

Non-Tariff Measures becoming ever more important - but also trickier to evaluate

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Book presentation „Focus on External Trade 2017/2018“

Protectionism: Causes, manifestations, economic effects

WKÖ/OeNB

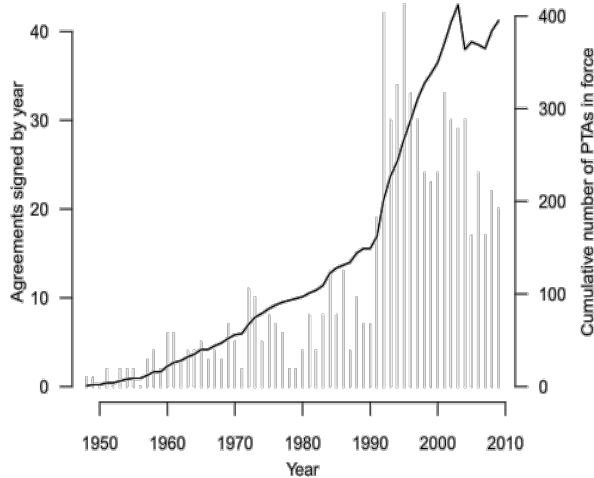
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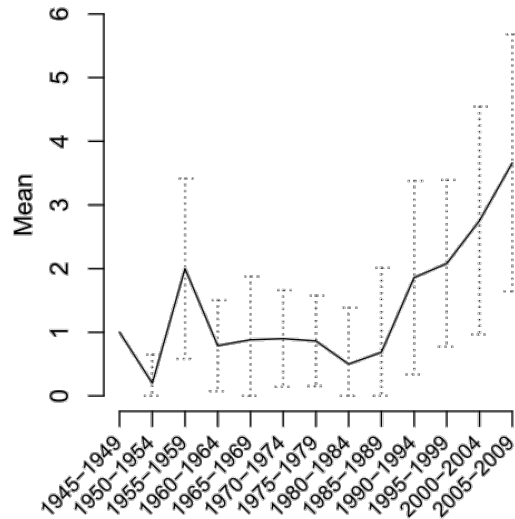
The increasing importance of non-tariff measures

The Political Economy of non-tariff measures (NTMs)

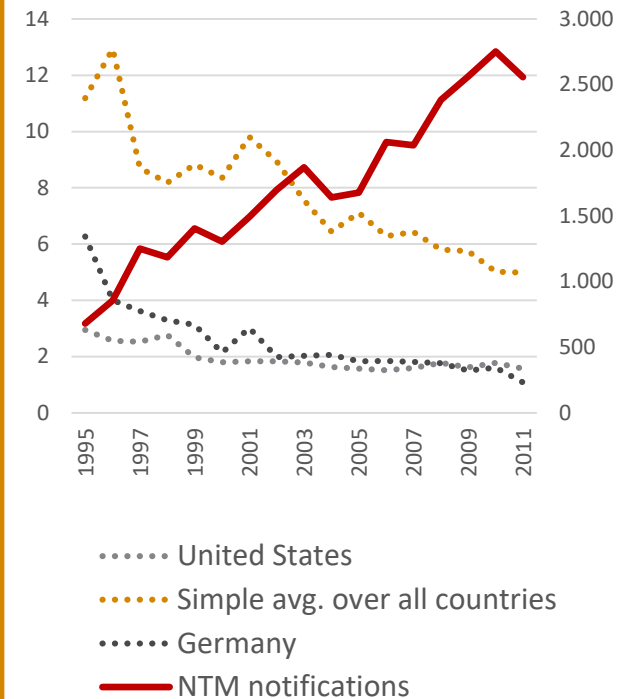
Number of PTAs over time



Depth of PTAs over time



Trends in Tariffs and NTMs



Note: Applied tariff rate, weighted mean, all products (%)

Sources: WTO I-TIP (NTM data), World Bank (WITS tariff data), wiiw calculations. Dür et al, 2014
(Number and Depth of PTAs).

What are non-tariff measures (NTMs)?

“*Non-tariff measures (NTMs)* 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.” (UNCTAD, 2017)

Non-tariff measure classification by MAST chapter

A: Sanitary and phytosanitary measures

B: Technical barriers to trade

C: Pre-shipment inspection and other formalities

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

P: Export-related measures

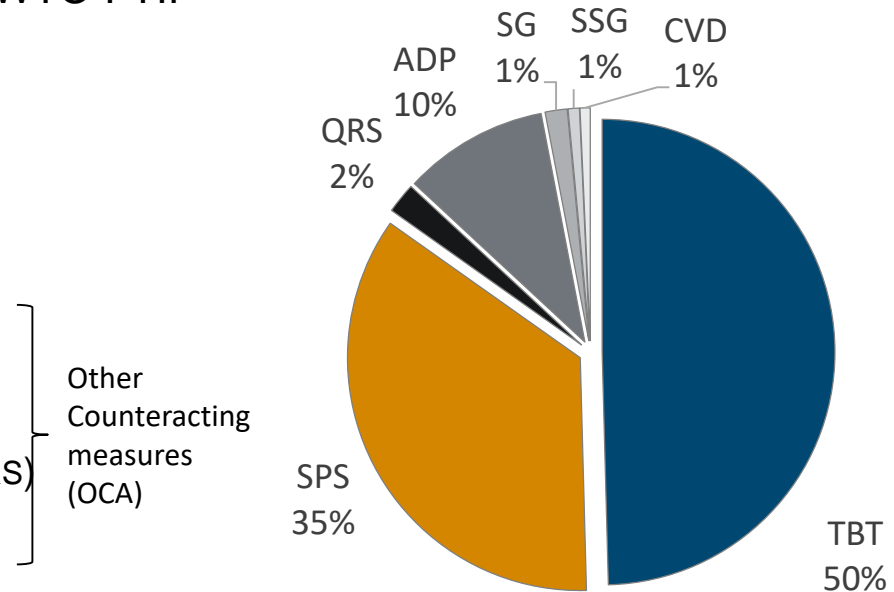
Examples of NTMs

- Sanitary and phytosanitary measures (SPS)
 - ~30% of NTM notifications
 - Bilateral SPS measure of the EU blocking the import of dried beans from Nigeria due to pesticide residues at levels exceeding the reference dose as stated by the European Food Safety Authority
[WTO Document: G/SPS/N/EU/131, 29 June 2015]
 - Measures to prevent the spread of transmissible diseases, such as spongiform encephalopathies
[WTO Document: G/SPS/N/EU/67, 4 March 2014]

- Technical Barriers to Trade (TBT)
 - ~45% of NTM notifications
 - Energy labelling requirement for storage cabinets, including those used for refrigeration. The stated aim of the EU is to pull the market towards more environmentally friendly products by providing more information to end-users.
[WTO Document: G/TBT/N/EU/178, 28 January 2014]

Non-tariff measures (NTMs): Overview

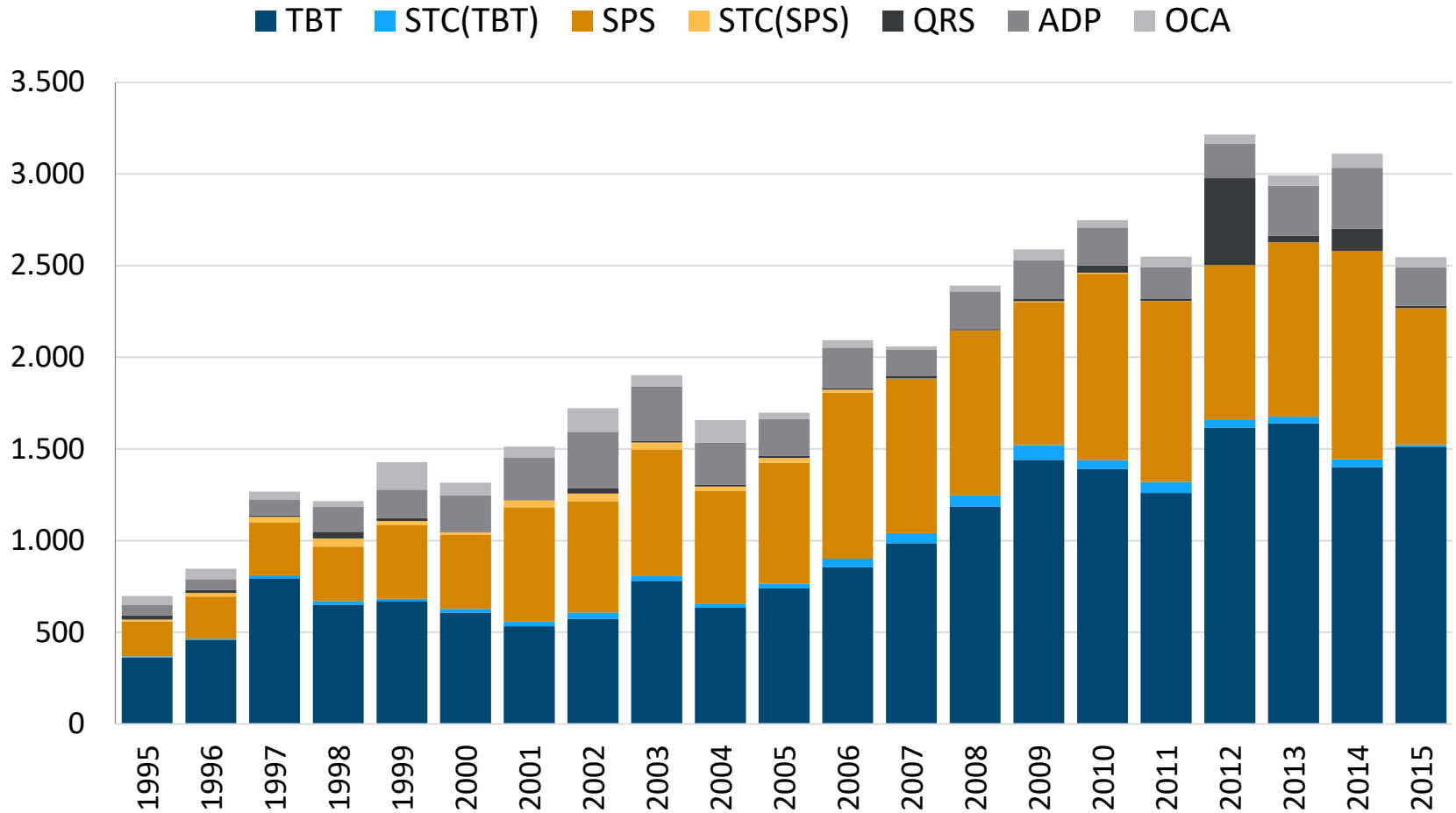
- Data collected from WTO trade notifications WTO I-TIP
 - and harmonised ...
- 15 out of 16 classifications concern imports
- thereof 3 are technical in nature:
 - **TBT... technical barriers to trade**
 - **SPS ... sanitary and phytosanitary measures**
 - Pre-shipment inspection and other formalities
- thereof 12 are non-technical measures:
 - antidumping (ADP)
 - countervailing Duties (CVD)
 - (special) safeguards (SG)
 - quantity control measures (e.g. quotas, licensing) (QRS)
 - ...
- Specific trade concerns (SPS & TBT)



Note: Total number of notifications (37,982) to the WTO between 1979 and March 2015; Graph excludes 899 Specific Trade Concerns.

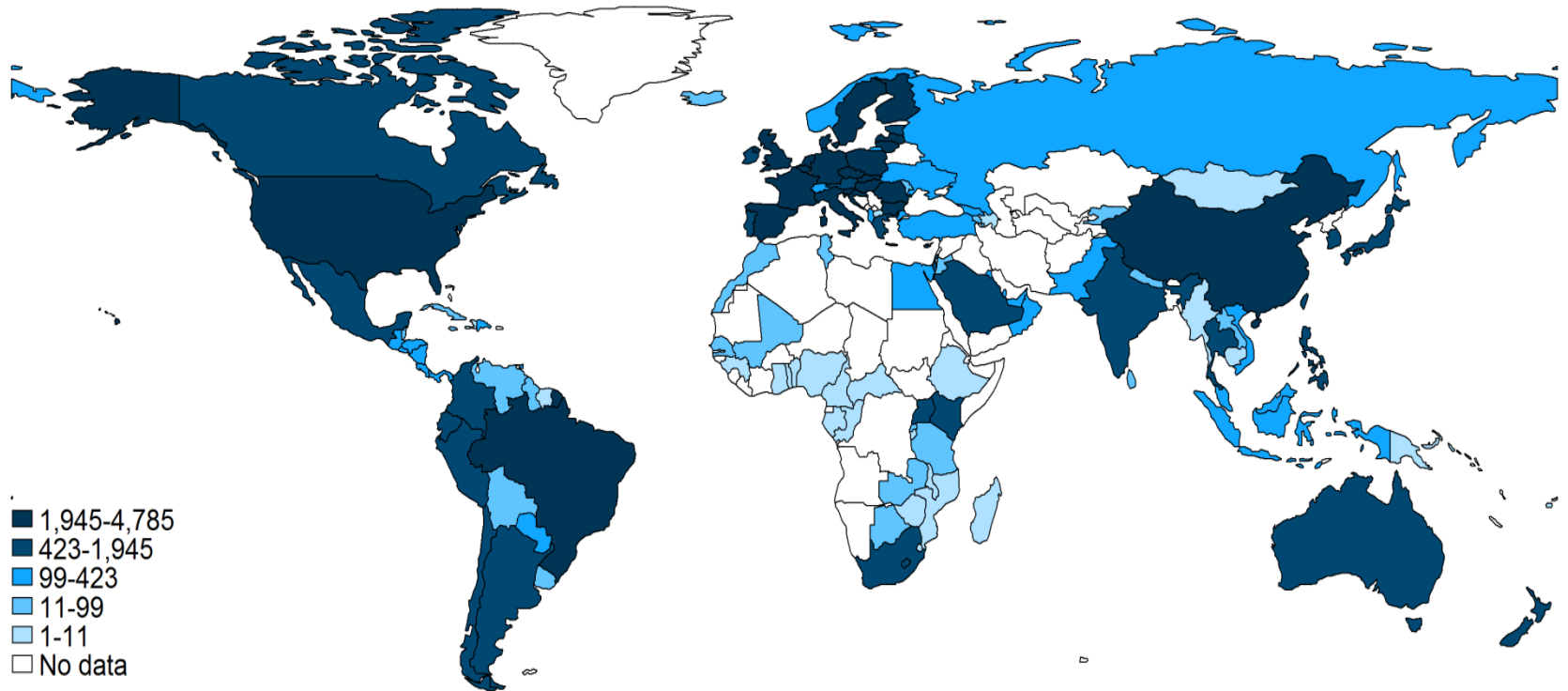
Sources: UNCTAD, 2013 (Classification), WTO I-TIP (NTM data), wiiw calculations.

NTM notifications over time



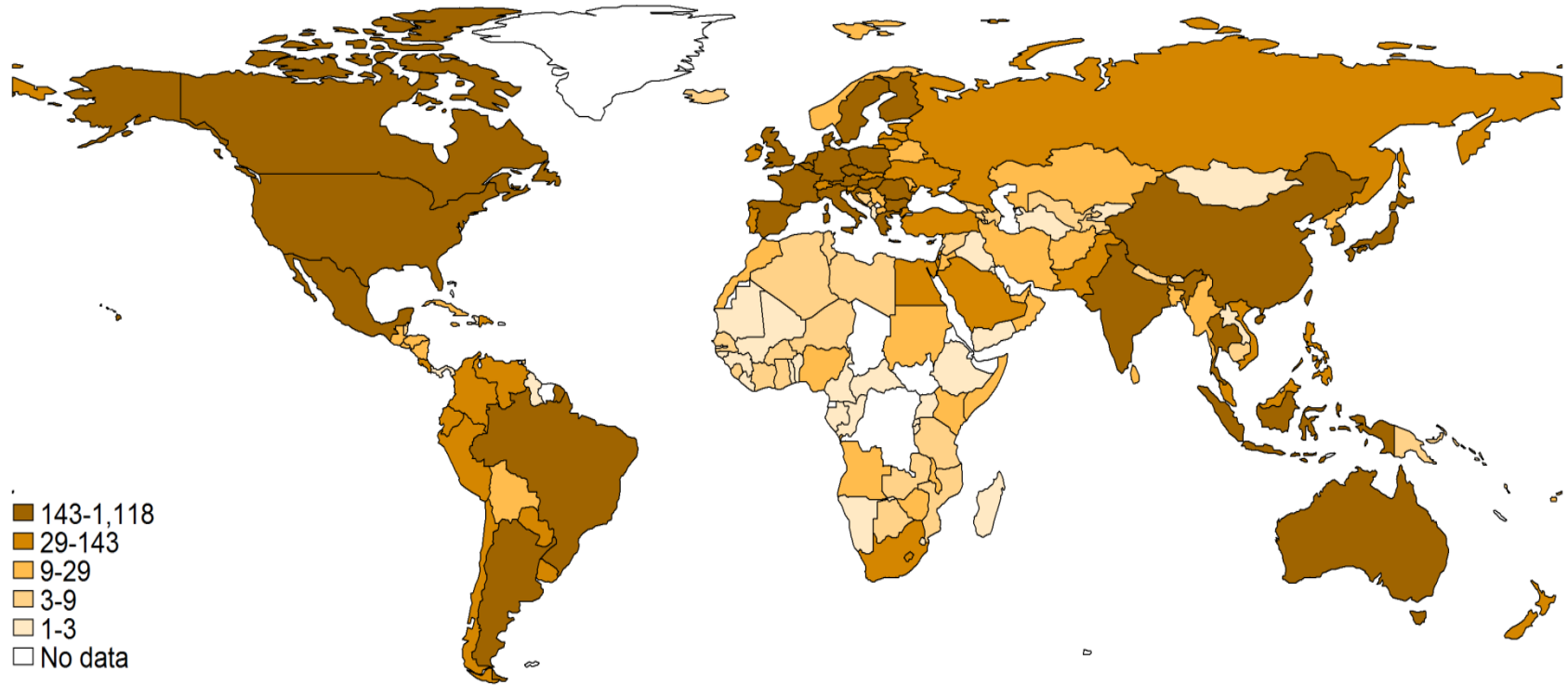
Source: Ghodsi et al. (2017)

NTM notifications by imposing country



Source: Ghodsi et al. (2017)

NTM notifications by affected countries



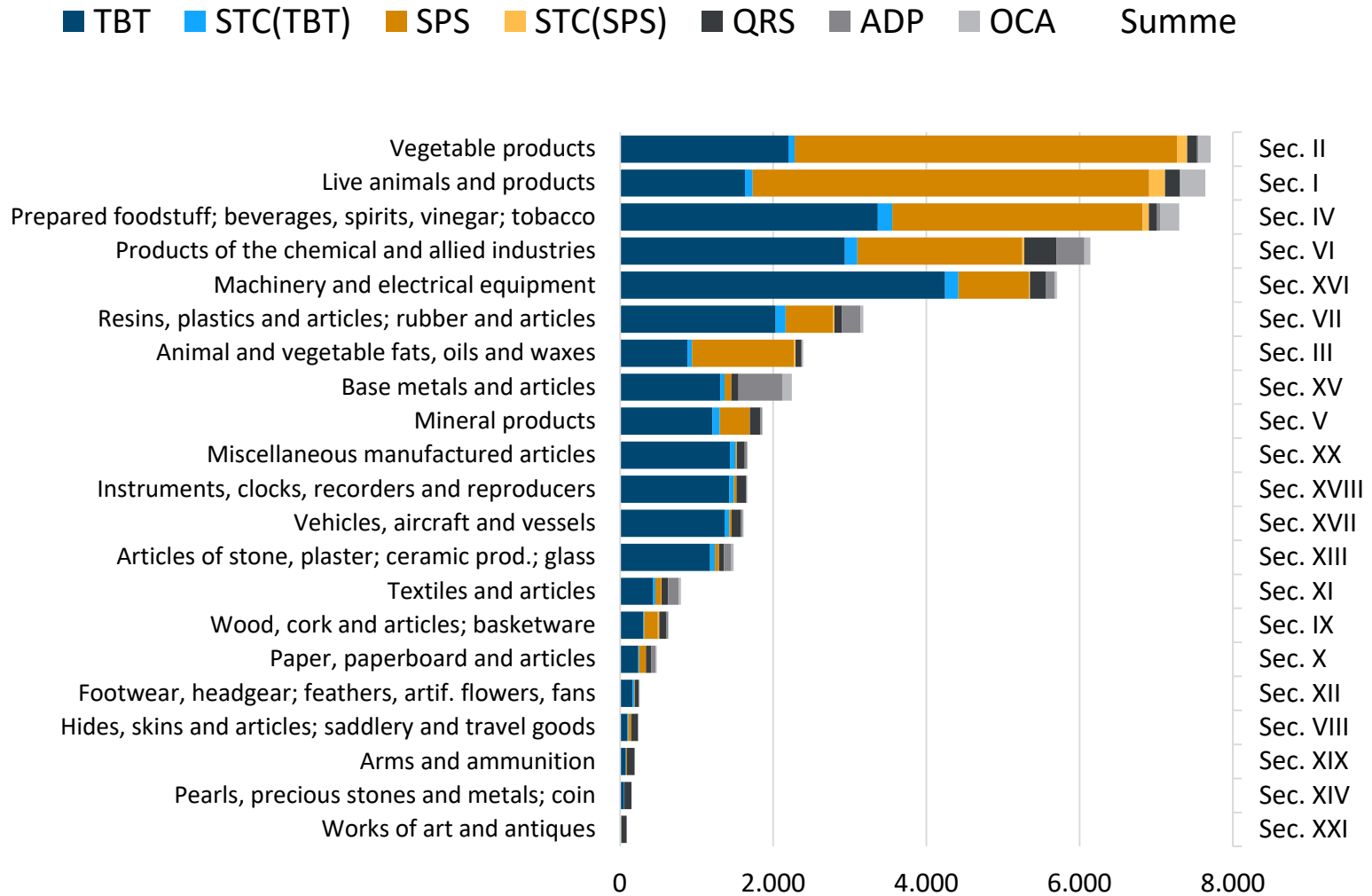
Source: Ghodsi et al. (2017)

NTM notifications by level of development



Source: Ghodsi et al. (2017)

NTM notifications by product groups



Source: Ghodsi et al. (2017)

Assessing the impact of non-tariff measures on trade

Ad-valorem equivalents (AVEs) of NTMs

or: How to make NTMs directly comparable to tariffs?

| | Price gap method | Indirect Approach |
|--------|---|---|
| What? | Deriving AVEs from an analysis of the price wedge due to the implementation of NTMs | Deriving AVEs with a Gravity estimation approach from the impact on import quantities and import demand elasticities |
| Who? | <ul style="list-style-type: none"> • Dean et al., 2009 • Nimenya et al., 2012 • Cadot and Gourdon, 2015 | <ul style="list-style-type: none"> • Kee et al., 2009 • Bratt, 2014 • Beghin et al, 2014 |
| Issues | <ul style="list-style-type: none"> › Necessity to compare different prices along the production and supply chain › Neglect of product quality differences › Price data availability usually restricts to few countries for a small set of products | <ul style="list-style-type: none"> › Based on import demand elasticities, which are themselves estimates › Neglect of product quality differences |



- **New data set**
(WTO I-TIP complemented by Ghodsi et al)
- **Types and intensity of NTMs**
- **Using a panel structure**
- **Assess effects bilaterally**
- **Assess impacts in GVCs**

Method: ad-valorem equivalents

- Based on GDP-function estimation of import price elasticities ε_{ih}

- Gravity estimation to get effect of NTM on trade flows β_{ihn}

- Transformation to AVEs:

$$\frac{\partial \ln(m_{ih})}{\partial \text{NTM}_{ih}^n} = \frac{\partial \ln(m_{ih})}{\partial \ln(p_{ih})} \frac{\partial \ln(p_{ih})}{\partial \text{NTM}_{ih}^n} = \varepsilon_{ih} \text{AVE}_{ih}^n$$

$$\tau_{ihn} = \frac{\varepsilon^{\beta_{ihn}} - 1}{\varepsilon_{ih}}$$

- This and related research shows that “Ad-Valorem Equivalents (AVE)” of NTMs are in almost 50% of cases negative, i.e. trade enhancing
 - Bratt (2014); Beghin et al. (2014); Ghodsi et al. (2017)

NTMs \neq NTBs

*“TBT/SPS measures do not unambiguously increase or decrease trade. In general, TBT/SPS measures have positive effects for more technologically advanced sectors, but negative effects on trade in fresh and processed goods. As economic theory suggests, the introduction of a new TBT/SPS measure yields a **trade-off** between **higher costs of adaption** to new requirements for producers and **lower information costs for consumers**, who can be confident about the quality of the product in question.” (WTO (2012), World Trade Report)*

- NTMs should not be seen as “trade costs”, implying that removal of those will – similar as tariffs in standard trade models – bring further beneficial effects (‘welfare gains’)
 - NTMs can also lead to reduction of trade costs (e.g. due to harmonisation)
- NTMs are often important and beneficial itself as e.g. safety standards, environmental protection, rules, etc.

Summary

- Non-tariff measures are becoming more important (particularly also in recent free trade agreements)
- Standards and regulations in trade have multiple aims
 - Consumer safety, harmonisation of technical standards, health effects, ...
 - Compliance with European standards and values
- Impact of NTMs on trade are diverse
 - due to complexity of technical regulations, etc.
 - even if negative impacts occur, NTMs serve various other purposes
 - Needs a detailed (product-level, bilateral) approach
- Trade measures accumulate when international production sharing is important
- Even if some NTMs have trade-impeding effects, these have to be weighed off with other important effects of promoting standards and consumer needs
- Needs much more careful modelling approaches than exist now

Papers

- Ghodsi, M., J. Grübler, O. Reiter and R. Stehrer (2017), *The Evolution of Non-Tariff Measures and their Diverse Effects on Trade*, wiiw Research Report 418, May 2017.
- Ghodsi, M., J. Grübler, and R. Stehrer (2016), *Import Demand Elasticities Revisited*, wiiw Working Paper 132, November 2016.
- Ghodsi, M., J. Grübler, and R. Stehrer (2016), *Estimating Importer-Specific Ad Valorem Equivalents of Non-Tariff Measures*, wiiw Working Paper 129, September 2016
- Ghodsi, M. and R. Stehrer (2017), Quality impacts of NTMs, in progress.
- Ghodsi, M. and R. Stehrer (2017), Non-tariff measures trickling through global value chains, in progress.

Thanks for attention!

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