

# *Trade Barriers or Catalysts?*

## *Non-Tariff Measures and Firm-Level Trade Margins*

*Dela-Dem Doe Fiankor\**

*Woubet Kassa*

*Abraham Larrey*

Discussion by Roberta Arbolino

(University of Naples L'Orientale)

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# Overview

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## Objective

- This study analyses how non-tariff measures (NTMs) affect exports from three African countries - Burkina Faso, Malawi, and Senegal.

## Approach

- Combines highly disaggregated firm-product customs transaction data with NTM panel data within a reduced-form gravity framework.
- Focuses on standards and technical regulations - mainly **Sanitary and Phytosanitary (SPS)** and **Technical Barriers to Trade (TBT)** - which account for **99% of all NTMs** observed in the three countries.
- Merges the **Exporter Dynamics Database (World Bank)** with the **NTM database** from the Vienna Institute for International Economic Studies.

# Identification Strategy

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**This paper explores NTMs' effects under a range of modelling specifications, including:**

## **Impact on firm-level trade margins**

- Extensive margin (entry/exit)
- Intensive margin (export values)

## **Heterogeneity in the intensive-margin response, by:**

- **Type of NTM** (SPS vs TBT)
- **Position in the value chain** (intermediate vs final goods)
- **Firm size** (export share)
- **Country characteristics** of destination and origin

## **Decomposition of the transmission channels**

- Effects on **quantities, prices, and quality**

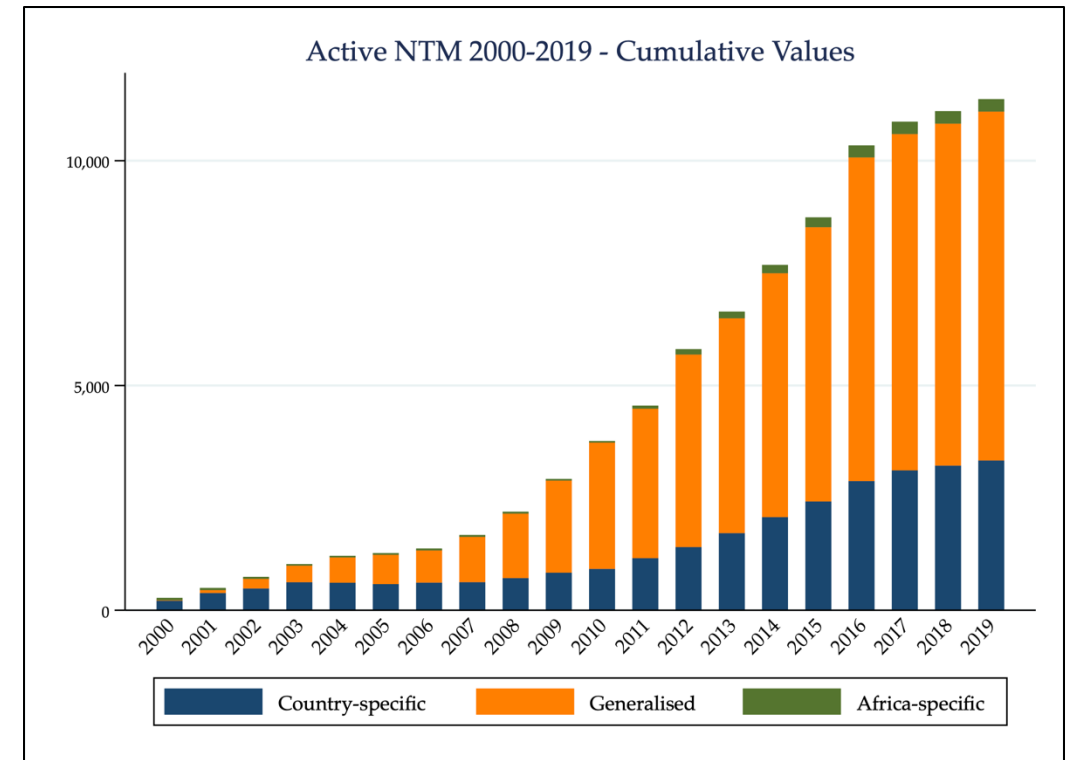
# Why the Paper Matters

Together with renewed attention to tariffs, regulatory heterogeneity in international trade has become central in recent debates (Campos et al., 2023).

- The number of active NTMs has increased sharply worldwide (from **225 in 2000** to **11,000 in 2019**).
- NTMs play a central role in shaping market access.

Given recent **increases in tariffs**, understanding the role of NTMs - and the potential for NTM reduction to offset tariff hikes - is even more relevant (Garcés and Vogt, 2025).

The paper offers strong policy insights for **developing-country exporters**.



# Main Findings

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- **No effect on entry/exit:** NTMs do *not* change firms' probability of entering or exiting export markets.
- **Intensive margin declines:** NTMs reduce export values, with stronger effects in **agriculture** than in manufacturing.
- **Strong heterogeneity:** Small firms, final goods, and low-quality exporters are more negatively affected; high-quality manufacturers may benefit.



The variable costs dominate fixed costs

# Comment 1. Understanding the Cost Structure Behind NTMs

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## The interaction between fixed and variable compliance costs:

- NTMs generally involve both components.
- Fixed costs are too low to deter market entry; **high variable costs** (testing, inspections, certification) significantly reduce export values.
- The underlying mechanisms remain only partially explored.
- Other channels include:
  - **Changes in product composition** → unit-value measurement issues
  - **Buyer-seller bargaining responses** → downward price adjustments in the presence of uncertain or costly compliance requirements
  - **Uncertainty and Risks** → lead importers and exporters to cautious behaviour

## Comment 2. Findings on the Extensive Margin

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### NTMs do not reduce entry/exit probability

The paper finds no significant effect of NTMs on the extensive margin.

However, the existing literature often reports **positive extensive-margin effects** of NTMs at:

- country level (El-Enbaby et al., 2016; Fontagné et al., 2015)
- firm level (Webb et al., 2018; Crivelli & Gröschl, 2016; Ferro et al., 2015).

Given these contrasting results, it may be useful to explore **heterogeneity across firms, country of origin and destination**, also for the extensive margin, just as the authors do for the intensive margin.

For example, smaller firms may react differently in terms of entry and exit decisions, and this could reconcile the paper's findings with prior evidence.

# Comment 3. Endogeneity Concerns and Robustness checks

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The relationship between exports and NTMs may be affected by endogeneity:

- **Reverse causality**
- **Omitted variables**

Recent approaches stress the importance of addressing these threats (Cali & Montfaucon, 2021).

Suggestions for additional testing:

- **Industry-year fixed effects** to absorb time-varying sector-specific lobbying or regulatory shifts.
- **Controls for initial firm market share** interacted with time (proxying for firm size and past performance).
- **Exclude the top 1% exporters** to rule out the - potentially - disproportionate influence of large firms on NTM policy.

Integrating some of these robustness checks - or clarifying why they are not needed - would reinforce the credibility of the results.



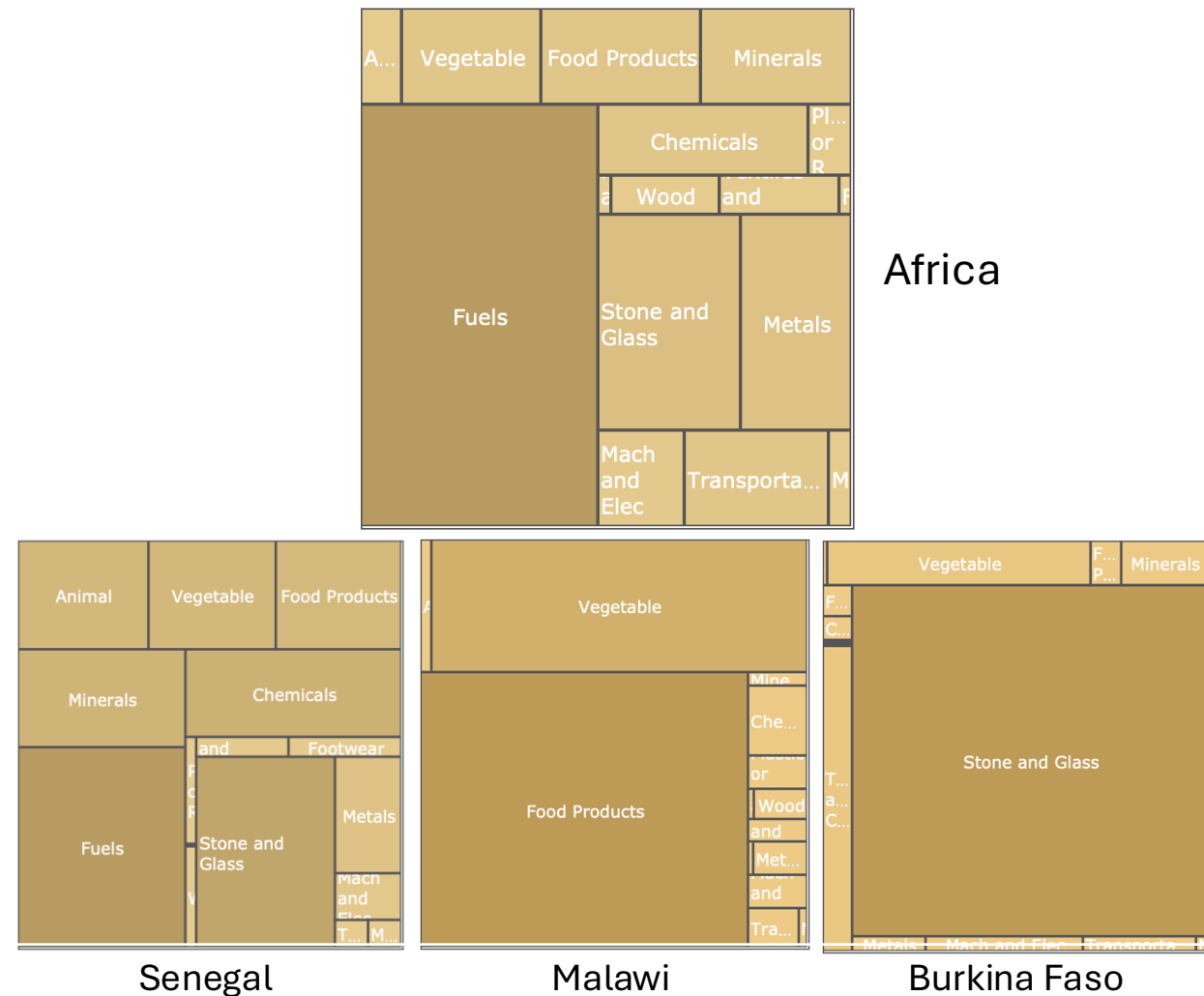
## Comment 4. Representativeness of the Sample

The paper repeatedly refers to “African economies”, yet the three countries studied (Burkina Faso, Malawi, and Senegal) are **not representative** of Africa’s export structure.

Together they account for a **very small share of African exports**.

The analysed export basket differs substantially from the continental pattern, which is dominated by **fuels, minerals, metals, and ores** - sectors **not covered** in this study.

It may therefore be more appropriate to frame the results as **country case studies**, rather than general evidence for Africa.



# Conclusions

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- A very important, novel and timely research!

- **The dual role of NTMs is clearly illustrated**

NTMs act both as **barriers** (through variable compliance costs) and, in some cases, as **catalysts**, particularly for high-quality manufacturing exporters.

- **Important implications for developing-country regulators and exporters**

Results highlight the need for targeted support for small firms, quality upgrading, and greater harmonisation of standards at regional and global levels.