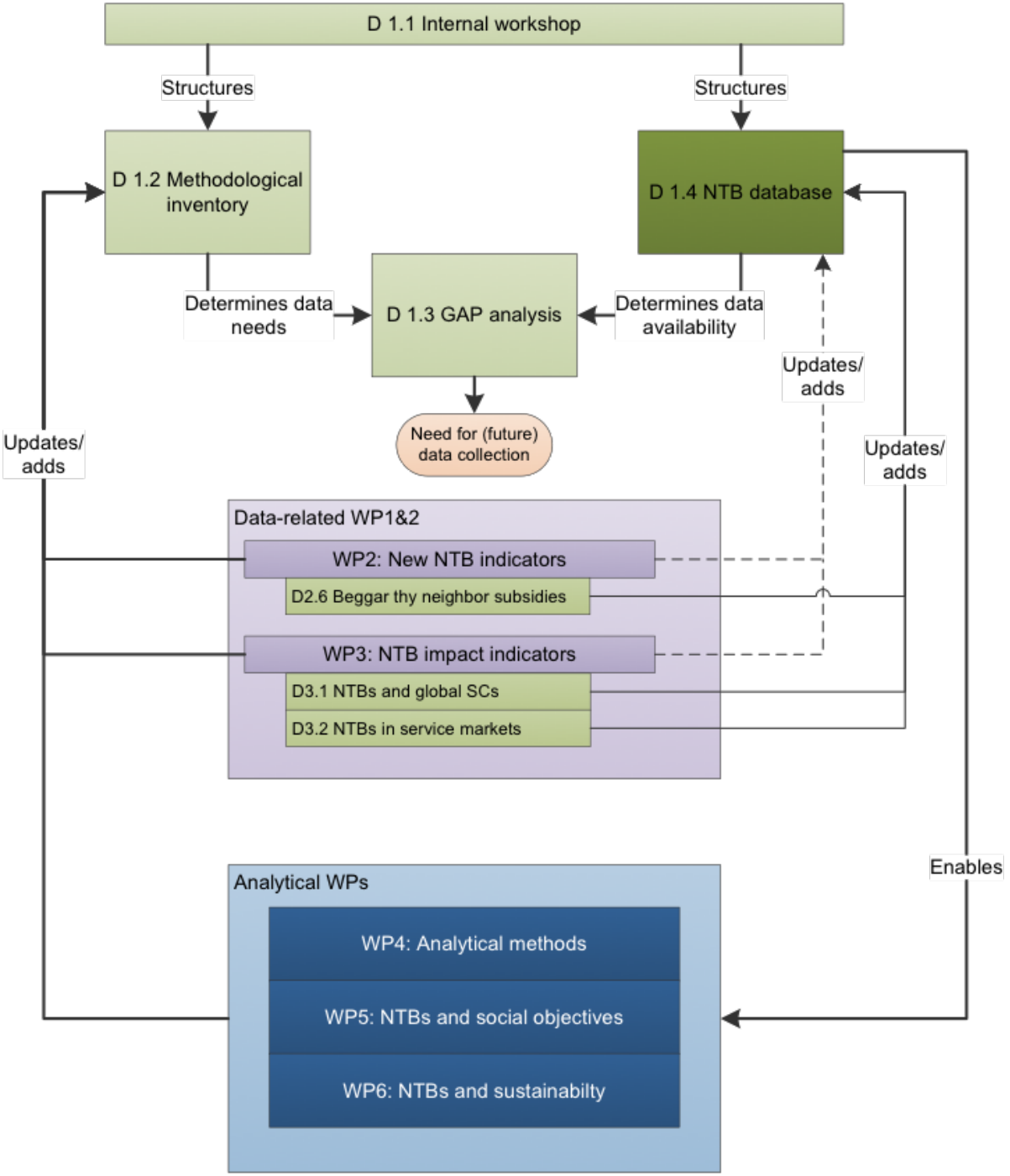

D 1.1 Internal workshop
Structures
Structures
D 1.2 Methodological inventory
D 1.4 NTB database
Determines data needs
D 1.3 GAP analysis
Determines data availability
Updates/ adds
Need for (future) data collection
Updates/ adds
Updates/ adds
Data-related WP1&2
WP2: New NTB indicators
D2.6 Beggar thy neighbor subsidies
WP3: NTB impact indicators
D3.1 NTBs and global SCs
D3.2 NTBs in service markets
Enables
Analytical WPs
WP4: Analytical methods
WP5: NTBs and social objectives
WP6: NTBs and sustainabilty

Methodology Inventory

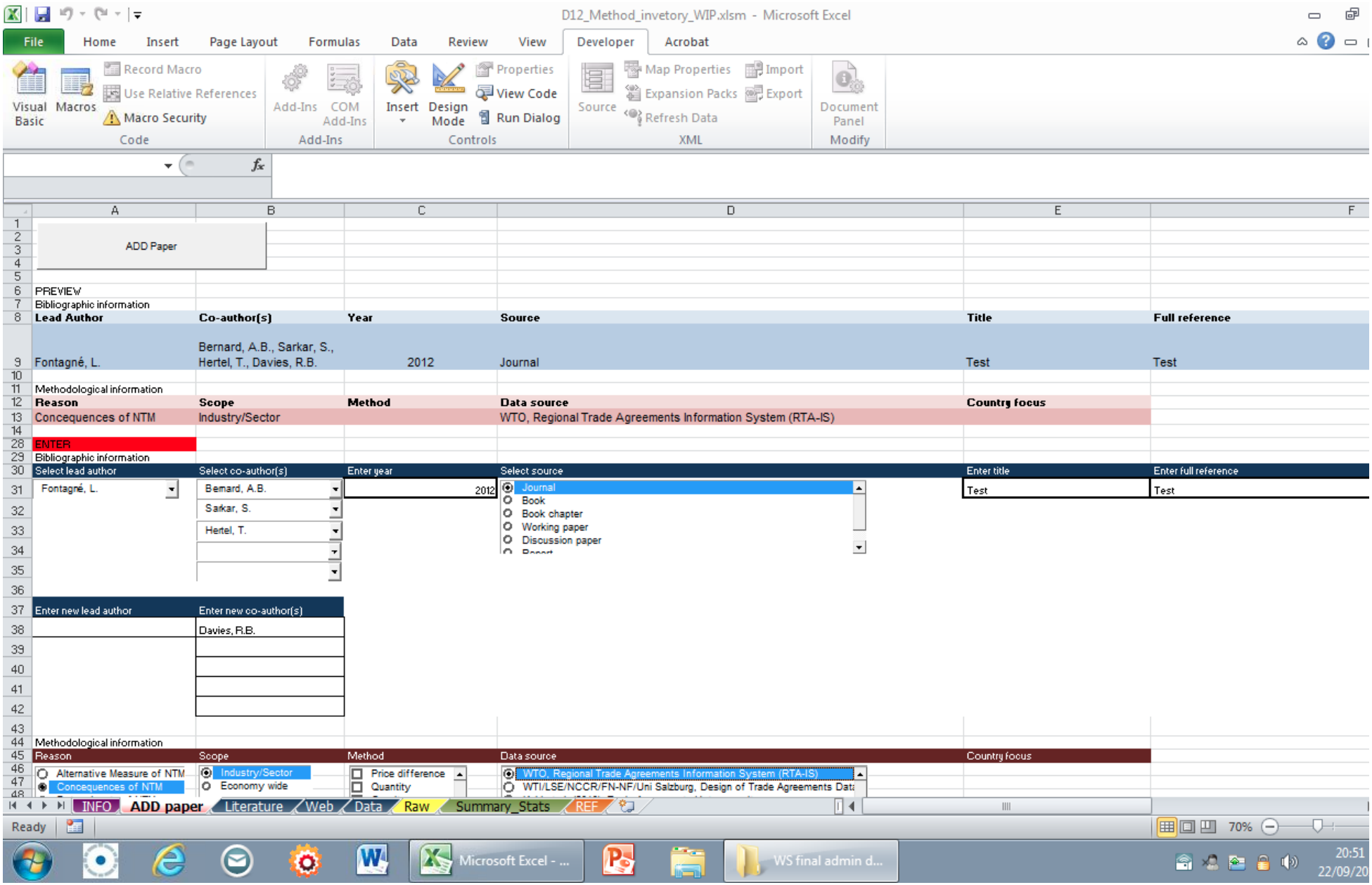
- The methodological inventory: *"develop an inventory of methodological approaches for NTM estimation and assessment. It will do so by surveying both the current state of the art academic literature and the efforts of various policy institutions..."*

$\Rightarrow$ Comprehensive overview of what is out there

$\Rightarrow$ A meta-analysis in terms of methods (of course), but also data used, as well as geographical scope (?)

$\Rightarrow$ A first step in linking methods to data, i.e. basis for the GAP analysis

$\Rightarrow$ A living doc that is updated in the course of PRONTO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Methodology Inventory

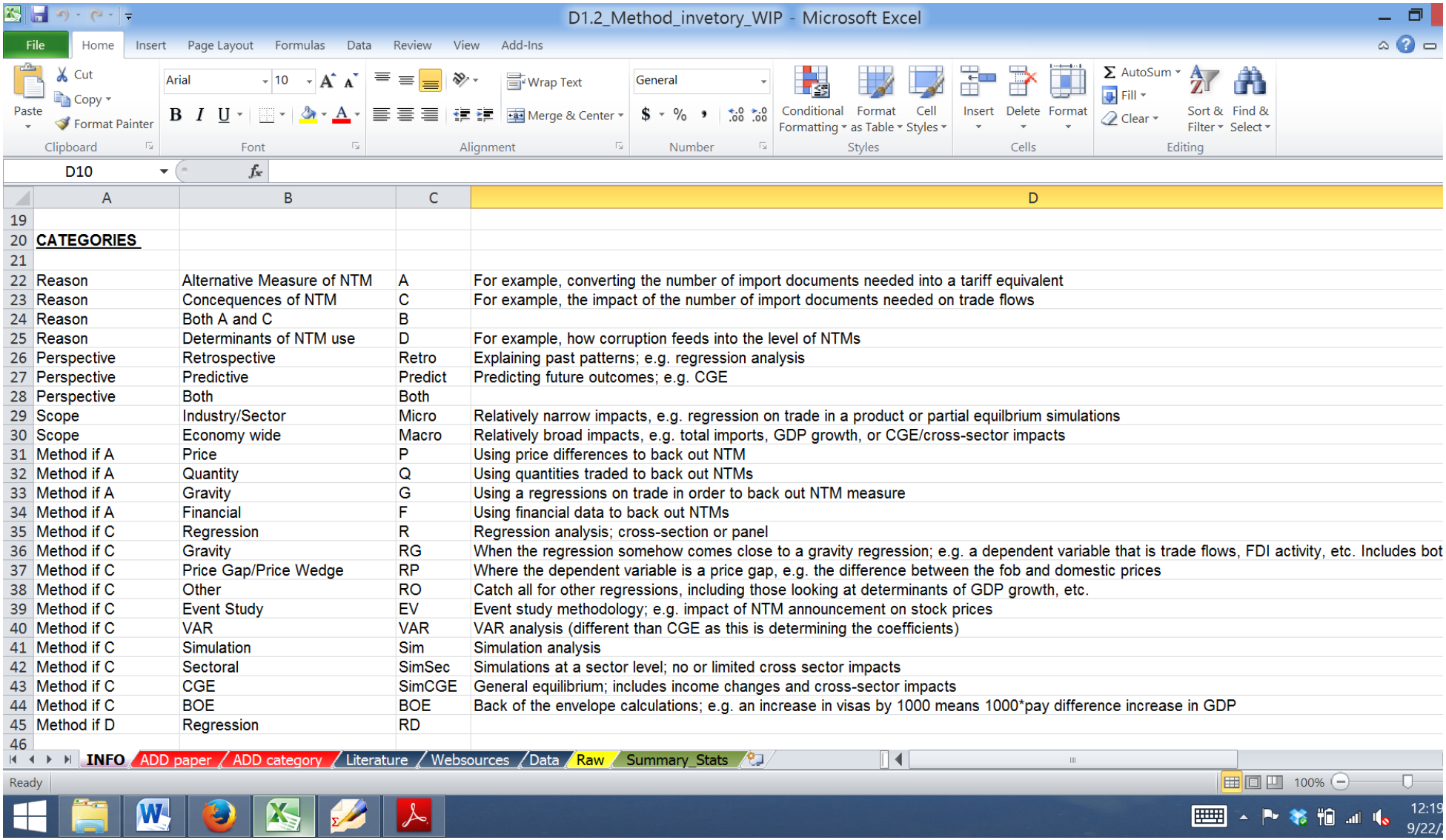
- In thinking about classifying *how* NTM measures are used:

$\Rightarrow$ Reason: what is the goal?

$\Rightarrow$ Perspective: looking backwards or forwards?

$\Rightarrow$ Scope: How wide is the net?

$\Rightarrow$ Method: in what way is the NTM measure used?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D10
A B C D
19
20 CATEGORIES
21
22 Reason Alternative Measure of NTM A For example, converting the number of import documents needed into a tariff equivalent
23 Reason Concequences of NTM C For example, the impact of the number of import documents needed on trade flows
24 Reason Both A and C B
25 Reason Determinants of NTM use D For example, how corruption feeds into the level of NTMs
26 Perspective Retrospective Retro Explaining past patterns; e.g. regression analysis
27 Perspective Predictive Predict Predicting future outcomes; e.g. CGE
28 Perspective Both Both
29 Scope Industry/Sector Micro Relatively narrow impacts, e.g. regression on trade in a product or partial equilbrium simulations
30 Scope Economy wide Macro Relatively broad impacts, e.g. total imports, GDP growth, or CGE/cross-sector impacts
31 Method if A Price P Using price differences to back out NTM
32 Method if A Quantity Q Using quantities traded to back out NTMs
33 Method if A Gravity G Using a regressions on trade in order to back out NTM measure
34 Method if A Financial F Using financial data to back out NTMs
35 Method if C Regression R Regression analysis; cross-section or panel
36 Method if C Gravity RG When the regression somehow comes close to a gravity regression; e.g. a dependent variable that is trade flows, FDI activity, etc. Includes bot
37 Method if C Price Gap/Price Wedge RP Where the dependent variable is a price gap, e.g. the difference between the fob and domestic prices
38 Method if C Other RO Catch all for other regressions, including those looking at determinants of GDP growth, etc.
39 Method if C Event Study EV Event study methodology; e.g. impact of NTM announcement on stock prices
40 Method if C VAR VAR VAR analysis (different than CGE as this is determining the coefficients)
41 Method if C Simulation Sim Simulation analysis
42 Method if C Sectoral SimSec Simulations at a sector level; no or limited cross sector impacts
43 Method if C CGE SimCGE General equilibrium; includes income changes and cross-sector impacts
44 Method if C BOE BOE Back of the envelope calculations; e.g. an increase in visas by 1000 means 1000*pay difference increase in GDP
45 Method if D Regression RD
46
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Purpose

- What is the reason that the study is using a NTM measure?

$\Rightarrow$ Alternative Measure of NTM (A): converting the number of import documents needed into a tariff equivalent

$\Rightarrow$ Concequences of NTM (B): the impact of the number of import documents needed on trade flows

$\Rightarrow$ Both: both A and C

$\Rightarrow$ Determinants of NTM use (D): how corruption feeds into the level of NTMs

- This informs a lot about the norms for how the measure is being used

Perspective

- Is the NTM measure being used to explain past data patterns or predict future outcomes?

$\Rightarrow$ Retrospective (Retro): regression analysis on impact of past liberalization

$\Rightarrow$ Predictive (Predict): CGE predictions of liberalization

$\Rightarrow$ Both (Both): both Retro and Predict

- This informs the norms as well as type of measure, e.g. CGE would probably need tariff-equivalent whereas regression could use 0/1

Scope

- How wide is the study's focus?

$\Rightarrow$ Industry/Sector (Micro): Narrow impacts, regression on trade in a product or partial eq. simulations

$\Rightarrow$ Economy wide (Macro): Broad impacts, total imports, GDP growth, or CGE/cross-sector impacts

- This is a bit of a judgement call, but cross-sector impacts would be more Macro

Methods

- Given the differing approaches under the different reasons, we break this down into:

$\Rightarrow$ Method if A (alternative measure)

$\Rightarrow$ Method if C (consequences)

$\Rightarrow$ Method if B (create alternative measure and estimate consequence)

$\Rightarrow$ Method if D (determinant of NTM)

Method if Alternative Measure Reason

- Method determined by the type of data used

$\Rightarrow$ Price (P): Using price differences to back out NTM

$\Rightarrow$ Quantity (Q): Using quantities traded to back out NTMs

$\Rightarrow$ Gravity (G): Using a regressions on trade in order to back out NTMs

$\Rightarrow$ Financial (F): Using financial data to back out NTMs

Method if Consequence Reason

- Largest set of different methodologies
- Three sub-categories

$\Rightarrow$ Regression (R): Regression analysis; cross-section or panel

$\Rightarrow$ Simulation (Sim): Simulation analysis

$\Rightarrow$ Back of the Envelope (BOE): Simple calculations; e.g. an increase in visas by 1000 means 1000*pay difference increase in GDP

Regression Methods if Consequence Reason

- Gravity (RG): When the regression is close to a gravity regression; e.g. a dependent variable that is trade flows, FDI, includes both extensive and intensive margins
- Price Gap/Price Wedge (RP):Where the dependent variable is a price gap, e.g. the difference between the fob and domestic prices
- Other (RO): Catch all for other regressions, including those looking at determinants of GDP growth, etc.
- Event Study (EV): Event study methodology; e.g. impact of NTM announcement on stock prices
- VAR (VAR): VAR analysis (different than CGE as this is determining the coefficients)

Simulation Methods if Consequence Reason

- Sectoral Simulation (SimSec): Simulations at a sector level; no or limited cross sector impacts
- CGE (SimCGE): General equilibrium; includes income changes and cross-sector impacts

Method if Determinant of NTM Reason

- Regression (RD): determinants of AD duties

Methodology Inventory

- Four fields of categorization:

$\Rightarrow$ Reason: what is the goal?
$\Rightarrow$ Perspective: looking backwards or forwards?
$\Rightarrow$ Scope: How wide is the net?
$\Rightarrow$ Method: in what way is the NTM measure used?

- Categories are *not* mutually exclusive
- This is intended to be a living classification