

# Analyzing Non-tariff measures: collating evidence and setting research agenda

Emerging trends and issues in  
monitoring the use of NTMs

26-27 April, 2017

UNCC, Bangkok

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## I. Setting the issue: definition and classification of NTMs

- NTMs are generally defined as 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 ([UNCTAD/DITC/TAB/2012/2/Rev.1](#))
- The latest (2012) version of the classification of NTMs prepared by the MAST group (Multi-Agency Support Team) encompasses 16 chapters (A to P), where each individual chapter is divided into groupings with depth up to three levels (one, two and three digits)

# NTM classification by chapter

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

## NTM classification by chapter: technical measures

- A. SPS. Measures ensuring food safety and measures for preventing dissemination of disease or pests. Conformity-assessment measures related to food safety, such as certification, testing and inspection, and quarantine
  - B. TBT. Measures such as labelling, standards on technical specifications and quality requirements, and other measures protecting the environment. Conformity-assessment measures related to technical requirements, such as certification, testing and inspection
  - C. Measures related to preshipment inspections and other customs formalities
- See [World Trade Report 2012](#)

## NTM classification by chapter: non technical measures

- D. Measures implemented to counteract particular adverse effects of imports in the market of the importing country, including measures aimed at unfair foreign trade practices. They include antidumping, countervailing, and safeguard measures
- See [World Trade Report 2009](#)

## NTM classification by chapter: non technical measures (ct'd)

### Hard trade policy measures

- E. Licensing, quotas and other quantity control measures, including tariff rate quotas (TRQs)
- F. Price-control measures implemented to control or affect the prices of imported goods. Examples include measures to support the domestic price of certain products when the import prices of these goods are lower
  - Traditionally used in trade policy

## NTM classification by chapter: non technical measures (ct'd)

- G. Measures restricting the payments of imports, for example when the access and cost of foreign exchange is regulated.  
Measures imposing restrictions on the terms of payment
- H. Measures affecting competition. Mainly monopolistic measures, such as State trading, sole importing agencies or compulsory national insurance or transport
- I. Trade-related investment measures, including local content requirements or measures requesting that investment be related to export in order to balance imports

## NTM classification by chapter: non technical measures (ct'd)

### Marketing after imports

- J. Restrictive measures related to the internal distribution of imported products
- K. Restrictions on post-sales services, for example, restrictions on the provision of accessory services

## NTM classification by chapter: non technical measures (ct'd)

### Behind-the-border policies

- L. Measures that relate to the subsidies that affect trade
- M. Restrictions bidders may find when trying to sell their products to a foreign government
- N. Restrictions related to intellectual property measures and intellectual property rights
- O. Measures that restrict the origin of products or its inputs

## NTM classification by chapter: non technical measures (ct'd)

### Export measures

- P. Measures a country applies to its exports: export taxes, export quotas and export prohibitions
- See World Trade Report 2010 ([section D](#)) and World Trade Report 2014 ([section D](#))

## II. Main sources of information on NTMs

- Due to the diverse nature of NTMs, NTM data are naturally patchy
- Each data source typically sheds light on a small part of the NTM universe
- The light it sheds depends, among others:
  - On the specific purpose for which the data have been collected
  - On how they have been collected, i.e. whether a measure is simply reported/notified or whether there is a complaint relating to the measure

## “Comprehensive” dataset: WITS [catalogue](#)

- [Example](#)
- Advantages
  - Wide country availability
  - Measures can be followed over time (since 2010)
  - Easily accessible and downloadable
- Disadvantages
  - Measures other than contingent trade protective measures (D) only available since 2010
  - Only “extensive margin” information on whether the measure is in place, and on whether coverage is full or partial

## Other “comprehensive” datasets

- ITC [MACMAP](#)
- ITC [business surveys](#)
- [PRONTO](#)'s NTM-MAP
  - Three indexes as proxies for NTMs occurrence: i) frequency index; ii) coverage ratio; and iii) prevalence score
  - Those indices are computed for five different categories of NTMs: i) SPS; ii) TBT; iii) PSI; iv) Price Control; and v) Quantitative Restrictions
  - Coverage: 63 countries for one year over the period 2010-2012 at the country level and two different product disaggregation levels (HS-2 and HS-Section)
  - Description [here](#) and data [here](#)

## Specific datasets: WTO sources of information

- WTO notifications (A, B, D, E, P of MAST classification)
  - Available on [I-TIP Goods](#)
  - Available at IMS for [SPS](#) and [TBT](#)
- Specific Trade Concerns ([SPS](#) and [TBT](#))
  - Advantage of STCs over notifications or traditional information on the existence of regulations is that they identify measures that are perceived by exporters and/or governments as major obstacles to trade (i.e. they are important enough that countries whose exports are affected raise a concern in the WTO committees)
  - As such, the information they provide relates to restrictive trade measures only
  - As Beghin et al. (2014) show, almost 40% of the product lines affected by NTMs in WITS database are actually trade-facilitating measures rather than trade-restrictive ones

## Specific datasets: other sources

- Other PRONTO NTM databases
  - Special Tax treatment as Trade Policy
  - Domestic Environmental Taxes Database
- ITC [standards map](#)
- OECD raw materials export restrictions [database](#)
  - Inventory containing information on export regulations in the raw materials sector, namely minerals, metals and wood
  - It records measures known to restrain export activity from 2009-2014 at the 6-digit level of HS2007 classification

### III. How about services?

In services, from an economic perspective, every measure can be considered an NTM

- WTO & World Bank [services I-TIP](#)
- OECD STRI
  - Services trade restrictiveness across 19 sectors in 44 OECD and partner countries for 3 years (2014-2016)
  - [Methodology](#) and [data](#)
- World Bank [STRI](#)
  - Services trade restrictiveness across 19 sectors in 103 OECD and non OECD countries in the mid 2000's

## IV. NTM research frontier

- NTMs and trade costs
  - Tariff equivalent of NTMs
- Trade policy substitution
- How NTMs affect firm level outcomes
- NTM transparency
- Determinants of export restrictions

## NTMs and trade costs

- Ongoing WTO project on trade costs in the global economy
  - How do trade policy measures, including NTMs, contribute to trade costs along value chains
  - See also [Ghodsí and Stehrer \(2016\)](#)
- Tariff equivalents: example with services NTMs ([Fontagné et al., 2016](#))

## Trade policy substitution

- There is some literature on the substitution between tariffs and anti-dumping (AD) duties (Falvey and Reed, 2002; Feinberg and Reynolds, 2007; Moore and Zanardi, 2011; Bown and Tovar, 2011). The consensus among the studies is that trade liberalization increases the likelihood of AD filings...
- ...and some literature on the more general relationship between tariff reduction and the imposition of NTMs (Goldberg and Pavcnik, 2005; Kee et al., 2009; Broda et al., 2008; Limão and Tovar, 2011; Aisbett and Pearson, 2012)

## Trade policy substitution (ct'd)

- Beverelli et al. (under review, old WP [here](#)) look at product standards
- They present theoretical evidence that the extent of trade policy substitution depends on the cost differential between domestic and foreign firms in complying with product standards.
  - The model suggests the prevalence of trade policy substitution in developed economies, where the costs of compliance are relatively low
- They test and validate this prediction using TBT STCs database on NTMs that identifies actual trade restrictions
- They further examine the protectionist use of trade policy substitution matching STC data with notification data

## How NTMs affect firm level outcomes

- How NTMs affect firm participation in international trade
  - [Fontagné et al. \(2015\)](#)
  - [Fontagné and Orefice \(2016\)](#)
- How services trade restrictions affect firm outcomes
  - [Arnold et al. \(2011\)](#) among others

## NTM transparency

- [Ing et al. \(2016\)](#)
  - Index of NTM transparency based on notifications to the WTO under the SPS and TBT agreements, the existence of a trade portal giving ready access to trade-relevant regulations, the existence of NTM data collected under the MAST classification, and the results of an experiment conducted between 2015 and 2016

# Determinants of export restrictions

- Beverelli et al. (in progress)
  - Are export restrictions on industrial raw materials used as tools of active industrial policy for economic development or as a response to tariff escalation?
  - We aim at showing – theoretically and empirically – the importance of input-output linkages between downstream manufacturing sectors and upstream natural resources sectors for the imposition of export restrictions upstream