Measuring Costs and Benefits of Non-Tariff Measures in Agri-Food

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Motivation

- NTMs important in international trade correction of information asymmetries, other market failures, but also possible protectionist purposes
- Existing economic studies:
  - focus mainly on (forgone) trade effects
  - presume removal of NTMs improves welfare (as for tariffs)
  - Lack conceptual foundation to analyze welfare effects of NTMs in an imperfect world

Incidence of NTMs: Main points

- SPS issues can generate trade frictions
  - Heterogenous standards across countries
  - Importance of International based standards
- South-North and South-South trade issue

The policy challenge

- NTMs are at interface between domestic policies and trade
- The challenge: recognize regulatory autonomy while avoiding obstacles to trade
- Objective: identify best practice/least cost solutions
  - Comparative analysis of different ways to address the same issue

Summary of CB analysis

- Key points:
  - Distinguish actors that are concerned by given market imperfection from those that are not
  - Obtain assessment of welfare effects with and without NTM in place for those groups
- Some results
  - Trade restriction may sometimes be welfare optimal (both domestic and global) if proportion of concerned is ‘big enough’ and value of externality is ‘big enough’

Analytical approach: costs and benefits

- A non-tariff measure has different costs and benefits for different actors:
  - Domestic :
  - Consumers, producers , government
  - (upstream, downstream, supply chain)
  - Foreign :
  - producers
  - (consumers, government)

Analytical framework

- All consumers (unconcerned & concerned) derive utility from consuming a market good. Concerned consumers decrease their demand if they know of a negative attribute (2 demands D_1 and D_2 unconcerned/concerned)
- Producers maximize profit in a competitive industry (S_O and S_F)
- To simplify, the negative attribute comes only through foreign supply
- Domestic firms assumed to have incurred costs to meet regulation to eliminate the attribute (in the baseline)

Clusters of products

	Number of cluster members	Trade coverage	NTM notifications	SPS concerns	Typical product
Cluster 1	25	High	High	High/ Very high	Cheese
Cluster 2	131	High	High	Medium/ High	Poultry
Cluster 3	195	High	High	Low	Vegetables
Cluster 4	216	High	Low	Low	Cut flowers
Cluster 5	116	Low	Low	Low	Vegetable oil
Cluster 6	94	Very low	Very low	Low	Oil cakes & other vegetable material

Six stable clusters of 777 products based on :

3 criteria: i) occurrence of NTMs (TRAINS), ii) their trade coverage (COMTRADE),

iii) the NTM-related trade frictions amongst countries (WTO SPS-STC)

Case studies selected from cluster analysis

- Cheese:
  - unpasteurized milk, human health issue (consumption externalities)
- Shrimps:
  - antibiotics, human health, developing country issues (consumption and production externalities)
- Cut flowers:
  - invasive species, developing country issues (production externalities)

Case Study : Impacts on gross profits of shrimp producers of OECD Food Safety regulation-(in mln euros)

	Import Ban	BMP better management practices	BMP+ resistant varieties
Vietnam	-483.8	+55.757	-170.1
Indonesia	-416.9	+47.6	-144.4
India	-211.1	+26.6	-85.3

Case Study: Cut Flowers-change in gross profits(mln euros)

	Tigher inspect	Tighter inspect+ qlty.deprec	Production changes + reduced inspect
Kenya	-.822	-24.68	-3.83
Ecuador	-.244	-7.33	-1.14
Eu	+1.15	+1.15	.633

Preliminary conclusions from cases

- Framework is flexible and adds economic dimension into assessment of measure, BUT:
- Data limitations are serious (no data on product varieties)
- If human life at stake, CBA is of limited use: need broader approach, risk assessment