The rise of non-tariff measures

During the past two decades, applied tariffs in the Asia-Pacific region have halved. At the same time, the number of non-tariff measures (NTMs), including sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBTs), has risen significantly (figure 1). Both in relative and absolute terms, the impact of NTMs vis-à-vis tariffs as an impediment to trade has increased. While the higher tariffs imposed by the United States and China during the past two years have made headline news, the rising importance of NTMs as barriers to trade at the regional and global levels is expected to continue.1 In fact, a key concern is that trade tensions evolve from existing relatively transparent tariff wars to discriminatory implementation of NTMs, the impact of which is much more difficult to assess and predict.

“Trade costs of NTMs are more than double that of ordinary customs tariffs.”

1 In fact, from a technical point of view (i.e., reflecting international trade rules under the World Trade Organization), the tariffs imposed by the United States and the retaliatory tariffs by trade partners are not ordinary customs tariffs and are therefore considered to be NTMs (see box in this introduction).
According to estimates made by ESCAP and UNCTAD, the trade costs of NTMs are more than double that of ordinary customs tariffs. As such, they have become a key concern for traders as well as for trade policymakers who are aiming to ensure that trade can continue to support sustainable development. Accordingly, this introduction defines NTMs and provides an overview of NTM trends and developments in the Asia-Pacific region. Chapter 1 explores how NTMs relate to the Sustainable Development Goals (SDGs). The costs associated with NTMs, together with the impacts of NTMs on trade and investment as well as the private sector perspective on NTMs, are discussed in chapter 2. Chapter 3 considers international standards, and notes that one of the most effective ways to bring down costs associated with NTMs is to ensure that NTMs are aligned with international standards. Chapter 4 provides policy recommendations and highlights good practices in the effective management of NTMs.

"NTMs are not inherently good or bad – they add to trade costs, but can be important instruments in achieving SDGs, and can even promote trade."

NTMs as policy instruments are not inherently good or bad. They often serve legitimate and necessary purposes, such as protection of human, animal and plant health, or protection of the environment, and can be important instruments in achieving the 2030 Agenda for Sustainable Development. Furthermore, although NTMs, such as food or technical standards, generally increase production and trade costs, they can also potentially boost trade under certain conditions. For example, when an exporting country has high sanitary and phytosanitary standards in place, consumers in importing countries feel more confident about the quality of those food products and demand may increase. Stricter domestic food safety standards can make it easier for domestic exporters to meet trade partners’ standards, thereby further boosting trade.

At the same time, a key characteristic of NTMs is that they generate costs for producers and traders who adhere to them. Such costs may raise prices, thus inhibiting international trade. NTMs are often more complex, less transparent and, due to their technical nature, are often more difficult to monitor and more challenging than tariffs. Therefore, they can sometimes provide a means for governments to discriminate against imported products, if so desired, without appearing to breach the non-discrimination principle of the global trade regime.

In this context, the content of this introduction is as follows. Section A provides an overview of the
taxonomy of NTMs and related concepts. Section B contains a review of the state and trends of NTMs in the Asia-Pacific region.

A. WHAT ARE 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.”

If you ask traders what requirements they must meet to import or export a certain product, you will most likely get a list of regulations and procedures (and complaints), but few would rarely use the term “NTMs”. Many of these regulations may be different types of product-specific requirements imposed by governments, while others may be standards preferred by their business partners, and yet others may relate to border or payment procedures. To understand and address NTMs in a systematic manner, it is first necessary to define and categorize NTMs and differentiate them from related concepts.

1. International Classification of 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, 2012). The early discussion regarding NTMs can be traced back to the creation of the General Agreement on Tariffs and Trade (GATT) in 1947, in which related provisions are laid out in the official text. However, for a long time, there was no commonly accepted definition of NTMs. It was only in 2006, when UNCTAD established the Group of Eminent Persons on Non-tariff Barriers (NTBs) and the Multi-Agency Support Team (MAST), that this broad but widely accepted concept of NTMs emerged. It is necessary to stress that ESCAP, UNCTAD and other agencies consider only mandatory government regulations as NTMs. Other provisions that may create barriers to trade, such as standards and associated procedures are not NTMs. NTMs, by definition, are neutral – there is no a priori assessment of their legality, nor on their net impact on trade or welfare.

In contrast to the rather succinct definition, the universe of NTMs exhibits an enormous diversity and complexity. For example, some NTMs target the price of goods, such as administrative pricing, variable charges, anti-dumping and countervailing measures etc., while others target the quantity of goods, such as non-automatic licensing, quotas, import prohibitions etc. Some NTMs target the characteristics of goods, such as technical standards and labelling requirements etc. There are also NTMs that do not target goods directly, but instead affect different processes, such as customs procedures and administrative practices, government procurement policies and so on.

Through the years, MAST has developed a coding system to provide a base to collate and tally NTMs. The objective of the International Classification of Non-Tariff Measures (ICNTM) is to provide information and clarification on new and existing measures, so as to improve their comparability across countries (UNCTAD, 2016). The ICNTM serves as a common language on categorizing NTMs. It is officially endorsed by the United Nations Statistics Division (United Nations Statistics Division, 2012) as the International Classification of NTMs for data collection across countries and for reporting on internationally comparable data on NTMs. As shown in table 1, NTMs are categorized via a hierarchical tree into 16 chapters from A to P. Each chapter consists of three further levels of sub-branches. Chapters A to O are import-related measures, whereas chapter P concerns exports only. In accord with the definition, the classification only acknowledges the

---

3 Such a private sector perspective provides useful information on the level of restrictiveness of various NTMs (see chapter 2, section C).
4 For example, GATT Article VII on Customs Valuation, Article XI on General Elimination of Quantitative Restrictions, and Article XX on General Exceptions allow NTMs under specific circumstances.
5 The MAST team comprises eight international organizations – the Food and Agriculture Organization of the United Nations (FAO), International Monetary Fund (IMF), International Trade Centre (ITC), Organisation for Economic Co-operation and Development (OECD), United Nations Industrial Development Organization (UNIDO), UNCTAD, the World Bank and WTO.
6 For example, under chapter A (SPS), A2 level contains “Tolerance limits for residues and restricted use of substances”, which further contains more detailed classification, such as A21, “Tolerance limits for residues of or contamination by certain (non-microbiological) substances”.
existence of an NTM, and does not pre-judge on its
legitimacy, adequacy, necessity, or whether or not it
is discriminatory.

According to this classification system, the first three
chapters are technical measures. Chapter A (SPS)
and B (TBT) include tolerance limits for residuals and
restricted use of substances; hygienic requirements;
labelling, marketing and packaging requirements;
product identity requirements; specification on
production and post-production; and conformity of
assessment procedures etc. Many SPS and TBT
measures are based on international standards, such
as Codex Alimentarius (for some SPS measures) or
ISO (for some TBT measures).

“Standards are not, in themselves, NTMs. To be
considered an NTM, a standard must be
referenced in government regulation, making it
mandatory.”

As mentioned above, standards are not, in themselves,
NTMs. To be considered NTMs, standards must
be referenced in government regulations, making
them mandatory (see online annex)⁷. Chapter C
on pre-shipment inspection and other formalities
covers requirements on direct consignment,
pass-through at certain ports, and import monitoring
and surveillance.

Chapters D to O of the ICNTM classification are
various non-technical measures. In chapter D,
contingent trade protective measures consist of
anti-dumping, countervailing, and safeguard
measures. The steel and aluminium tariffs imposed
by the United States, as well as the tit-for-tat tariffs
spat between the United States and China are not
ordinary customs tariffs; thus they are classified as
contingent trade-protective measures, which means
the policy implications and remedy tools are different
to those of ordinary customs tariffs (see box 1).

Chapter E deals with measures aimed at restricting the quantity of goods, such as non-automatic licensing, quotas, prohibitions etc. Chapter F covers price controls on imported goods such as, for example, minimum import prices, reference prices, and seasonal duties. Chapter G concerns financial measures, such as advance payment requirements, multiple exchange rates, and measures that affect terms of payment. Measures affecting competition are given in chapter H such as, for example, importing by state trading enterprises. Chapter I on trade-related investment measures consists of local content requirements and trade balancing measures. Distribution restrictions in chapter J include geographical distribution measures and limits on resellers. Chapters K to O contain measures related to after-sales servicing, subsidies, government procurement restrictions, intellectual property rights and rules of origin.

Finally, chapter P covers together all export-related NTMs, including: technical measures imposed on
exports; export formalities; export licences, quotas, prohibitions, other quantitative restrictions; price controls; state-trading enterprises; export support measures; and measure on re-exports etc. They are equally as diverse as import-related measures (UNCTAD, 2016).

2. Non-tariff measures versus non-tariff barriers

“Non-tariff barriers (NTBs) are the policies that induce an adverse impact on trade due to the specific discriminatory and protectionist intent.”

Non-tariff barriers (NTBs) are the policies that induce an adverse impact on trade due to the specific discriminatory and protectionist intent. Unlike for NTMs, there is no widely accepted definition of NTBs. Whether an NTM is an NTB largely depends on the intent of the regulation. NTMs are primarily put in place to serve public interest, such as the protection of public morals or health and lives of humans, animals or plants; pursuance of foreign policy or national security goals; achievement of a monetary policy mandate; protection of artistic, historical or archaeological treasure; and conservation of natural resources or wildlife (Global Trade Alert, 2018). Classifying an NTM as an NTB is a rather contentious issue since trade partners are likely to disagree on whether a particular NTM is discriminatory or has a protectionist intent. Strictly speaking, however, technical NTMs are, de facto, not NTBs unless they have been successfully challenged through the WTO dispute settlement process (lengthy and expensive). Nevertheless, it is generally seen that some technical NTMs are indeed discriminatory/more trade restrictive than necessary (i.e., they are NTBs), and are sometimes used by governments as a trade policy. Non-technical NTMs are mostly NTBs. For example, quotas or subsidies are used with the intention to discriminate and affect trade. As shown in box 1, governments can be creative and use virtually any NTM category as an NTB. NTBs could be targeted for removal, whereas other NTMs, subject to regulatory review, could either continue to exist or be replaced by more effective and efficient policy measures (such as in the case of domestic policies restricting the use of alcohol and tobacco in lieu of NTMs, as discussed later in this report).

3. Procedural obstacles

Closely related to NTMs, procedural obstacles are practical challenges, such as long delays in testing or certification, inadequate facilities, lack of adequate information on regulations, or infrastructural challenges. While not regulations themselves (i.e., not NTMs), they exist because there are NTMs. As discussed in chapter 2, section C of this report, it is most often procedural obstacles associated with NTMs that are found to be burdensome by traders, rather than the NTMs themselves.

The burden of complying with NTMs and associated procedural obstacles is especially felt in the economies of developing and least developed countries (LDCs), where facilities necessary to achieve compliance with technical measures are often lacking or inadequate. Developing economies consequently must resort to outsourcing services such as laboratory testing or certification to meet standards, which can erode any cost advantages in production that they may have. Most notably affected are the agricultural and food sectors. This is particularly disadvantageous for developing economies and LDCs, which often have a comparative advantage in those sectors and with large portions of their populations that derive livelihoods from activities in those sectors. Developing economies are also negatively affected because consignments from these countries tend to be smaller, hence SPS-related costs per consignment are higher.

B. NON-TARIFF MEASURES IN ASIA AND THE PACIFIC REGION

NTMs are national regulations. As such, the only true comprehensive sources of policy regulations that could “potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both” are national repositories of

---

8 For example, when exporting live animals from Kyrgyzstan, “exporting animals must be quarantined for 30 days” [Government of Kyrgyzstan Decree of June 18, 2015 No. 377, “On the approval of priority veterinary and sanitary requirements for the prevention of animal diseases.”].

9 In one example, some agricultural goods from Myanmar bound for Mae Sot District in Tak Province (Thailand border province next to Myanmar) have to first be tested in Chiang Mai Province (more than 350 km away), before being shipped back to Mae Sot.
legislative acts. However, member States of WTO, under certain circumstances discussed below, are also required to notify the WTO Secretariat of new or changed NTMs. Furthermore, to build a comprehensive overview of the stock of NTMs across the world, UNCTAD in collaboration with other international agencies including ESCAP, regularly collects data on NTMs through systematically examining officially published national legislation. Based on these two sources, the following discussion provides an overview of the state and trends of NTMs in the Asia-Pacific region.

1. WTO notifications

Several WTO agreements set out multilateral rules on NTMs. For example, the WTO SPS Agreement sets out the basic rules on technical measures related to food safety as well as animal and plant health standards (WTO, 2018b), while the TBT Agreement sets out rules on other types of technical measures. According to the WTO SPS and TBT Agreements, WTO members are required to provide advanced notice of new or changed regulations. Additionally, pursuant to other WTO Agreements, such as the Agreement on Subsidies and Countervailing Measures and Anti-Dumping Agreement among others, members must notify subsidies and contingent trade protective measures etc.

Since 2013, globally, about 3,000 new or changed NTMs have been reported to WTO every year, most of which have been TBTs and SPS measures. In 2018, 95% of all notifications were SPS and TBT, with the rest falling within the contingent trade protection category (chapter D in ICNTM, figure 2).

Figure 2 

NTMs initiations notified to WTO, 2018

(a) World

- Technical barriers to trade 57.6%
- Sanitary and phytosanitary 37.6%
- Anti-dumping 3.4%
- Safeguards 0.9%
- Countervailing

(b) Asia-Pacific

- Technical barriers to trade 45.6%
- Sanitary and phytosanitary 44.1%
- Anti-dumping 7.8%
- Safeguards 1.2%
- Countervailing 1.3%


Under the SPS Agreement, WTO members are allowed to use higher and more restrictive standards when there is scientific justification, or there is consistent (not arbitrary) appropriate assessment of risks. Similarly, the WTO TBT Agreement aims to ensure that regulations, standards, and testing and certification procedures do not create unnecessary obstacles. The TBT Agreement also allows WTO members to adopt standards they consider appropriate – for example, for human, animal or plant life or health, for the protection of the environment or to meet other consumer interests. Moreover, WTO members can take necessary measures to ensure standards they set are met by domestic and foreign producers, as long as the procedures used to decide whether a product conforms with relevant standards are fair and equitable.
In Asia and the Pacific in 2018 the number of new SPS and TBT initiations notified to WTO reached 1,360 measures – a 15% year-on-year increase.

The number of new or updated SPS and TBT measures initiated globally and notified to WTO in 2018 reached 3,466 – a 16% increase from 2017. In Asia and the Pacific, the number of new initiations reached 1,360 measures – a 15% year-on-year increase. In comparison, 1,875 SPS and TBT measures were initiated globally, and 522 in Asia and the Pacific in 2007.

The increase in the number of initiations over the past decade has been partially triggered (and expected) by the accession of 13 new members to WTO, 7 of them from Asia and the Pacific region. The main reason, however, is the increase in notifications by developing countries (figure 3). The SPS and TBT notifications by the developed economies in Asia and the Pacific have remained relatively static over the years, whereas initiations by the developing economies have experienced substantial growth. Significantly, notifications by LDCs have recently experienced a notable growth as well – SPS measures initiated by LDCs in 2018 alone amounted to 21 notifications. In comparison, since 1995 up to 2017, LDCs in Asia and the Pacific region notified only 12 measures in total. While some of this growth can be attributed to enhanced notification efforts, it is generally agreed that a large portion of these are due to developing countries’ efforts to improve their technical, sanitary and phytosanitary regulatory frameworks.

While notifications of initiated SPS and TBT measures to WTO provide a good indicator of the increasing trend of notifications across time, they do not provide an accurate representation of the overall stock of measures in force. The main purpose of the WTO notification mechanism is to provide an opportunity for trade partners to comment on upcoming new or modified measures that could potentially have a significant impact on trade (whether positive or negative), rather than to act as a repository of measures. Furthermore, only measures that are different from international standards are required to be notified (see chapter 3).

Some economies notify all the new potential NTMs, irrespective of whether they adhere to international standards or not. Others only notify those that adhere to international standards. Yet others do not notify either. Some countries potentially confound national standards with NTMs (i.e., notify voluntary standards). Moreover, countries are required to notify only if the

---

“regulation may have a significant effect on trade of other members” (Annex B, WTO SPS Agreement and Article 2.9 in the WTO TBT Agreement). In addition, while it is encouraged to publish final regulations as they come in force, few countries follow this recommendation with all regulations. As such, the repository often only contains draft versions of regulations with no clear indication on whether they were adopted, when, or in what form. Finally, pre-1995 regulations, since they were not “new” or “amended”, are not in the WTO database.

2. UNCTAD TRAINS

The lack of consistent notification, coupled with the fact that not all economies are WTO members, prompted UNCTAD to lead an international effort with many national, regional and international partners, including ESCAP, to collect comprehensive data on NTMs. The UNCTAD TRAINS database has a coverage of close to 90% of world trade. All data are published online and are accessible free of charge through several web-portals.12 The database also allows quick access to full-text regulations of many countries. NTM data are collected by extensively reading and analysing national legislative documents, such as laws, decrees or directives. Once a relevant regulation is identified, each specific provision is classified into the detailed NTM codes and respective Harmonized System (HS) product codes. As of May 2019, more than 60,000 measures from 88 economies (counting the European Union as a single economy) have been classified and made publicly available.13 More than 25,000 measures came from 28 Asia-Pacific economies included in the database.14

“In the Asia-Pacific region, 30% of measures in the UNCTAD TRAINS NTM database are sanitary and phytosanitary measures, and 48% are technical barriers to trade.”

The majority of measures in the database are SPS measures and TBTs (figure 4). Globally, 41% of measures in the database are SPS (30% in the Asia-Pacific region) and 40% are TBTs (48% in the Asia-Pacific region). The third-largest category, export-related measures, accounts for 9% of measures globally and 13% of measures in the Asia-Pacific region. Notably, NTMs in chapters J to O have not been actively collected yet, but are included in the database if reported.

“China has the highest number of NTMs in the Asia-Pacific region, followed by high-income economies of New Zealand, Republic of Korea and Australia.”

In terms of individual economies, the highest number of NTMs in the Asia-Pacific region is in China, followed by high-income economies of New Zealand, Republic of Korea and Australia (figure 5).15 In general, the stock of NTMs relates to the level of development – more-developed economies generally have stronger legislative frameworks. However, caution should be exercised when comparing the collection of measures across economies. Although strong efforts are made to ensure cross-country comparability, the legal architecture of countries varies significantly, and the data collection process is complex (including due to translation).16

As this section has shown, NTMs are already prevalent and are becoming more so as developing countries enhance their technical regulatory frameworks. The key questions are whether NTMs contribute to sustainable development, and whether these contributions outweigh the trade costs associated with NTMs. The relationship between NTMs and sustainable development is presented in chapter 1. A detailed discussion of the effects of NTMs on trade and economic development is presented in chapter 2.

12 UNCTAD TRAINS portal trains.unctad.org; World Integrated Trade Solution (WITS) platform at wits.worldbank.org; and ITC/UNCTAD/WTO’s Global Trade Helpdesk at www.globaltradehelpdesk.org.

13 Caution should be exercised when comparing these figures to WTO notifications and measures under ICNTM classification disaggregates into specific Chapters, whereas WTO notifications by individual economies often compound many clusters into one measure.


15 The number of NTMs does not say anything about the trade restrictiveness of a country. For example, a country can have many measures that apply to single products or few measures applying to large product groups. Also, the restrictiveness of different measures cannot be compared. A labelling requirement is different from an import prohibition, for example.

16 UNCTAD (2018, UNCTAD TRAINS: The Global Database on Non-Tariff Measures) describes the database in detail, and the possibilities and limitations of comparing the data across countries.
NTMs in the Asia-Pacific region and globally, by type

(a) Asia-Pacific

- SPS [A]: 30%
- TBT [B]: 48%
- Pre-shipment inspection [C]: 2%
- Contingent trade protective [D]: 3%
- Quantity control [E]: 2%
- Price control [F]: 2%
- Other [G, H, I, J, K, L, M, N, O]: 0.5%
- Export-related [P]: 13%

(b) World

- SPS [A]: 41%
- TBT [B]: 41%
- Pre-shipment inspection [C]: 2%
- Contingent trade protective [D]: 4%
- Quantity control [E]: 2%
- Price control [F]: 2%
- Other [G, H, I, J, K, L, M, N, O]: 0.4%
- Export-related [P]: 9%


NTMs in the Asia-Pacific region, by economy

C. CONCLUSION

This chapter introduced the classification of NTMs and overviewed the trends and stocks of NTMs in the Asia-Pacific region. As noted, NTMs are not inherently good or bad – they can be important tools in achieving SDGs. At the same time, the proliferation in NTMs globally and within the region mean that they are now a more significant deterrent to trade than ordinary customs tariffs. In some cases, NTMs could implicitly be used in lieu of tariffs to intentionally restrict trade, rendering NTMs as NTBs. The key challenges to policymakers are to evaluate whether NTMs are the most effective tools in achieving the public policy objectives, and if so, how to strike the right balance between their positive (intended) effects and cost to traders (and ultimately the consumers) associated with them. In many cases, reducing the costs to traders does not mean outright removal of NTMs (which may indeed be a viable option for some), but rather ensuring that NTMs are coordinated across economies and associated procedural obstacles do not put an unnecessary burden on traders. As such, chapter 1 links NTMs to the 2030 Agenda for Sustainable Development in an effort to highlight the beneficial side of NTMs. Chapter 2 presents estimates of costs associated with NTMs, the impact of NTMs on trade and investment as well as the issues pertaining to the procedural obstacles that exist because of NTMs.
References


ONLINE DATABASES

UNCTAD. Trade Analysis Information System (TRAiNS) database. Available at https://trains.unctad.org/.