

3. Non-tariff Measures in ASEAN 2040

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Non-Tariff Measures in ASEAN 2040

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1. Introduction

The Association of Southeast Asian Nations (ASEAN) has come a long way since its inception in 1967. This can be seen, for instance, in the region's increasing economic integration in terms of trade and investment. It is also playing a greater role in East Asian production networks and value chains. Nonetheless, although trade integration in ASEAN continues to increase, the region still faces various challenges, including the ambivalence of some of its member countries towards globalisation. The future of trade integration in ASEAN 2040 depends on whether it will follow the tendency towards protectionism that has risen around the world since mid-2016, or will further exploit the benefits of economic interlinkages in the region. To achieve the latter end, ASEAN will need to address various barriers to trade integration.

This chapter focuses on the future of NTMs in ASEAN 2040. This is an important issue because NTMs have come to play a major role in

ASEAN trade integration since tariffs have been reduced under various agreements and commitments (including the ASEAN Free Trade Area agreement and ASEAN Economic Community 2015 commitment). Many have suggested that NTMs are spreading globally as a substitute for declining tariffs (Moore and Zanardi, 2011; Aisbett and Pearson, 2012; Orefice, 2015). This is also the case for ASEAN, which has seen divergence between tariffs and NTMs since the early 2000s (Ing et al., 2016). Furthermore, as concerns over product safety and environmental issues receive more public attention, the number of NTMs is also expected to increase. However, despite their significance, NTMs are often misunderstood.

A small number of NTMs is not necessarily good because NTMs are needed to protect the health and safety of consumers, as well as the environment. However, a greater number of NTMs is not necessarily better because many regulations are poorly designed and fail to protect consumers while increasing the cost of doing business (Cadot and Ing, 2015a). NTMs generally affect business due to their stringency and fragmenting effects (Cadot and Ing, 2015b). With respect to stringency, NTMs drive companies to source raw materials at higher costs (sourcing cost) and increase administrative costs (enforcement cost). Meanwhile, the application of different NTMs by various countries affects the market structure and degree of competition, thus fragmenting the market. NTMs are also often criticised as lacking transparency, being prone to lobbying interests, and being sometimes motivated by hidden protectionism intentions. Therefore, managing NTMs is an important part of ASEAN's trade integration agenda.

This chapter argues that efforts should be made to improve the effectiveness and efficiency of NTMs to achieve a more integrated ASEAN 2040. First, the compliance cost of NTMs in ASEAN is estimated, particularly the sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBTs). This is followed by a strategy to improve NTMs, including greater transparency, harmonisation, streamlining, and institutional improvement. The final section concludes with a broader focus on the NTM agenda in the future.

2. Ad Valorem Equivalents of Non-Tariff Measures

Various efforts have been made to estimate the compliance cost of NTMs through their ad valorem equivalents (AVEs) (Cadot and Gourdon, 2015, 2016; Grübler, Ghodsi, and Stehrer, 2016; Kee and Nicita, 2016). Nonetheless, these previous attempts encountered difficulties with both the data and estimation methods used. Since no comprehensive cross-country NTM database existed until recently, researchers have relied on a partial database created by the World Trade Organisation (WTO), including notifications and 'special trade concerns'. With respect to estimation, the previous literature used variations in dollar trade values or trade volume from the price elasticity of import demand to infer the AVEs of NTMs. These estimations encountered problems in retrieving the AVEs (for example, when the elasticity is unity), and may have led to incorrect identifications, as in the case of trade volume. Furthermore, the traditional approach yielded an average effect across countries (i.e., not individual country effects), or simulated the value of country-specific AVEs, instead of the real estimate.

Ing and Cadot (2017) proposed a new estimate of country-specific AVEs of NTMs, based on a recent NTM database and on trade unit value. A new, consistent NTM database covering 85 countries is now available. Meanwhile, using a trade unit value will separate the compliance cost effect (i.e., higher prices) from the demand-enhancing effect of NTMs (i.e., higher demand due to better quality products). This would be impossible when using variations in trade volume as this approach assumes unchanged demand. Interacting the NTM variables with a full vector of importer dummies also makes it possible to obtain a country-specific effect. Ing and Cadot (2017) then estimated importer-specific AVEs as the sum of the direct effects of certain NTMs on the unit values of certain products and the interaction effects of certain NTMs imposed by certain importing countries (see Ing and Cadot [2017] for a detailed regression equation).

Ing and Cadot (2017) found that the AVEs of NTMs in the ASEAN region are broadly in line with world averages. For food and agriculture products (Table 1), they found that the median AVEs of SPS measures at the

country-section level is 6.24%, and the simple average across all non-ASEAN importers and sections is 6.58%. Meanwhile, for ASEAN countries, the median is 6.51% and the average is 6.69%. This shows that SPS measures for food and agriculture products in ASEAN appear not to have a different compliance cost compared to those in other countries. Within food and agriculture products, the highest AVEs are found in animal products and fats and oils products (around 15% on average), while vegetable products and processed food have the lowest AVEs (around 5% on average). For animal products, the highest AVEs are found in the Lao People’s Democratic Republic (PDR) (26%) and Cambodia (23%), and the lowest is in Singapore (8%), where consumers are sensitive to safety and quality. This suggests that the technical capabilities of the SPS enforcement and monitoring infrastructure in the Lao PDR and Cambodia are limited, resulting in bureaucratic friction. A similar pattern is also found in fats and oils products. Across all sections, the highest averages are observed in Viet Nam (16.7%) and Myanmar (12.1%), and the lowest are in the Philippines (3.7%). In general, for food and agriculture products, SPS measures still impose significant compliance costs amongst ASEAN countries. The AVE is still lower than 10% for large economies like Indonesia, Malaysia, and the Philippines, but more than 10% for Singapore, Thailand, and all newer members of ASEAN (Cambodia, Lao PDR, Myanmar, and Viet Nam).

Table 1: Average Ad Valorem Equivalents, Sanitary and Phytosanitary Measures, by Section and Importer (%)

HS section	BRN	IDN	KHM	LAO	MMR	MYS	PHL	SGP	THA	VNM	avg.
Animal products	12.4	16.1	23.4	26.0	8.9	6.2	9.2	8.0	21.2	17.2	14.9
Vegetable products	6.0	4.4	2.8	4.4	8.9	5.7	0.5	7.4	5.8	5.1	5.1
Fats and Oils	14.0	6.0	0.1	18.5	26.3	18.4	0.0	16.1	11.5	38.8	15.0
Food, bev, and tobacco	3.1	3.8	4.0	-1.3	4.3	4.9	4.9	13.8	8.1	5.5	5.1
Simple average	8.9	7.6	7.6	11.9	12.1	3.7	3.7	11.3	11.7	16.7	10.0

avg. = average, bev. = beverages, BRN = Brunei Darussalam, equip. = equipment, HS = harmonised system, IDN = Indonesia, KHM = Cambodia, LAO = Lao People’s Democratic Republic, MMR = Myanmar, MYS = Malaysia, PHL = Philippines, prod. = product, SGP = Singapore, THA = Thailand, VNM = Viet Nam.

Source: Ing, L.Y. and O. Cadot (2017), 'Ad Valorem Equivalents on Non-Tariff Measures in ASEAN', *Economic Research Institute for ASEAN and East Asia Discussion Paper Series*, No. 2017-09. Jakarta: Economic Research Institute for ASEAN and East Asia.

For manufactured products (Table 2), the compliance cost resulting from TBTs in ASEAN countries are only slightly higher if not broadly in line with other countries. The median AVE at the country-section level is 4.0%, and the simple average is 4.5% for non-ASEAN countries. Meanwhile, for ASEAN countries the median is 5.06% and the simple average is 5.00%. Between products, the highest AVEs are found in textiles and apparel (7.6%), transport equipment (7.3%), and metal products (6.2%); while the lowest are in leather (1.1%) and chemicals (2.2%). For textiles and apparel, the highest AVEs are in Singapore (9.9%) and Malaysia (9.4%). For transport equipment, the highest are in Viet Nam (12.9%) and Thailand (8.7%). In metal products, the highest are in Indonesia (10.3%) and the Philippines (9.3%). Across all sections, average AVEs are relatively higher in the big economies, such as Indonesia (5.7%), Viet Nam (5.4%), Malaysia (5.2%), and Singapore (5.0%), while the lowest are found in Cambodia (2.8%) and Myanmar (3.1%). Ing and Cadot (2017) also found a positive correlation between the number of import documents required and cost to import with the average AVEs of TBT measures amongst all countries. This suggests that exporters tend to pass on the cost of NTMs to buyers. All in all, in general, for ASEAN and other countries, the cost of complying with TBT measures in manufactured products is relatively limited at around 5% of trade unit value. This is lower than the cost of complying with SPS measures in food and agriculture products.

Table 1: Average Ad Valorem Equivalent, Technical Barriers to Trade Measures, by Section and Importer (%)

HS section	BRN	IDN	KHM	LAO	MMR	MYS	PHL	SGP	THA	VNM	avg.
Chemicals	3.3	7.3	0.8	4.4	-0.9	5.6	-0.4	0.6	0.3	0.7	2.2
Plastics and rubber	3.1	5.1	3.1	-2.5	-4.2	3.1	2.4	3.1	7.7	10.5	3.1
Leather	4.9	5.7	-1.4	-1.4	-1.4	4.8	-1.9	4.9	-1.4	-1.4	1.1
Textile and apparel	4.8	6.9	7.2	7.8	7.8	9.4	6.9	9.9	7.1	7.8	7.6
Footwear	2.5	5.1	2.1	2.1	2.1	2.1	1.8	2.5	2.1	2.0	2.4
Cement etc.	7.1	5.0	3.9	3.9	3.9	3.9	4.3	9.4	7.8	6.0	5.5
Metals and metal prod.	3.6	10.3	4.7	6.6	6.6	5.1	9.3	5.2	4.7	8.6	6.2
Machinery	8.1	4.1	-2.8	4.5	4.5	7.0	2.7	3.3	3.3	1.8	3.5
Transport equip.	4.8	1.5	7.5	6.9	6.9	6.1	5.5	6.3	8.7	12.9	7.3
Simple average	4.7	5.7	2.8	3.6	3.6	5.2	3.4	5.0	4.5	5.4	4.3

avg. = average, BRN = Brunei Darussalam, equip. = equipment, HS = harmonised system, IDN = Indonesia, KHM = Cambodia, LAO = Lao People's Democratic Republic, MMR = Myanmar, MYS = Malaysia, PHL = Philippines, prod. = products, SGP = Singapore, THA = Thailand, VNM = Viet Nam.

Source: Ing, L.Y. and O. Cadot (2017), 'Ad Valorem Equivalent on Non-Tariff Measures in ASEAN', *Economic Research Institute of ASEAN and East Asia Discussion Paper Series*, No. 2017-09. Jakarta: Economic Research Institute of ASEAN and East Asia.

However, this result, which generally shows that NTM compliance costs in ASEAN are broadly in line with the world average, should be treated with caution for several reasons. The first of these reasons is a technical issue; the reported figures are section-level averages of panel estimates obtained at the chapter level, and these estimates are relatively more erratic than those averaged at the section level. Second, although AVEs reflect compliance costs, this could indicate either measures to correct market failures or simply bureaucratic friction. For instance, a low AVE does not necessarily reflect a smooth and efficient import process, but could also reflect unenforced regulation. As such, a detailed case study is needed to confirm the results of the estimation. Overall, due to the ambiguity of the AVE interpretations, it would be more prudent for ASEAN countries to continue the drive towards a more effective and efficient NTM regime in the region. This is the focus of the next section.

3. Strategies for Improving Non-Tariff Measures

Improving NTMs is different from reducing trade tariffs because NTMs differ in nature. First, although some NTMs have legitimate reasons to exist, they are often not designed with appropriate incentives and might be too stringent. As such, extra efforts are required to identify which NTMs ought to be eliminated or could be simplified. Second, unlike tariff reductions, reducing NTMs for certain products does not necessarily guarantee that no new NTM on the same product will resurface in the future. In fact, as there are at least 170 categories and forms of NTMs, NTMs on the same product could reappear in another form. Third, NTMs often fall into the domain or under the authority of many government agencies, thus complicating the challenge of managing them. Furthermore, there are also unfortunate similarities between managing tariffs and NTMs; for example, NTMs are often used as bargaining tools in trade negotiations, meaning that they are only reduced as part of a negotiated *quid pro quo*. This adds to the challenge of improving NTMs. Nonetheless, despite significant challenges, since an improved NTM regime is critical for ASEAN trade integration, efforts should continue.

To begin with, a general change in mindset is necessary. Disguised-protectionism NTMs usually aim to protect certain sectors from

competition. A better approach would be to improve the competitiveness of the concerned sectors. This could be done by correcting the policy and bottlenecks that prohibit industrial development, technological development, and employment in the sectors (Stone, Messent, and Flaig, 2015). Efforts should be taken to improve the overall environment of doing business (including regulatory systems, innovation policy, and infrastructure development) so that comparative advantages and new growth areas can be developed. This change in mindset would have a lasting positive impact, in contrast to a 'picking winners' tendency in some NTM applications. Going further, some specific strategies for improving NTMs in ASEAN are listed below.

The first strategy is to improve transparency. Since NTMs are complex by nature, the first step demands transparency on existing NTMs. According to the NTM Transparency Index created by Ing, Cadot, and Walz (2017), ASEAN's transparency on NTMs is good relative to other developing countries, such as those in Latin America, South Asia, and the Middle East. This might reflect ASEAN's efforts to achieve NTM transparency in recent years, for instance by creating national single windows, the ASEAN Single Window, and national trade repositories. However, this improvement needs to be communicated more effectively, as ASEAN countries typically rank unfavourably in various surveys of government transparency. Furthermore, there is still much room for improvement, such as greater regulatory transparency and simplification through broadening the mandate of institutions like NTM committees (Ing, Cadot, and Walz, 2017). Improvement in data management is also needed. NTM information in ASEAN was incomplete until recently, and it follows a different classification system than that used by other regions around the world (Cadot, Munadi, and Ing, 2015). The creation of an NTM database in ASEAN under the United Nations Conference on Trade and Development and Economic Research Institute for ASEAN and East Asia work programme (see Ing et al., 2016) incentivises greater transparency in NTMs going forward. The application of national single windows and national trade repositories in ASEAN member countries should also be continuously improved, especially in newer members of ASEAN.

The second strategy is harmonising standards and cooperating in conformity assessment procedures (CAPs). These harmonisation

efforts will make NTMs more efficient as they reduce the regulatory differences or distances between countries. Nonetheless, despite high expectations as to the benefit of harmonising standards, Cadot and Ing (2015b) found that this is not necessarily the best way to improve NTMs. They argue that, in the case of poorer countries, engaging in standard harmonisation with richer countries in the region might result in too-stringent standards that impose an overly heavy burden on producers, rendering them uncompetitive in other developing countries' markets. On the contrary, they found that the mutual recognition of CAPs appears to deliver a bigger reduction in compliance costs, compared to standard harmonisation. More specifically, they found that standard harmonisation reduces compliance costs by around 10%, while CAPs reduce these by around 27% (almost three times more). Yet, they also found that harmonising standards remains important in enhancing trade (especially in adopting international standards), but less so in adopting regional standards. This could be because regional standards might be ad hoc and influenced by special interests. Cadot and Ing (2015b) also argue for harmonisation in terms of regulatory management system convergence within the region. This soft regulatory convergence would result in lasting NTM improvement. This is discussed further below.

The third strategy is streamlining and institutional improvement. Streamlining NTMs involves removing redundancy and red tape to achieve more simplified NTMs. In general, given their complex nature and to make them more effective, improving NTMs should be viewed as a governance issue. This is how the government can protect public interests through effective regulation without necessarily complicating business. Without this country-based (bottom-up) approach, NTM reform will proceed slowly due to the government approach of trading concessions at the regional level (Cadot, Munadi, and Ing, 2015). Thus, NTMs should be improved by enhancing the regulatory management system of the country. For instance, before a new regulation is imposed, a quality control process should take place inside the government whereby the cost and benefits of such a regulation are examined (through a regulatory impact analysis). Any legitimate complaint from the private sector regarding a certain regulation should also trigger a review process. To this end, the creation of an independent body or task force with the mandate and power to review business and trade regulation is crucial. This institution should be given a legal mandate and staffed

with competent personnel. In the long run, this could be merged with the competition oversight body as these require similar skills (Cadot, Munadi, and Ing, 2015). This institutional change will put an end to the traditional approach of using NTMs as bargaining tools, which has had only limited success in improving NTMs. As demonstrated by other countries, regulatory reform ought to comprise four key ingredients: (i) a consistent and mutually reinforcing reform agenda and permanent political anchor (for example, NTM improvement should be placed within the bigger picture of improving the investment and business climate); (ii) international support in terms of technical assistance; (iii) a credible institutional setup in the form of a strong oversight body; and (iv) the engagement of national administrations in a regulatory impact assessment process for new regulation.

The three strategies outlined above are essential components of an integrated ASEAN 2040. These far-reaching strategies (especially the third one) are better carried out as part of a broader effort to improve ease of doing business. Thus, it is necessary to obtain strong political support and involve the private sector. These strategies constitute a transformative approach for ASEAN to adapt and respond to new types of NTMs and broader challenges that they may present in the future.

4. New Issues on Non-Tariff Measures for ASEAN

The previous section focused mostly on SPS and TBT measures. As trade integration continues, it is important to look at other types of NTMs that might not currently feature prominently in the policy discussion but will do so in the future. These include NTMs related to government procurement and state-owned enterprises (SOEs), intellectual property rights (IPRs), and environmental issues.

First, NTMs on government procurement usually take the form of preference given to national providers (often SOEs), despite, for instance, their higher cost compared to foreign suppliers. Known as home bias, this is usually amplified in procurement under fiscal stimulus package programmes. There are several forms of NTMs in government

procurement, including (i) market access restriction (e.g., limiting access to only national, local, and joint-venture suppliers); (ii) domestic price preferences (e.g., price preferences for national, local, and joint-venture suppliers); (iii) local content requirements (e.g., using local inputs, services, staff, and subcontractors); (iv) collateral restrictions (e.g., taxes on foreign suppliers and ineligibility for subsidies); (v) conduct of procurement that discriminates against foreign supply (e.g., pre-selected lists of tenderers, direct or limited tendering, registration mechanisms, and limited timing); (vi) restrictive qualification criteria (e.g., requirements for extra certifications or licenses, set-asides for small and medium-sized enterprises or local minorities); (vii) restrictive evaluation criteria (e.g., technical contractual conditions favouring domestic firms); (viii) lack of access to a review and complaint system; (ix) a lack of transparency or clarity of information; and (x) inadequate anti-corruption laws or their enforcement (Gourdon, Bastien, and Folliot-Lalliot, 2017). Overall, these measures raise the cost of government procurement, thus undermining the 'value for money' objective in procurement.

NTMs in government procurement are closely linked with SOEs, which are sometimes granted advantages that hinder market access or affect competition, such as being prioritised or given exclusive rights to participate in government procurements. SOEs are also typically given direct subsidies, concessional financing, state-backed guarantees, preferential regulatory treatment, and exemptions from antitrust enforcement or bankruptcy rules, amongst other things. This results in an uneven playing field (Kowalski et al., 2017). Another dimension of the issue is the industrial policies (e.g., subsidies) used by some countries to make their SOEs more competitive when participating in foreign governments' procurements.

Data on the size of procurement markets, flows of trade in procurement, and the types of discriminatory measures applied are still lacking. Existing information on advantages obtained by SOEs are also mostly anecdotal or individual cases. Gourdon and Messent (2017) estimated the size of government procurement markets at around 11–12% of GDP. They also estimated that home bias in government procurement has increased in recent years, especially in developed countries, and in developing countries since 2000. Gourdon and Messent (2017) also

found that the WTO Agreement on Government Procurement (concluded in 1994 and revised in 2012) has somewhat reduced discrimination in the procurement market and increased trade in procurement amongst signatories. This reduction is higher if the signatory countries also have an international investment agreement that permits a domestic presence. This demonstrates the positive role played by international agreements in reducing NTMs.

The second type of NTMs is those related to a lack of protection and enforcement for IPRs. These could be measures where importing countries require or pressure technology transfer on imported goods from other countries, such as in the form of joint-venture requirements, foreign equity limitations, and administrative review and licensing processes, amongst many others. While a stronger IPRs regime is expected to increase trade, inbound investment, and domestic innovation processes (Cavazos Cepeda, Lippoldt, and Senft, 2008), some countries appear to prefer a shortcut approach to gain capability in technology-intensive goods through forced technology transfer. Another form of NTMs in this area is the lack of enforcement of IPRs, leading to widespread copyright piracy and trademark counterfeiting.

In recent years, NTMs on IPRs issues have become increasingly important and received more public attention. In fact, a main source of trade conflict escalation between the United States (US) and China in 2018 is China's alleged forced technology transfer policy. In June 2018, the US imposed a 25% tariff on \$50 billion worth of imports from China on the grounds of concerns regarding forced technology transfer. Earlier, in May, trade ministers from the US, Japan, and the European Union (EU) affirmed their intention to deepen cooperation and the exchange of information to find effective means to address forced technology transfer policies and practices. They also plan to prevent the acquisition of domestic companies by foreign companies suspected to be driven by motives to obtain technologies and intellectual property. This demonstrates how unresolved NTM issues can slow trade and investment.

The third type of NTMs is those related to the environment. This covers trade measures on the grounds of environmental protection.

The measures could take the form of environmental regulations and standards on product and production process, environmental labelling, and taxes and subsidies (Khatun, 2009). Developing countries are often affected by environment-related trade measures applied by developed countries. A broad lack of access to environment-friendly production technology, access to timely information, and representation in international standards bodies often adversely affects the competitiveness of developing countries' products. Furthermore, while environmental protection is an important goal, some of its measures are influenced by local players' trade interests, thus undermining the objectivity of the measures (disguised protectionism).

Environment-related disputes constitute a small fraction of the cases addressed to the WTO dispute settlement mechanism (Falker and Jaspers, 2012). However, environment-related NTMs are expected to increase due to increasing public awareness of environmental issues, which might lead to more trade friction and disputes. One example is the EU renewable energy directive, which aims to promote the production of energy from renewable sources in the EU. However, the policy discriminates against the use of palm oil as a biofuel as it argues that the production of palm oil fails to guarantee real carbon savings and protect biodiversity. This claim has been contested by palm oil-exporting countries, which are mainly ASEAN countries. Another example is trade measures targeting illegal, unreported, and unregulated fishing. In an effort to combat this, some countries require stringent import documentation, certification, and traceability of the whole supply chain, amongst other measures. This has put fishery imports (mainly those from developing countries) at a disadvantage compared to local production. Many small and medium-sized vessel operators from developing countries are burdened with significant administrative and budgetary costs. As such, developed countries should consider some flexibility on these measures. On the other hand, environmental issues such as land degradation, climate change, water shortage, and loss of biodiversity caused by animal husbandry industries (mainly in developed countries), have largely been ignored so far (Food and Agriculture Organization of the United Nations, 2006). Animal husbandry activities are responsible for around 18% of greenhouse gas emissions, more than the combined exhaust from all transportation sectors, which account for 13%. The industry emits methane gas, which is significantly more destructive and has higher

global warming potential than carbon dioxide. It also consumes a large amount of water. In the US, for instance, feed crops for livestock account for around 56% of all water consumed annually.¹ However, despite significant negative impacts on the environment, developed countries remain silent on this issue, possibly due to the value of their large share of livestock, meat, and dairy industry exports (around 80% of such exports worldwide).² The practice by which developed countries pick and choose which industries they will target with stringent NTMs on the grounds of environmental protection would undermine the credibility of other measures and could lead to trade friction with developing countries.

The NTMs outlined above are tough issues to address, partly due to their political sensitivity, as in the case of government procurement and SOEs, and tension between multiple objectives, as in the case of IPRs and environmental NTMs. Nonetheless, as achieving the benefits of trade integration is paramount, efforts to improve the effectiveness and efficiency of these types of NTMs should be firm on the agenda. A lack of effort would slow trade and investment unnecessarily. An economic analysis is needed to ascertain the current prevalence of these types of NTMs within ASEAN, as well as between ASEAN and its trading partners. For instance, it should be explored whether firms face significant barriers to joining public procurement within ASEAN, and whether ASEAN countries are subject to environment-related non-tariff barriers in other countries.

Finally, as ASEAN continues to pursue trade integration, regional bodies play a significant role. The ASEAN Secretariat should continue its efforts to compile and maintain a uniform NTM database. It should also continue to support the adoption and harmonisation of international standards, as well as mutual recognition of CAPs. Furthermore, it could provide technical support in establishing a supervisory body or task force for business and trade regulation. Sharing best practice and technical assistance in conducting economic analyses on the effects of NTMs would

¹ For a more detailed discussion, see Cowspiracy: The Sustainable Secret. <http://www.cowspiracy.com/facts/> (accessed 3 September 2018).

² The value of the share of livestock, meat, and dairy products (HS codes 01, 02, and 04) exports of the US, EU, Canada, Australia, and New Zealand to the world in 2017. United Nations Comtrade Database. <https://comtrade.un.org/data/> (accessed 3 September 2018).

also be useful, especially for the CLMV countries. Equally important, the ASEAN Secretariat and think tanks in the region could champion policy discussion on the frontier of the NTM agendas mentioned earlier. ASEAN has been on a remarkable journey of economic integration. Despite a growing trend toward protectionism in many countries, this initiative should be continued to achieve a more dynamic, competitive, and prosperous region.

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