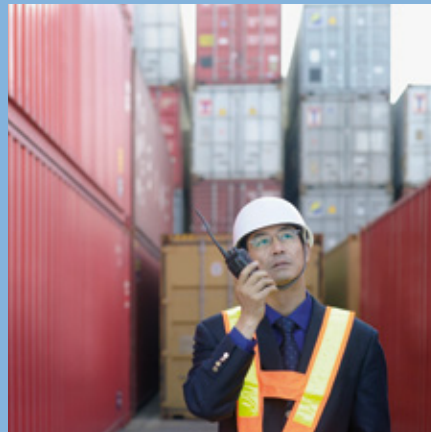




WORLD TRADE  
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# World Trade Report 2012

Trade and public policies:  
A closer look at non-tariff measures in the 21<sup>st</sup> century



What is the World Trade Report?

The World Trade Report is an annual publication that aims to deepen understanding about trends in trade, trade policy issues and the multilateral trading system.

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Using this report

The 2012 World Trade Report is split into two main parts. The first is a brief summary of the trade situation in 2011. The second part focuses on the special theme of non-tariff measures in the 21<sup>st</sup> century.

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## Disclaimer

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## Foreword by the WTO Director-General



This year's *World Trade Report* takes a fresh look at an old issue. Non-tariff measures (NTMs) have been with us since nations have traded and they have certainly constituted a key element of the work of the GATT and the WTO over the years. I offer seven reasons why it is a good time for the WTO to be thinking about NTMs.

First, NTMs have acquired growing importance as tariffs have come down, whether through multilateral, preferential or unilateral action. Secondly, a clear trend has emerged over the years in which NTMs are less about shielding producers from import competition and more about the attainment of a broad range of public policy objectives. You could say we are moving from protection to precaution. This tendency is discernible in practically every economy, as concerns over health, safety, environmental quality and other social imperatives gain prominence. Moreover, issues such as these take on a more central role in policy as economies develop and incomes grow.

Thirdly, growing public policy concerns add significantly to the complex nature and variety of NTMs deployed by governments, calling for an additional layer of analysis to tease out the trade effects of alternative approaches towards the attainment of declared policy goals. Fourthly, the expansion of the public policy agenda means that NTMs will not follow a path of diminishing relevance like tariffs have done. They will not shrink in importance. Regulatory interventions addressing market failures and international spillovers, with inevitable consequences for trade flows and investment, are here to stay. Fifthly, the increased role of public policy becomes ever more present in international economic relations as globalization intensifies interdependency among nations. Sixthly, all this takes us to where the WTO comes in. I see effective international cooperation on NTMs as a key challenge facing the multilateral trading system in the years ahead. Finally, a related point to the last is that NTMs figure prominently among disputes brought to the WTO.

We have to think differently about the challenges of international cooperation. When trade opening is the core business, the "level playing field" imagery applies. But with public policy, it does not. The aim is not to reduce public policy interventions to zero; it is to render them compatible with the gains from trade. We can no longer think about reduction formulae,

becoming immersed – and sometimes lost – in endless debates about the size of reduction coefficients or exceptions to the coefficients. Reciprocity in negotiations does not have the same meaning. The policy tool box is quite different. The challenge is about finding ways of managing a wider set of policy preferences without disrespecting those preferences or allowing them to become competitiveness concerns that unnecessarily frustrate trade.

Reference is often made to distinctions between shallow and deep integration and between border measures and behind-the-border measures. These are not clear-cut categories and they are used in different ways by different commentators. From the current perspective, where vibrant trade relations must be underpinned by public policy infrastructure with potential trade effects, it makes sense to think in terms of the deeper end of the integration spectrum. Indeed, one way of thinking about the challenges of economic integration is less as a quest for free trade and more as progress towards a global market.

These are some of the issues that the *World Trade Report* takes up this year. Beginning with a short historical overview, the Report shows how the early focus on removing NTMs that were largely surrogates for tariffs has given way to a much subtler and more complex world in which public policy concerns find greater expression in trade relations than they did a few decades ago. The Report tries to identify the major motivations that prompt governments to use NTMs. A simple three-fold distinction is between those NTMs that serve public policy (essentially non-economic issues), those that have an economic focus based on a national welfare-increasing calculus, and those that have a political economy motivation that serves particular interests, and quite possibly do not increase national welfare.

These distinctions cannot always be easily drawn, but they make clear why dealing with NTMs is so much more complicated than simply working for more open markets by removing other barriers to trade. NTMs can generally be expected to have trade effects and they may increase or decrease trade. The outcome depends both on the motivation for the measure and the way it is designed. In keeping with policy trends in the area of NTMs, most of the analysis in the Report focuses

primarily on public policy interventions that are covered by the Technical Barriers to Trade (TBT) Agreement, the Application of Sanitary and Phytosanitary (SPS) Measures Agreement, Article XX of the General Agreement on Tariffs and Trade (GATT), and on the domestic regulation provisions of the General Agreement on Trade in Services (GATS).

Since public policy NTMs are likely to have trade effects, we cannot altogether escape consideration of these effects. Policy-makers may not ostensibly reflect any trade intent in their public policy interventions, but in practice these interventions might be intended to serve a dual purpose. They may be designed or administered in ways that intentionally restrict trade even if their primary purpose is to serve a public policy. This has been referred to as “policy substitution” and it arises either where alternative, less opaque policies (such as tariffs) are unavailable, or where policy-makers wish to conceal the objective. Note also that this problem can arise not so much in the design of a policy but in the way it is administered. When this is the case, finding a systematic remedy can be much more difficult. A good deal of the case load in GATT/WTO dispute settlement has turned on the tension between good public policy and hidden protection.

The issue of policy substitution is but one element of engagement when it comes to international cooperation on NTMs. It is probably one of the easier aspects of cooperation. Matters become more complicated when we think about the trade effects of NTMs not in terms of protectionist intent, but rather in terms of the trade effects of divergent approaches to NTMs. The issue of divergence embodies at least three elements. The first is potentially the least complicated and relates to what we might think of as “incidental or path-dependent divergence” – that is, localized regulatory cooperation may have led to different regulatory approaches that are not grounded in any strong preference, but rather in habit or custom. With no strong vested interest in pursuing divergent approaches, cooperation to harmonize or mutually recognize such diverging approaches should be relatively straightforward. Indeed, this was very much the spirit of the suggestion in last year’s *World Trade Report* on preferential trade agreements that the risks of regulatory divergence could be lessened through a multilateralization of preferential policies in this area.

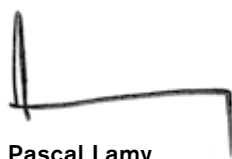
The second aspect of divergence in national or regional approaches to NTMs is much more delicate. Divergence may reflect something more profound that goes to the root of societal preferences. Value systems may vary across societies in ways that make the idea of harmonization or mutual recognition unacceptable. This could be called “preference divergence” and it would be a brave person who argued that trade should trump such diversity. Yet such realities may carry strong

consequences for the ability of nations to cooperate and benefit mutually from exchange. In such cases, the only sensible approach is to ensure that differences are preserved and respected at minimum cost in terms of any slippage towards a dual-purpose approach to public policy formulation and administration.

The third aspect of divergence concerns the difficulties faced by poorer countries in meeting standards in major markets they serve. One could characterize this as “involuntary divergence”. Developing countries have no motivation for preferring different standards; it is merely a question of capacity. With the necessary will and commitment, this problem is readily amenable to solution. As noted in the Report, a number of capacity-building initiatives are attempting to address this issue.

The economic gains from joint international action to remove protectionist elements in the design and administration of NTMs would be considerable. Work on minimizing regulatory divergence, through harmonization, mutual recognition of standards and action to ensure that private standards do not unduly segment markets, would also promise considerable benefits. Much has already been achieved in managing public policy regarding TBT/SPS measures in the goods area, and domestic regulation in services. The progress that has been made holds promise for further advances.

A good part of this report is dedicated to identifying information available on NTMs and our capacity to analyse and assess the impact of these measures. The review is very useful, but it does not make for cheerful reading. We know far less than we should about the existence and effects of NTMs. Some of the difficulty is of a technical nature, as the Report carefully documents. The new Integrated Trade Intelligence Portal (I-TIP) information system being developed by the WTO Secretariat is an effort to increase transparency. But it is clear that governments bear a responsibility for the insufficiency of available information. A strong case exists for seeking improvements in the design and content of notification obligations and in the level of compliance with these obligations. This would seem to be a pre-condition for serious international engagement, whether regionally or multilaterally, in making progress on an agenda that promises significant gains to those who engage.



**Pascal Lamy**  
Director-General

# Executive summary

This year's *World Trade Report* ventures beyond tariffs to examine other policy measures that can affect trade. As tariffs have fallen in the years since the birth of the General Agreement on Tariffs and Trade (GATT) in 1948, attention has progressively shifted towards non-tariff measures (NTMs). The range of NTMs is vast, complex, driven by multiple policy motives, and ever-changing. Public policy objectives underlying NTMs have evolved. The drivers of change are many, including greater interdependency in a globalizing world, increased social awareness, and growing concerns regarding health, safety, and environmental quality. Many of these factors call for a deepening of integration, wresting attention away from more traditional and shallower forms of cooperation. Trade in services is a part of this development and has come under greater scrutiny, along with the policies that influence services trade.

The continuing multiplication of policy directions and preoccupations presents challenges for international cooperation. The GATT/WTO has addressed some of the challenges created by NTMs, both through its dispute settlement mechanism and successive rounds of GATT/WTO negotiations. The Tokyo and Uruguay rounds, in particular, focused on a number of NTMs, including standards, which were progressively subject to heightened multilateral discipline. The Uruguay Round also marked the inclusion of services in the WTO.

Regulatory measures such as technical barriers to trade (TBT) and sanitary and phytosanitary (SPS) measures in goods and domestic regulation in services raise new and pressing challenges for international cooperation in the 21st century. They also pose acute transparency issues. More than many other measures, they reflect public policy goals (such as ensuring health, safety and well-being of consumers). Their trade effects may be incidental, but they can also be designed and applied in a manner that unnecessarily frustrates trade. Moreover, they raise a number of issues that are specific to governments and firms in developing countries. The sheer breadth of the subject area has meant that the focus of this report is on TBT/SPS measures and domestic regulation in services.

## A. Introduction

Section A of the Report presents an overview of the history of non-tariff measures in the GATT/WTO. This overview discusses how motivations for using NTMs have evolved, complicating this area of trade policy but not changing the core challenge of managing the relationship between public policy and trading opportunities.

Section B examines the reasons why governments use NTMs and services measures and the extent to which public policy interventions may also distort international trade. The phenomenon of offshoring and the cross-effects of services measures on goods trade are also considered. The section analyses choices among alternative policy instruments from a theoretical and empirical perspective. Finally, case studies are presented on the use of NTMs in particular contexts. These include the recent financial crisis, climate change policy and food safety concerns. The case studies consider how far measures adopted may pose a challenge for international trade.

Section C of the Report surveys available sources of information on NTMs and services measures and evaluates their relative strengths and weaknesses. It uses this information to establish a number of “stylized facts”, first about NTMs (TBT/SPS measures in particular) and then about services measures.

Section D discusses the magnitude and the trade effects of NTMs and services measures in general, before focusing on TBT/SPS measures and domestic regulation in services. It also examines how regulatory harmonization and/or mutual recognition of standards help to reduce the trade-hindering effects of the diversity of TBT and SPS measures and domestic regulation in services.

Section E looks at international cooperation on NTMs and services measures. The first part reviews the economic rationale for such cooperation and discusses the efficient design of rules on NTMs in a trade agreement. The second part looks at how cooperation has occurred on TBT/SPS measures and services regulation in the multilateral trading system, and within other international forums and institutions. The third part of the section deals with the legal analysis of the treatment of NTMs in the GATT/WTO dispute system and interpretations of the rules that have emerged in recent international trade disputes. The section concludes with a discussion of outstanding challenges and key policy implications of the Report.

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## B. An economic perspective on the use of non-tariff measures

### Reasons for government intervention and types of measures

**Governments employ non-tariff measures to increase national welfare and for “political economy” reasons.**

Non-tariff measures, such as TBT/SPS measures (including labelling), taxes and subsidies, are often the first-best policy instruments to achieve public policy objectives, including correcting market failures such as information asymmetries (where parties do not have the same information) or imperfect competition, and pursuing non-economic objectives, such as the protection of public health. NTMs such as export subsidies and export taxes increase national income by exploiting market power in international markets. While many NTMs are concerned with consumer protection, NTMs can also be utilized by political incumbents to protect domestic producers.

**The use of NTMs, irrespective of the motive that underlies them, will often have trade effects.**

In some cases, the use of NTMs can promote trade but in many other cases, they restrict it. In cases where the NTMs are meant to correct a market failure, the trade effects are an inadvertent by-product of pursuing a public policy objective. At other times, when NTMs are employed to manipulate the terms of trade or protect domestic producers, adverse trade effects on partners are the means through which gains are captured. The fact that the same NTM used to pursue a public policy objective can also be used for protectionist purposes underlines the difficulty of distinguishing between “legitimate” and protectionist motivations for NTMs, and of identifying instances where NTMs create unnecessary trade costs.

### The choice of NTMs in light of domestic and international constraints

**Analysing the choice among alternative instruments in light of the domestic political and economic context can help identify the motivation behind policy interventions.**

Neither the declared aim of a policy nor its effect on trade provides conclusive evidence on whether or not an NTM is innocuous from a trade perspective. An analysis of the nature of these measures and of the political and economic conditions leading to their adoption can provide important insights in this regard. In particular, the opaque nature of certain NTMs compared with tariffs and other policy instruments allows politically motivated governments to conceal the true

costs and benefits of a measure and, thus, satisfy the demands of producer lobbies while maintaining the appearance of pursuing a policy of public interest. Various circumstances in the political environment, such as election cycles or inter-departmental conflicts, can give further indications as to why the use of NTMs persists. Sector characteristics also play a role. Pressure from large influential firms regarding increases in fixed costs or the prevalence of international offshoring in certain industries is bound to affect governments' decisions on the use of certain NTMs.

**As countries make commitments in trade agreements that constrain their ability to pursue certain trade policies, less effectively regulated measures may emerge as a secondary means of protecting or supporting domestic industries.**

When tariffs and other trade measures increasingly become unavailable to governments, certain NTMs, including behind-the-border NTMs such as TBT/SPS measures, may be used to influence trade. For example, a government may be tempted to impose more stringent domestic technical regulations if domestic firms in an import-competing industry find it easier than foreign companies to comply. Existing empirical evidence alludes to increased use of NTMs when tariffs are constrained by international agreements.

### Measures affecting trade in services

**Despite the peculiarities of services trade, distinguishing when services measures pursue public policy objectives from instances in which they distort trade is fraught with the same fundamental difficulties as in the case of NTMs.**

The case for regulating services markets is particularly evident given the incidence of market failures in many services sectors. At the same time, the specific characteristics of services trade, notably the intangibility of services and the different modes of supply, imply that regulatory measures, mostly applied “behind the border”, are the only form of trade protection. Thus, while some services measures may be used explicitly for protectionist purposes, much services regulation pursues public policy objectives, but might nonetheless have effects on trade.

**Ensuring that services measures do not unduly distort trade has become of even greater significance in light of the unbundling of production processes.**

Trade in services plays an important role in supporting international production networks. Measures that restrict trade and competition in services markets may affect more than the sector directly concerned. Particularly in the case of infrastructural services, spillover effects on other services and goods can be significant.



## NTMs in the 21<sup>st</sup> century

**The use of NTMs in the financial crisis, and policies addressing climate change and food safety measures are all examples of how challenges arise at the interface of public policy and trade policy.**

During the recent financial crisis, a number of “emergency” measures were taken to stem the spread of systemic damage. At the same time, it was feared that the crisis could increase the temptation to resort to beggar-thy-neighbour policies. This has heightened the need for the monitoring of measures taken in response to the crisis in order to guard against the spectre of protectionism.

In regard to climate change, countries with strict regimes will be tempted to resort to NTMs in order to manage the environmental and trade consequences of their climate policies. Two of these consequences are carbon leakage (whereby reductions of greenhouse gas emissions by a country with strict regulations are offset by increased emissions by a country with less strict regulations) and the loss in competitiveness of firms in countries with tough environmental regulations. While environmental reasons could motivate the use of NTMs, such as border adjustment measures, these measures also help competitively challenged domestic producers, giving rise to a risk of regulatory capture.

Economic, social and technological advances have resulted in higher consumer demand for food safety and posed new challenges in managing globally fragmented supply chains. Food safety measures have proliferated as a tool to respond to these challenges. As a consequence, various approaches to mitigate possible negative trade impacts, such as harmonization of standards, equivalence and commitment to a set of rules, are receiving widespread attention.

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## C. An inventory of non-tariff measures and services measures

### Sources of information on NTMs and services measures

**Transparency is a major issue with regard to both NTMs and services measures. Despite recent efforts aimed at filling the information gap in this area, data remain sparse.**

The relative scarcity of information on non-tariff measures is partly due to the nature of these measures, which are inherently more difficult to measure than tariffs. The WTO and other international organizations have undertaken substantial efforts and made good progress in classifying and collecting data on NTMs in recent years, and these efforts are starting to extend to services measures. However, more needs to be done to obtain a clearer and more complete picture of the trade policy landscape.

WTO internal sources include WTO members' schedules of concessions/commitments, notifications, WTO trade policy reviews, monitoring reports, and information on specific trade concerns (STCs) raised by WTO members and disputes brought to the WTO. Most of these sources suffer from limitations and fail to provide the level of transparency they are supposed to deliver. With WTO members' notifications, for example, the low compliance rate can be a serious limitation.

Another problem is the accessibility of data which are not always stored in databases and are scattered. The situation with regard to the accessibility of NTM data should improve considerably with the WTO's new Integrated Trade Intelligence Portal (I-TIP), which is currently being deployed.

With regard to non-WTO sources, it became evident by the early 2000s that UNCTAD's Trade Analysis and Information System (TRAINS) database, the most complete collection of publicly available information on NTMs, was in need of upgrading.

A multi-agency group including all relevant organizations updated UNCTAD's outdated coding system. At the same time, UNCTAD, the International Trade Centre and the World Bank started coordinating their efforts to collect official information on NTMs. They also undertook a series of business surveys that usefully complement official information.

Other non-WTO sources of NTM data include the Global Anti-Dumping Database, the CoRe NTMs Database and the Global Trade Alert Database.

None of these data sources provides comprehensive coverage of NTMs. However, each sheds light on a

particular aspect, and taken together they provide significant information.

Besides the specific commitments under the General Agreement on Trade in Services and preferential trade agreements, there is very little information on services measures. The OECD's Product Market Regulation family of indicators is the main source of information on applied measures. However, it does not distinguish between market access and national treatment limitations on the one hand and domestic regulation on the other. The most reliable information on domestic regulation comes from sector-specific data, for example in financial services.

### Stylized facts about NTMs

**Despite common perceptions about a rising trend in NTMs, evidence is inconclusive. NTMs appear to have risen in the mid-1990s, but between 2000 and 2008 activity remained relatively flat before picking up again following the financial crisis. However, WTO notifications suggest an upward trend in TBT/SPS measures.**

According to historical data from the UNCTAD TRAINS database, shares of product lines and trade values covered by NTMs rose between the late 1990s and early 2000s, but then stayed flat or declined slightly up to 2008.

WTO data on notifications, however, show increasing use of TBT/SPS measures since the mid-1990s. This increase in the incidence of TBT/SPS measures is reflected in an increase in the number of specific trade concerns raised by WTO members in the TBT and SPS committees. Frequency and coverage ratios for specific trade concerns have also risen over time, although not evenly.

Evidence from WTO disputes in relation to TBT and SPS measures is more nuanced. Over the last five years, only 11 per cent of disputes cited the SPS Agreement and 12 per cent cited the TBT Agreement. The General Agreement on Tariffs and Trade (GATT) was cited more than half of the time (55 per cent) during the same period. One possible explanation for this discrepancy is that other committee-based cooperation mechanisms are effective in diffusing conflicts.

**TBT/SPS measures are the most frequently encountered NTMs according to data collected from official sources. They are also considered among the most relevant impediments to exports, according to business surveys.**

Newly collected official NTM information from 30 developing countries, the European Union and Japan shows a high cross-sectional incidence of TBT and SPS measures.

Evidence from business surveys conducted by the ITC in 11 developing countries suggests that TBT/SPS measures are the most burdensome for exporters. In 2010, the share of TBT/SPS measures in all NTMs perceived burdensome by exporting firms was 48 per cent. Similarly, survey-based data show a large share of TBT/SPS in measures affecting EU exporters (just over 50 per cent), but the US share is lower (around 20 per cent). This discrepancy might be explained by differences in methodology between the US and EU surveys.

**Evidence from WTO members' specific trade concerns and ITC business surveys indicates that TBT/SPS measures applied by developed countries are an important source of concern.**

TBT/SPS measures imposed by developed economies raise relatively more specific trade concerns than measures imposed by developing economies. The ITC business surveys show a greater resort to TBT/SPS measures by developed economies.

**NTMs, and TBT/SPS measures in particular, vary across sectors but are especially prevalent in agriculture.**

Specific trade concerns related to SPS measures overwhelmingly affect the agricultural sector (94 per cent), which is far from surprising. More unexpected is the fact that a large number of TBT concerns (29 per cent) also relate to agriculture. Additionally, econometric analysis shows that TBTs as measured by specific trade concerns are most important, in terms of numbers of tariff lines and trade value, in the agricultural sector.

If ITC survey responses are weighted by trade, the reported incidence of NTMs among firms in the agricultural sector is 63 per cent, compared with 45 per cent in manufacturing. Furthermore, TBT/SPS measures are far more prevalent among NTMs in agriculture (59 per cent) than in manufacturing (34 per cent).

Evidence from WTO disputes also shows a greater number of citations of the SPS and TBT agreements in cases involving agricultural products. Both agreements were cited in 28 per cent of disputes involving agricultural products (as defined in the Agreement on Agriculture) between 2007 and 2011. Meanwhile, no disputes involving non-agricultural products cited the SPS Agreement and only 2.9 per cent cited the TBT Agreement.

**Evidence also suggests that procedural obstacles are the main source of difficulties for exporting firms from developing countries.**

ITC business surveys show that, for exporters, more than 70 per cent of burdensome NTMs also raise a

procedural obstacle. Time constraints and unusually high fees or “informal” payments together account for more than half of reported obstacles.

## Services measures

**The currently available sources of information on services measures are unsatisfactory in a number of respects. WTO notifications suffer from low compliance rates. WTO members’ schedules of market access and national treatment commitments provide information on bound policies but the regimes actually applied are often more open. Domestic regulation is generally measured using poor proxies.**

Product Market Regulation (PMR) indicators, the most frequently used data on services measures, have followed a downward trend in OECD countries since the late 1990s. This indicates an increase in market contestability, but provides limited information on trends of market access, national treatment and domestic regulation. Very little is known on the trends in services measures in most non-OECD countries because they are not included in the PMR.

There is some evidence of discrimination against foreign services and services providers, in particular from the foreign direct investment (FDI) restrictiveness index calculated by the OECD. Such discrimination, which is likely to generate rents for domestic incumbents, has however followed a downward trend since the late 1990s, especially via reductions in foreign equity restrictions.

As far as domestic regulation is concerned, the data situation is particularly troubling. The trade literature has used PMR indicators to proxy for domestic regulation, but such indicators do not provide a satisfactory account of qualification requirements and procedures and technical standards in services. One of the difficulties in measuring domestic regulation is that it is often sector-specific. Not surprisingly, the most reliable information comes from sector-specific datasets, such as the World Bank dataset on banking regulation.

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## D. The trade effects of non-tariff measures and services measures

### The quantification of trade effects

**Non-tariff measures are diverse and cannot easily be compared across countries and sectors. The existing literature, however, suggests that NTMs significantly distort trade, perhaps even more than tariffs. Moreover, the relative contribution of NTMs to the overall level of protection appears to increase with the level of GDP per capita.**

A number of studies quantify the effect of NTMs on international trade by estimating an “ad-valorem tariff equivalent” (AVE). Averaging across countries and across tariff lines, NTMs almost double the level of trade restrictiveness imposed by tariffs. More recent evidence suggests that with falling tariffs, the contribution of NTMs to overall trade restrictiveness is likely to have increased even more. The evidence also suggests that as WTO members become richer, the trade restrictiveness of NTMs – relative to tariffs – increases. Furthermore, the average AVE for agricultural products appears to be much higher than that for manufactured goods.

**The degree of restrictiveness of services measures is generally higher in developing countries than in developed countries. Yet there is no systematic relationship between the restrictiveness of services measures and income per capita.**

The restrictiveness of services measures does not appear to be systematically associated with a country’s level of development because there is much variation within the group of developing economies. Furthermore, it appears that the cross-country variation in the restrictiveness of services measures may depend on the particular service sector under consideration.

**The methods developed in the trade literature to estimate the degree of restrictiveness of NTMs and services measures suffer from a number of limitations. These are aggravated in the presence of global supply chains.**

The methodological limitations can be traced, in part, to a lack of transparency in the use of NTMs and services measures. Problems also arise due to insufficient data on different prices, the sensitivity of results from the use of different econometric techniques and the difficulty of attributing price increases to a single measure when a market is characterized by multiple NTMs and services measures.

Efforts so far to measure the trade effects of NTMs and services measures do not address the fact that in a global supply chain semi-finished goods have to

move across international borders more than once. The effect of a marginal increase in trade costs is much larger than would be the case if there were a single international transaction.

**Estimates of the restrictiveness of services measures do not account for their impact on trade in goods.**

The trade-restrictive impact of services measures goes beyond trade in services and spills over to trade in goods. Transport and travel account for about half of cross-border trade in services and are obviously the most important direct services inputs to international trade. There is evidence that barriers to trade and competition in transport and logistics have a negative impact not only on cross-border trade in transport services, but also on a country's overall trade performance. Similarly, regulatory barriers to FDI flows and business services are shown to affect export performance in manufacturing sectors such as machinery, motor vehicles, chemicals and electric equipment.

The complementarities between goods and services and the spill-over effects of services measures on merchandise trade are especially strong along global value chains. Open and competitive business services markets are essential for moving up the value chain into more differentiated and service-intensive manufactured goods.

Estimates of the overall restrictiveness of services measures should take interactions between trade in services and trade in goods into account, but empirical analysis on this is still scarce.

### A focus on TBT/SPS measures and domestic regulation in services

**A comparative analysis of the role that the various types of NTMs play in the overall level of NTM restrictiveness does not exist. However, the impact on trade is not necessarily restrictive for all measures. TBT/SPS measures and domestic regulation in services, in particular, do not unambiguously increase or decrease trade.**

In general, TBT/SPS measures have prevalently positive effects for more technologically advanced sectors, but negative effects on trade in fresh and processed goods. Furthermore, when negative, the effect of TBT/SPS measures on trade is found to be driven by the impact on developing countries' exports, especially small countries.

Empirical evidence on the trade effect of domestic regulation in services is extremely limited. Domestic regulation that reduces competition negatively affects bilateral trade. In contrast, evidence from the financial

sector shows that domestic regulation aimed at ensuring appropriate standards has a positive effect on trade.

**TBT/SPS measures and domestic regulation in services affect not only how much two countries trade but also the number of countries with whom they trade.**

It has been argued that TBT/SPS measures may mainly represent a fixed cost to enter a new market. For example, a firm may need to pay an initial cost of adaptation to the standard in a foreign market that it enters, but this cost is independent of the amount the firm sells. This is consistent with evidence that TBT/SPS measures have a stronger effect on small rather than large firms, and on firms that outsource their components.

The importance of the fixed cost component also is consistent with the evidence that TBT/SPS measures and domestic regulation in services affect trade both through their impact on the volume of trade between two countries, and through their effect on the diversification of export markets.

**There is some evidence that conformity assessment is particularly burdensome.**

A study on SPS measures conducted for this report finds that conformity assessment measures have a stronger negative impact on food and agriculture trade relative to regulations on product characteristics.

**Negative effects on trade are mitigated by a reduction in policy divergence, whether through convergence to international standards, harmonization or mutual recognition.**

The empirical literature measures the extent of harmonization of TBT/SPS measures in different ways. For example, some studies consider a standard to be harmonized if it conforms to an international standard published by the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC), the International Telecommunication Union (ITU) or similar bodies. Other studies treat standards as harmonized if they are common to a group of countries. Notwithstanding these differences, a general finding in the literature is that harmonization of TBT/SPS measures increases trade. In particular, harmonization of TBT/SPS measures is shown to enhance the presence of small and medium-sized firms in export markets.

As with goods, it has been argued that differences in services regulation across countries (policy heterogeneity) constitute regulatory trade restrictions. There is indeed evidence that a reduction in policy heterogeneity, carried out through mutual recognition of standards or convergence to international standards, has led to increased services trade.

**If harmonization and mutual recognition of standards occur at the regional level, there may be significant trade-diverting effects on outsiders and regulatory “lock-in”. This appears to be the case especially for developing countries.**

Existing studies indicate that harmonization at the regional level tends to divert trade. Such trade diversion negatively affects developing countries' exports in particular. The inclusion of specific provisions in preferential trade agreements appears to follow a “hub and spoke” structure, with a larger partner representing the hub to whose standards the spokes will conform.

As discussed in last year's *World Trade Report*, the risk of a lock-in effect exists in regional provisions on TBTs. Harmonization to a regional standard may increase the costs for further multilateral trade opening. If adopting a certain standard involves the payment of some form of fixed cost, the risk exists that regional provisions may work as a stumbling block in multilateral cooperation.

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## **E. International cooperation on non-tariff measures in a globalized world**

### **Regulation of NTMs in trade agreements**

**Shallow agreements contain provisions that focus on addressing the problem of tariffs being replaced by non-tariff measures.**

Under the main economic theory for trade agreements, the main problem that the rules on non-tariff measures in a trade agreement need to address is “policy substitution” between tariffs and non-tariff measures. Efficiency can be obtained with a simple set of rules, which leave substantial autonomy to national governments in setting NTMs (“shallow” integration).

**The changing nature of international trade and the use of private standards may prompt the need for deeper forms of institutional integration.**

The proliferation of global production chains creates new forms of cross-border policy spillovers. In addition, firms increasingly employ private standards to address the challenges in governing their supply chains, with implications for market access. This provides a rationale for deep cooperation on NTMs within trade agreements. Because production is international, some of the costs of trade frictions are borne by firms in foreign states. Trade agreements play a role in preventing governments and firms from distorting trade and investment decisions across the supply chain.

**Moreover, the growing number of reasons why governments resort to NTMs, including for health, safety and environmental considerations, creates a need to develop rules to facilitate cooperation in the identification of efficient and legitimate uses of NTMs.**

As consumer concerns become more important in areas such as health and the environment, regulations play a more prominent role in government decisions for legitimate reasons. However, the complexity of certain NTMs can create inefficiencies because policy-makers may not have all the necessary information about their own regulatory needs and the needs of their trading partners. The opacity of many NTMs also makes enforcement of regulations a difficult international endeavour, because it depends on the ability of each government to observe how the others are holding up their end of the bargain.

**GATT rules regarding national treatment and non-violation complaints were designed to address the policy substitution problem between tariffs and NTMs. Deep agreements regulate NTMs in different ways, creating trade-offs.**

One of the principal constraints on discrimination via NTMs is the obligation to treat foreign products at least as favourably as “like” domestic products (national treatment). When a measure does not explicitly violate national treatment rules, governments may instead appeal to so called “non-violation” complaints that are allowed if one government can show that it has been deprived of an expected benefit because of another government’s action. In practice, however, non-violation complaints have been resorted to rarely by WTO members in disputes and where such complaints have been put forward, they often have not prospered.

Three forms of deep integration are often discussed: mutual recognition of regulations, linking tariff and non-tariff measures in trade negotiations, and harmonization of NTMs. These approaches imply trade-offs that depend on a number of economic conditions (e.g. the extent of trade integration, differences in policy preferences across countries) that need to be clearly assessed.

### **Cooperation in specific policy areas: TBT/SPS measures, services measures**

**Countries cooperate on TBT/SPS measures to address problems that arise when balancing trade restrictiveness and the achievement of policy objectives.**

Problems may arise when governments try to balance trade restrictiveness and the achievement of policy objectives through efficient regulations. To address these problems, countries cooperate by developing, disseminating, and adopting common approaches to regulation, such as “good regulatory practices”, and by developing international standards as benchmarks for measures.

The WTO’s TBT and SPS committees also allow WTO members to address problems regarding lack of information. Transparency procedures developed by the committees for the “notification” by WTO members of draft measures have enhanced the quality and availability of information on measures. Discussions of specific trade concerns provide information about how other members are balancing trade restrictiveness and the achievement of policy objectives.

**WTO members cooperate through the GATS by subjecting certain types of services measures to negotiations on progressive trade opening.**

Trade protection in services can be found in internal law, regulations, rules, procedures, decisions, administrative actions and suchlike. Although such services measures often do not primarily have a trade-related focus, there may be cases where regulations have unnecessarily trade-distortive and restrictive effects.

The GATS provides a framework for distinguishing between those regulations which can be considered as barriers to trade in services, and thus subject to progressive trade opening, and other measures which are domestic regulation. Discriminatory regulation, which violates national treatment, and quantitative restrictions on market access are already disciplined by the GATS and their removal is the subject of negotiations.

**WTO members face the challenge of negotiating disciplines on domestic regulation to complement market access commitments.**

Some domestic regulations are outside the scope of market access negotiations, but nevertheless have an impact on trade. The challenge is to find ways to ensure that they fulfil their stated objectives in a manner which is not more burdensome than necessary.

Thus, the focus of work in the GATS has been on negotiating a set of disciplines on domestic regulation to ensure that these measures are based on transparent and objective criteria, are not more burdensome than necessary to ensure the quality of the service and, in the case of licensing procedures, are not in themselves a restriction on the supply of services. The experience of the SPS and TBT agreements points towards the need for a similar set of disciplines in services to eliminate or reduce requirements which are not necessary for the objective sought.

### **GATT/WTO disciplines on NTMs as interpreted in WTO dispute settlement**

**GATT rules on NTMs are consistent with a “shallow integration” approach.**

The GATT does not constrain the regulatory autonomy of WTO members except where a measure treats an imported product less favourably than a “like” domestic product (Article III: national treatment), discriminates between two like imported products (Article I: most-favoured nation), or constitutes a border prohibition or restriction that has a limiting effect on the quantity or amount of a product being imported or exported (Article XI). This framework is supplemented by the possibility that challenges may be brought against GATT-consistent measures that nullified or impaired benefits accruing to a trading partner.

However, even where an NTM is inconsistent with the non-discrimination obligations of Articles I and III, or the prohibition on quantitative restrictions in Article XI, it may be justified under one of the general exceptions of GATT Article XX.

**Different approaches have been advocated to the question of whether NTMs that pursue a legitimate regulatory objective should be found to violate the non-discrimination obligations in the GATT and the other WTO agreements.**

Some consider that the national treatment obligation in Article III should be interpreted strictly to allow for NTMs that, despite being discriminatory, pursue a legitimate regulatory purpose or can objectively be said not to have a protectionist intent. For others, such considerations are not appropriate in the analysis under Article III, but rather belong in the assessment of whether the measure concerned can be justified under one of the general exceptions of Article XX of the GATT.

The role of regulatory purpose for the analysis under Article 2.1 of the TBT Agreement was recently clarified by the Appellate Body in two recent disputes (*US – Clove Cigarettes* and *US – Tuna II (Mexico)*). The Appellate Body held that to run afoul of Article 2.1 of the TBT Agreement, the technical regulation must not only have a detrimental impact on the competitive opportunities of the imported product, but also such detrimental impact must not stem exclusively from a legitimate regulatory distinction. In interpreting Article 2.1, the Appellate Body noted that while the GATT and the TBT Agreement seek to strike a similar balance, the two agreements are structured differently. In the GATT the balance is expressed by the national treatment rule in Article III:4 as qualified by the exceptions in Article XX, whereas in the TBT Agreement the balance is to be found in Article 2.1 itself.

**The SPS and TBT agreements are “post-discriminatory” agreements.**

Although the SPS and TBT agreements include non-discrimination obligations, they contain provisions that go beyond a “shallow integration” approach. They promote harmonization through the use of international standards and include obligations that are additional to the non-discrimination obligation. This includes, for instance, the need to ensure that requirements are not unnecessarily trade restrictive. Some question the appropriateness of these “post-discriminatory” obligations, arguing that the assessment of a measure’s consistency with such requirements is difficult without WTO adjudicators “second-guessing” a member’s domestic regulatory choices.

## Challenges in dealing with non-tariff measures

**Recent changes in the global economic environment have altered both the perceived need for NTMs and the structure of government incentives to use these measures for protectionist purposes.**

The rules of the GATT were designed for a world of trade in final goods, but the growing complexity of

production networks across borders is altering the nature of modern international trade. These changes pose challenges for governance, as the kinds of problems that arise in a world of offshoring require some rethinking about the current market access based framework of the multilateral trading system.

Changes in international markets do not only arise from differences in how businesses organize, but also from a number of other issues, including the growing sensitivity of consumers and voters to health and climate concerns. On the other hand, it is also likely that the use of NTMs will be responsive to a number of foreseeable trends in the global economic environment, including the way food is produced and consumed, the central role of international finance in the economy and in economic crises, and the fundamental challenges of climate change.

**Transparency provisions in the WTO agreements help address the problems raised by the opacity of NTMs but they are not sufficient. This is, at least in part, because, contrary to what is often claimed, not everyone benefits from transparency.**

While every government is interested in its partners’ NTMs, it may be reluctant to disclose information on its own NTMs. The WTO’s Trade Policy Review Mechanism and its monitoring reports help to address this problem, but resources and the timeframe between reports limit their usefulness.

Increasing transparency, in effect, opens trade. This means that for governments, the incentives to maintain opacity are similar to those for imposing a tariff. Despite common rhetoric endorsing transparency, the distributional impact of transparency provisions is typically ignored in a manner incompatible with economic incentives.

Among the options to improve transparency are providing the WTO with the resources necessary to independently monitor governments and markets, or relying on some third party to do the same. Compliance would still be an issue, as delegation of this monitoring role does not eliminate the lack of incentive for governments to be transparent. Members may need bilateral and/or plurilateral negotiations over transparency obligations in order to improve the situation.

**Limiting the protectionist application of NTMs requires better integration of economic and legal analysis. Economic theory can help in identifying situations in which governments may be more likely to employ NTMs for competitiveness reasons rather than the stated public policy rationale.**

When there is a legal dispute as to the importance of the purpose, rationale, or intent of a measure,

economic theory could provide insight into a government's choice of a measure, as well as the way it is administered. NTMs can be evaluated using economic reasoning to assess their suitability in addressing various public policy concerns. Government policy could also be screened for evidence of protectionism.

While the use of "economic indicators" is certainly neither exhaustive nor able to provide a conclusive answer as to the true policy rationale of an NTM affecting foreign trade interests, it may nevertheless be the case that this type of analysis could usefully be employed to narrow evidentiary gaps that may arise in the examination of certain trade rules.

**While current WTO rules focus on the policy substitution problem between tariffs and NTMs, policy flexibility is in some cases too limited.**

A non-violation approach to complaints could play a role in allowing WTO members to retaliate against other members' use of NTMs to circumvent their obligations – the so-called "policy substitution" problem. However, when a member wishes to choose a domestic measure that lowers restrictions to trade, the rules do not allow members to raise their tariffs to maintain their committed level of market access. This lack of flexibility may discourage the adoption of efficient domestic regulations or even trade concessions. Therefore, broadening the scope of non-violation complaints may improve economic efficiency.

On the legal side, there remain a number of ambiguities concerning the elements that a complainant must satisfy for its claim of non-violation to succeed. WTO members have preferred to address NTMs and domestic regulation in services using other rules. Finally, even if there were a successful case, the remedy available when a non-violation complaint is successful is weaker than the remedies available in cases of violation.

**Strong encouragement in the SPS and TBT agreements to follow international standards creates tension in practice.**

The SPS and TBT agreements encourage the use of international standards. There is, however, a "line of tension" between, on the one hand, reliance on international standards as a way to avoid unnecessarily trade-restrictive measures, and, on the other hand, deploying a "relevant" international standard. International standards may be difficult to use and there may be differences in preferences among WTO members, and difficulties in setting international standards, including differing capacities to influence the desired outcomes. The regular work of the TBT and SPS committees and certain aspects of on-going negotiations in the Doha Round are affected by this tension.

**The responsibility of governments with respect to private standards and the role of the WTO are not clear.**

The role of the WTO in addressing the trade impact of "private standards" is another important challenge facing the multilateral trading system. This topic arises across the WTO's regular work in contexts as diverse as green protectionism, food safety and social responsibility. Although these standards are cast as "voluntary" in nature (because they are imposed by private entities), they may nevertheless have significant *de facto* impacts on trade, and this has been of particular concern to developing countries in the WTO. Considering that private standards are non-governmental by definition, this gives rise to questions regarding the responsibility of governments with respect to private standards (under WTO disciplines), as well as the role of the WTO itself. While some members see no place for this discussion in the WTO, others are keen to engage.

**It is vital to ensure that market access and national treatment commitments in the GATS are not impaired by unduly burdensome or protectionist practices.**

The principal concern is that common rules at the multilateral level will result in a loss of regulatory freedom to pursue non-trade objectives for services. One way to overcome concerns regarding regulatory autonomy would be to focus the discipline on the necessity of the measure used to achieve its stated purpose. Another would be to foster greater awareness of the trade and investment implications of regulatory practices.

**It is important to identify possible areas where trade instruments for pro-competitive regulation of services could be used.**

The WTO has the experience of successfully developing a text that supports competition in the telecoms sector. Such experience could be used in other sectors where there might be potential for the use of similar instruments. Identifying possible areas for the use of trade instruments for pro-competitive regulation would require action by a wide range of national, regional and international agencies in order to expand regulatory dialogue and cooperation.

**Capacity building is a vital part of improving international cooperation both on TBT/SPS measures and on domestic regulation in services.**

Regulations aimed at dealing with public policy are not subject to market-opening negotiations in the same way as protectionist trade barriers, and therefore there is no place for thinking about preferential arrangements, such as the Generalized System of Preferences, to assist developing countries to develop and grow.



Instead, the developmental challenge associated with trade-friendly public policy involves technical assistance and capacity-building. In the area of SPS and TBT, developing and least-developed countries often lack the regulatory institutions, the training capacity, and physical infrastructure that would enable them to design and implement effective measures in these areas.

The Standards and Trade Development Facility (STDF), a global partnership established by the Food and Agriculture Organization of the United Nations (FAO), the World Organization for Animal Health (OIE), the World Bank, the World Health Organization (WHO) and the WTO, supports capacity building efforts in the SPS area. The Enhanced Integrated Framework and the Aid for Trade Initiative are also relevant here.

Addressing regulatory challenges in trade in services requires doing more than curbing non-transparent or unduly restrictive regulatory practices. Despite over a decade of negotiations, much remains to be done to improve cooperation and awareness among regulators, policy-makers and trade negotiators of the links between regulatory issues and trade principles. Sharing knowledge on good practices and strengthening regulatory institutions are important priorities for the proper functioning of services markets.

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