

WORLD TRADE REPORT 2012

Looking beyond International Cooperation on Tariffs:
NTMs and Services Measures in the XXIst Century

Cosimo Beverelli
Economic Research Division

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Why do we care about NTMs and Services Measures?

- Tariffs have been progressively reduced and bound.
 - Even if some tariffs still represent significant barriers to trade, WTO rules and modalities are appropriate to handle them – it is mostly a matter of political will.
- New developments raise new challenges:
 - Growth in global production networks (offshoring).
 - Growing consumer concerns regarding food quality and safety or environmental issues (especially in rich countries).
 - The recent financial crisis.
 - The need to address climate change.



Why do we care about NTMs and Services Measures?

- Given these new developments, the WTO needs to:
 - Deepen our understanding of the incidence, role and effects of NTMs and services measures.
 - Offer new insights into the scope for further international co-operation in these areas.

- Why also discuss services measures?
 - Services have increased their share of global trade.
 - The complementarity between goods and services in trade has become more apparent, especially along supply chains.



Difficult questions, difficult answers

- Understanding the incidence, role and effects of NTMs and services measures is a difficult task...
- ...especially because of lack of transparency on such measures.
- Transparency is a multi-dimensional problem:
 1. Opaqueness – in terms of purpose and effects – of certain measures.
 2. Large gaps in the availability of data and numerous shortcomings in existing datasets.
 3. Methodological shortcomings in quantifying trade effects – especially in a world with offshoring.



Transparency in a world with offshoring

- As argued in WTR 2011, in the last two decades offshoring in both intermediate goods and services has grown at a faster pace than trade in final goods.
 - In particular in East Asia.
- Traditional trade patterns imply a linear supply chain in which a single good is moved from place of production to place of consumption.
- But with the location of different stages of production in different countries, it takes many more cross-border transactions to provide a single unit of a final good than before.
 - This is particularly true for manufactured goods with multiple components, such as electronics and motor vehicles.

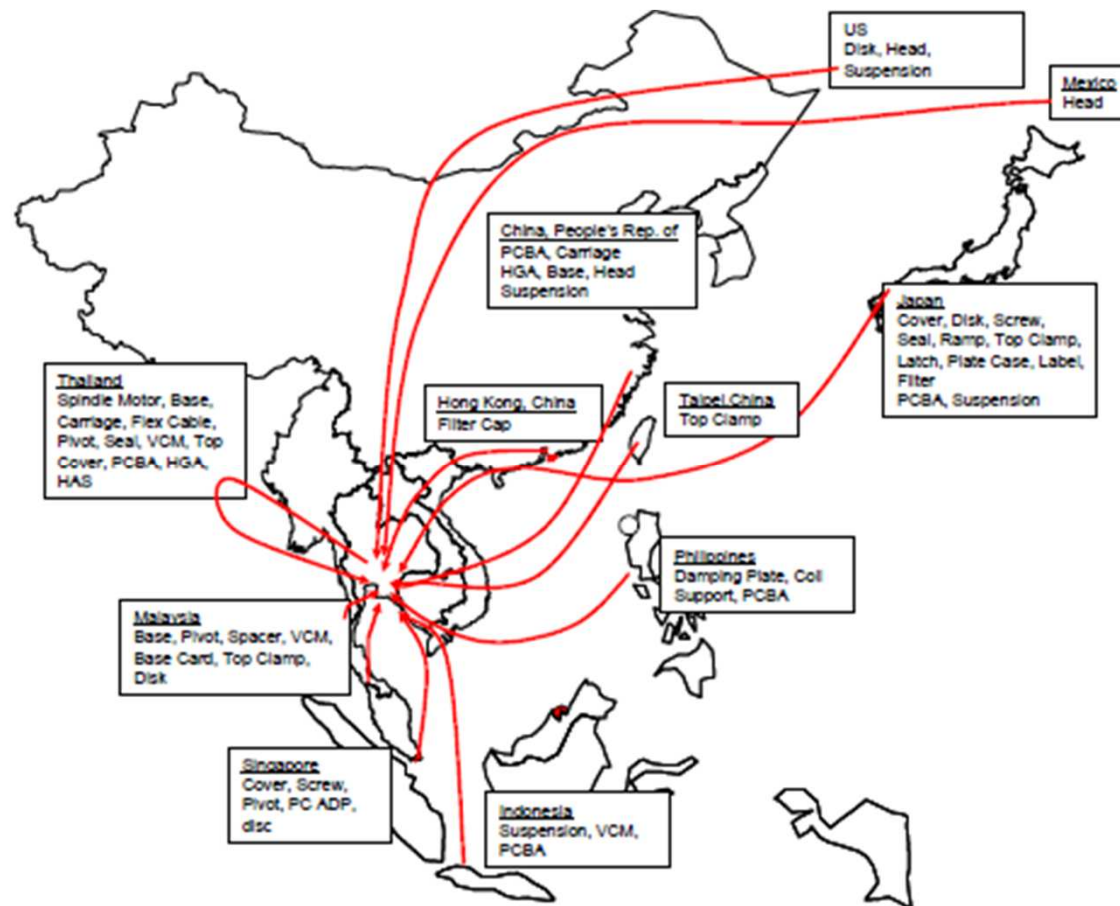


Transparency in a world with offshoring

- Offshoring gives rise to hub-and-spoke regional global supply chains.
- Example: computer disk drive (Hiratsuka, 2005).
 - Thailand acts as the hub of the supply network, using 43 components from 10 other countries along with 11 components produced in Thailand.
 - Hence, there are at least 10 moves across international borders, and perhaps more, depending on the extent to which shipments can be bundled.
 - Furthermore, since the disk drive will be shipped to the location of final computer assembly (e.g. China), at which other major components of a computer are gathered, the number of cross-border moves multiplies even further.



Transparency in a world with offshoring



Source: Hiratsuka, 2005



Transparency in a world with offshoring

- In a supply chain that requires semi-finished goods to move across international borders more than once, the effects of NTMs (and other trade costs) are compounded.
- The effect of a marginal increase in trade costs is much larger than would be the case if there were a single international transaction.



Transparency in a world with offshoring

- Example of cumulation of trade costs in a supply chain.
 - Suppose that the total value-added necessary to produce a product is equal to 1.
 - The product is produced in stages in n countries, each of which adds $(1/n)$ to the total value of the product.



Transparency in a world with offshoring

- Example of cumulation of trade costs in a supply chain (ct'd).
 - If the cost of NTM on moving the product from one country to another is equal to t (on AVE basis), the cost t is charged on the entire value of the product produced up to that point.
 - The total cost of the product delivered to the final consumer is $c(n)$, which is calculated as follows:

$$\begin{aligned}c(1) &= (1 + t) \\c(2) &= \left(\frac{1}{2}\right) (1 + t)^2 + \left(\frac{1}{2}\right) (1 + t) \\c(3) &= \left(\frac{1}{3}\right) (1 + t)^3 + \left(\frac{1}{3}\right) (1 + t)^2 + \left(\frac{1}{3}\right) (1 + t) \\&\vdots \\c(n) &= \sum_{i=1}^n \frac{1}{n} (1 + t)^i\end{aligned}$$



Transparency in a world with offshoring

- Example of cumulation of trade costs in a supply chain (ct'd).
 - Suppose that the AVE of an NTM at each stage is 10 per cent ($t = 0.1$). Then:
 - $c(1) = 1.1$; $c(2) = 1.155$; ... ; $c(5) = 1.343$; ... ; $c(10) = 1.753$ (tariff equivalent of 75.3%).
- As the global supply chain is fragmented further, trade costs compound quickly.
 - This is not usually taken into account by current estimates of AVE of NTMs.
 - In addition, the price increase at each step would also include the costs associated with the time of waiting.



Transparency in a world with offshoring

- Complementarities between goods and services trade.
 - When goods and services are complementary or bundled, services measures strongly affect the traded good in question as well.
 - A services measure that restricts trade and competition in transport and logistics services, for instance, has a negative impact on merchandise trade.
 - But, this is not taken into consideration when AVEs of services measures are calculated using services trade flows only.
 - The role that services trade plays in global supply chains makes this even more relevant.
 - For OECD countries, as much as three quarters of service trade is in intermediate inputs.



Transparency in a world with offshoring

- Complementarities between goods and services trade is mainly explained by three mechanisms:
 1. Transport and logistics links.
 - Transport and travel services account for about half of cross-border trade in services and are the most important direct services input to international trade.
 - Measures that restrict trade and competition in transport and logistics services have a negative impact on merchandise trade performance.



Transparency in a world with offshoring

- Complementarities between goods and services trade is mainly explained by three mechanisms (ct'd):
 2. Goods and services are often bundled in final markets.
 - After-sales services are important for a host of durable goods such as cars.
 - Aviation engines, printers, vending machines, and other equipment are also increasingly rented or leased with a services contract.
 - Some goods such as mobile phones are mainly a services platform (they are often sold for a nominal amount on the condition that customers sign up for a fixed-period service contract).



Transparency in a world with offshoring

- Complementarities between goods and services trade is mainly explained by three mechanisms (ct'd):
- 3. Role of intermediaries (retailers and wholesalers) in international trade.
 - 35 per cent of US exporters are wholesalers, accounting for 10 per cent of the value of US exports.
 - Market concentration in a sector comprising intermediaries may affect merchandise trade
 - Regulatory heterogeneity (such as differences in product standards, labeling and recycling requirements) may impose considerable market-specific costs on retailers.



Transparency and the functioning of WTO Agreements

- The complexity and opacity of several NTMs pose three new and related challenges for domestic government regulators and international trade negotiators.
 1. There can be uncertainty on what constitutes the efficient level of an NTM.
 - Politically motivated governments may have a preference for opaque policy instruments over transparent ones.
 2. Enforcement of agreements requires observing compliance, but some NTMs are not easily observable.
 3. Opaque NTMs are of limited use as a mechanism for securing commitment by governments under an international agreement.



Transparency and the functioning of WTO Agreements

- Four main types of transparency provisions in the WTO.
 1. Publication requirements.
 2. Notifications.
 3. Trade policy review mechanism and monitoring reports.
 4. Specific Trade Concerns (STCs) in the TBT and SPS committees and (to some extent) the dispute settlement mechanism.
- Such transparency provisions help address the problems raised by the opacity of NTMs and services measures but they are not sufficient.



WTO regulation of NTMs and services measures

- More fundamental question: Why does the WTO regulate these measures?
 - GATT drafters were aware that policies other than tariffs could substitute for tariffs and undermine the value of a negotiated tariff binding (policy substitution problem).
 - Inclusion of provision designed to induce tariffication of border NTMS.
 - Shallow integration approach to behind-the-border NTMs.
 - National treatment and non-violation.
- WTO:
 - More stringent rules on border NTMs and movement in the direction of deep integration (TBT/SPS Agreements).
 - Regulation of services measures (GATS).



WTO regulation of NTMs and services measures

- How relevant is policy substitution?
 - Empirical evidence mildly suggests it takes place.
 - Using data from STCs, we find some evidence that between 1995 and 2010 TBT measures may have been used to substitute tariffs, but very limited evidence of substitution between tariffs and SPS measures.
 - This result is in line with expectations: SPS cover a relatively narrow area of health and safety measures that are often directly related to consumer protection and may offer less scope for policy substitution than the wider set of TBT measures.



WTO regulation of NTMs and services measures

- Beyond policy substitution.
 1. Growing consumer concerns, e g. on food and product safety.
 2. Rise in offshoring.



WTO regulation of NTMs and services measures

1. Food safety and quality.
 - As consumer concerns are becoming more important in areas such as health and the environment, regulation for legitimate public policy goals plays a more prominent role.
 - Is mercantilist exchange of market access appropriate?
 - Opacity (lack of transparency) and offshoring intersect this issue:
 - Because of opacity, policy makers may be imperfectly informed own and partners' regulatory needs.
 - Opacity complicates enforcement (see above).
 - Offshoring (i.e. development of supply chains) also contributes to the increase in both government and private measures related to food quality and safety.



WTO regulation of NTMs and services measures

1. Offshoring.

- May provide a rationale a deep integration approach in the multilateral treatment on behind-the-border (regulatory) NTMs.
- Offshoring changes the nature of international price determination from one governed by market-clearing to one where buyers and suppliers from different countries bargain bilaterally on the input price.
- Behind-the-border tax and regulatory policies are set inefficiently because of a rent-shifting externality on input producers.
 - In addition to obtaining market access, or a lower tariff on the imports of the input, governments must additionally negotiate the tariffs and domestic policies which affect the downstream product.

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