

# Non-Tariff Measures in ASEAN - An Update

Edited by  
**Ha Thi Thanh Doan**  
**Samuel Rosenow**



Non-Tariff Measure in ASEAN  
- An Update

Published by  
Economic Research Institute for ASEAN and East Asia (ERIA)  
Sentral Senayan 2, 6th floor,  
Jalan Asia Afrika no.8,  
Central Jakarta 10270  
Indonesia

© Economic Research Institute for ASEAN and East Asia

Published in August 2019

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means electronic or mechanical without prior written notice to and permission from ERIA.

The findings, interpretations, and conclusions expressed herein do not necessarily reflect the views and policies of the Economic Research Institute for ASEAN and East Asia, its Governing Board, Academic Advisory Council, or the institutions and governments they represent.

Material in this publication may be freely quoted or reprinted with proper acknowledgement.

Cover Art by Artmosphere Design  
Book Design by Artmosphere Design

National Library of Indonesia Cataloguing-in-Publication Data  
ISBN: 978-602-5460-19-7

# FOREWORD [ERIA]

Tariffs, as a traditional trade policy tool, have declined worldwide. A new generation of free trade agreements has shifted the focus towards indirect policies which can affect trade. Amongst key policy areas, the importance of non-tariff measures (NTMs) is increasing. For the Association of Southeast Asian Nations (ASEAN), the removal of non-tariff barriers is amongst the major components of regional efforts to enhance intra-regional trade. In principle, the ASEAN Trade in Goods Agreement has explicitly stated obligations regarding NTMs. In practice, however, the integration agenda has focused primarily on tariffs, which have been reduced to 0.2% on average. As room to liberalise tariffs further is limited, addressing NTMs is a fundamental prerequisite for realising the ASEAN Economic Community. Because NTMs constitute a grey area where trade policy meets public policy goals, effective NTM management must consider not only their trade-distorting effects but also their potential benefits.

To understand the extent of NTM application and adopt an appropriate approach to managing them, a comprehensive and up-to-date NTM database is essential. Realising this urgent need, the Economic Research Institute for ASEAN and East Asia (ERIA) and the United Nations Conference on Trade and Development (UNCTAD) have cooperated to construct a detailed ASEAN NTM database. The first database was launched in 2015, and an update was completed in early 2019 to capture the dynamics of regulatory reform in ASEAN. At the 12th meeting of the ASEAN Trade Facilitation Joint Consultative Committee (ATFJCC), the database was endorsed as a primary resource for the National Trade Repository (NTR) as well as an input to ASEAN Trade Repository. Consequently, ERIA-UNCTAD has shared the raw database with the ASEAN Member States (AMS) to assist them in populating the NTM section of respective NTRs.

This database is only the first step towards improving transparency and competitiveness for AMS. The successful collaboration between ERIA and UNCTAD, with the unwavering support of AMS, will continue through various follow-up activities. Upon official request from the ATFJCC, efforts are being made to enhance the capacity of governments to sustain and update the database through in-country training programmes. Analytical work to quantify the impact of NTMs on trade and the economy is being conducted.

This report provides a snapshot of the usage of NTMs amongst ASEAN, and presents the ongoing efforts at national and regional level to address NTMs. It can serve as a useful reference for policymakers and researchers by shifting the common negative perception about NTMs, elaborating on the complexity of NTMs and the prevalence of NTMs in ASEAN, and recommending pragmatic approaches to manage NTMs. As such, we expect the database and the report could contribute to ASEAN's efforts in enhancing national competitiveness and moving forward with the integration agenda, which, ultimately, could foster economic growth.

A handwritten signature in black ink, reading "H. Nishimura". The signature is stylized and cursive.

**Professor Hidetoshi Nishimura**

President of ERIA

Jakarta, August 2019

# FOREWORD [UNCTAD]

Regional integration plays a fundamental role in contributing to economic prosperity and sustainable development. The ASEAN's Economic Integration agenda is a case in point. Promoting regional stability and trade as well as collaboration in economic, social, cultural, technical, scientific and administrative areas, it laid the foundation for a prosperous and peaceful community of Southeast Asian Nations. Moreover, the ASEAN integration agenda set out ambitious priorities, notably the establishment of a regional single market and production base characterized by free flow of goods and services.

Non-tariff measures (NTMs) are critical to achieve market integration in ASEAN. While tariffs are transparent and widely eliminated, NTMs are not easy to identify and prove today the major obstacle to trade. The majority of NTMs are regulatory measures while traditional trade measures such as quotas and non-automatic licensing are now less common. Since most regulations apply equally to domestic products, NTMs affect most of the products that we encounter in our daily lives: packaging requirements and limits on the use of pesticides ensure safe food; restrictions on toxins in toys protect our children; mandatory voltage standards for household plugs enable regional mobility; and emission standards for cars limit climate change.

Increasing transparency and understanding of NTMs is essential for the formulation of effective market integration strategies in ASEAN. To that end, The Economic Research Institute for ASEAN and East Asia (ERIA), the United Nations Conference on Trade and Development (UNCTAD) and all ASEAN governments jointly updated NTM data in all ten countries in 2018. Based on the first NTM database from 2015, that was collected by the same team, we further improved the data quality and captured novel regulatory reform since then. As a result, the new NTM database captures comprehensively all NTMs applied in ASEAN as of March 2018, including non-tariff barriers and behind-the-border regulations. Moreover, this information is freely available through an online database. A wide array of stakeholders can take advantage of it: private sector exporters and importers to identify the regulations with which they must comply; policy makers and negotiators to streamline and negotiate NTMs; and researchers and government officials to assess the impact of NTMs on trade and sustainable development.

This report highlights pattern of NTMs usage in ASEAN, based on the updated NTM database. It documents regional and country-specific time trends in NTM application; highlight differences in prevalence and structure by sector and NTM type; and identifies differences of NTM usage between imports and exports. Based on this extensive analysis, the report identifies policy recommendations to help manage NTMs more effectively, a stepping stone to advance market integration in ASEAN.

I hope that the report will assist ASEAN member States in advancing regional integration and boosting competitiveness that supports their sustainable economic, social and environmental development, as well as global inclusion.



**Pamela Coke-Hamilton**

Director

Division on International Trade and Commodities

UNCTAD

# CONTENTS

	<b>ACKNOWLEDGEMENT</b>	<b>VIII</b>
	<b>LIST OF FIGURES AND TABLES</b>	<b>X</b>
	<b>EXECUTIVE SUMMARY</b>	<b>XVII</b>
	<b>INTEGRATIVE REPORT</b>	<b>01</b>
<b>Chapter 1</b>	<b>UPDATING NON-TARIFF MEASURES IN BRUNEI DARUSSALAM</b> <i>Christina Ruth Elisabeth</i>	<b>32</b>
<b>Chapter 2</b>	<b>NON-TARIFF MEASURES: CAMBODIA</b> <i>Chan Hang Saing, Sereirot Yoeng, and Seyhah Ven</i>	<b>45</b>
<b>Chapter 3</b>	<b>INDONESIAN NON-TARIFF MEASURES: UPDATES AND INSIGHTS</b> <i>Ernawati Munadi</i>	<b>67</b>
<b>Chapter 4</b>	<b>NON-TARIFF MEASURES: LAO PEOPLE’S DEMOCRATIC REPUBLIC</b> <i>Phonesavanh Sitthideth</i>	<b>85</b>
<b>Chapter 5</b>	<b>NON-TARIFF MEASURES IN MALAYSIA</b> <i>Evelyn S. Devadason, VGR Chandran Govindaraju, and Andrew Kam Jia Yi</i>	<b>98</b>
<b>Chapter 6</b>	<b>NON-TARIFF MEASURES IN MYANMAR</b> <i>Ha Thi Thanh Doan</i>	<b>120</b>
<b>Chapter 7</b>	<b>PHILIPPINE NON-TARIFF MEASURE PROJECT</b> <i>Cecilia V. Reyes</i>	<b>137</b>
<b>Chapter 8</b>	<b>NON-TARIFF MEASURES UPDATE SINGAPORE</b> <i>Anika Widiana and Steven Leonardo</i>	<b>170</b>
<b>Chapter 9</b>	<b>NON-TARIFF MEASURES IN THAILAND</b> <i>Nuttawut Laksanapnyakul, Papatsara Rattanasimanon, Sunthorn Tunmuntong, Pattharapon Yutthasaknukun and Chedtha Intaravitak</i>	<b>185</b>
<b>Chapter 10</b>	<b>NON-TARIFF MEASURES IN VIET NAM</b> <i>Duong Anh Nguyen, Hang Thu Dinh, Thien Thi Nhan Do, and Thanh Tri Vo</i>	<b>207</b>

# ACKNOWLEDGEMENTS

This report is based on the updated Non-Tariff Measures in ASEAN Database, a joint product of the Economic Research Institute for ASEAN and East Asia (ERIA), and the United Nations Conference on Trade and Development (UNCTAD). The database is the result of several years of intensive work by a dedicated team of experts, with the consultation and support of various stakeholders.

The project is led by Samuel Rosenow (UNCTAD) and Ha Thi Thanh Doan (ERIA). The core team includes Chi Le Ngo, Mingcong Li, Sergei Sudakov, and Denise Penello Rial. Their extensive expertise and absolute commitment to the project ensure quality of the final product. Ralf Peters, with his rich experience and vision, provides valuable guidance throughout the process. Lili Yan Ing shares excellent advice and considerable encouragement.

This journey would not be possible without the tremendous efforts and dedication of national teams: Brunei Darussalam (Christina Ruth Elisabeth, Bernardinus Realino Yudianto); Cambodia (Saing Chan Hang, Ven Seyhah, Yoeng Sereiro); Indonesia (Ernawati Munadi, Indah Rahayu); Lao PDR (Leeber Leebouapao, Sthabandith Insixiengmay, Phonesavanh Sittideth); Malaysia (Evelyn S. Devadason, VGR Chandran, Andrew Kam Jia Yi); Myanmar (Zin Zin Naing, Cho Cho Thein, Daw Win Min Phyo); Philippines (Cecilia V. Reyes, Edmund Jose C. Guamen, Jhunafe Antonio Ruanto, Charmaine Reyes-Lynn); Singapore (Anika Widiana, Stefany, Steven Leonardo); Thailand (Nuttawut Laksanapanyakul, Papatsara Rattanasimanon, Sunthorn Tunmuntong, Pattharapon Yutthasaknukun, Chedtha Intaravitak); and Viet Nam (Nguyen Anh Duong, Vo Tri Thanh, Dinh Thu Hang, Do Thin Nhan Thien). In addition, inputs and facilitation from NTM focal points further accelerate the efforts.

We thank Eng'r Artemio D. Bernardino, Ahmad Syaukat Romawi, Santiago Teperino Lopez, Miftahudin, and Petros Shayanowako for their contribution to mapping product codes. Coordination from Gracia Hadiwidjaja at the early stage of the project is gratefully acknowledged. Muhamad Rizqy Anandhika provides excellent research assistance. Special thanks also to ERIA's publications team, particularly Stefan Wesiak and Fadriani Trianingsih, for scrutinising every detail of the report and organising the report nicely, and to Rizka Chantika Anggara and Marina Sari, who provide able administration support.



We thank Ponciano S. Intal Jr and Salvador M. Buban for sharing insights into regulatory reform in ASEAN.

We would like to express our appreciation for the continuous and unwavering support of the ASEAN Secretariat and the ASEAN Trade Facilitation Joint Consultative Committee (ATFJCC). ATFJCC's endorsement to utilise the database as a primary resource in developing AMS national trade repositories, as well as input to the ASEAN Trade Repository, would help ensure transparency and facilitate trade. We extend our gratitude to ASEAN Member States for their active support and continued collaboration in moving forward with the NTM agenda to further improve national competitiveness and promote regional integration.

This publication has been produced jointly with  
the United Nations Conference on Trade and Development



# FIGURES

Figure 1	Incidence and Prevalence of Import Non-tariff Measures, by Country, 2015	11
Figure 2	Incidence and Prevalence of Import Non-tariff Measures by Country, 2018	11
Figure 3	Incidence and Prevalence of Export Non-tariff Measures, by Country, 2015	12
Figure 4	Incidence and Prevalence of Export Non-tariff Measures by Country, 2018	12
Figure 5	Incidence and Prevalence of Import Non-tariff Measures in ASEAN, by Sector, 2015	13
Figure 6	Incidence and Prevalence of Import Non-tariff Measures in ASEAN, by Sector 2018	14
Figure 7	Incidence and Prevalence of Export Non-tariff Measures in ASEAN, by Sector, 2015	14
Figure 8	Incidence and Prevalence of Export Non-tariff Measures in ASEAN by Sector, 2018	15
Figure 9	Complementarity between tariffs and Non-tariff Measures	16
Figure 1.1	Export Composition, Brunei, 2016	32
Figure 1.2	Import Composition, Brunei, 2016	33
Figure 1.3	Most Favoured Nation Tariff Trends, Brunei, 2000–2016	34
Figure 1.4	Tariff Reductions under Most Favoured Nation and Free Trade Agreements, Brunei, 2011–2016	35
Figure 1.5	Frequency Index of Imports, Country Total, by HS 2 Product Group, Brunei, 2015 and 2018	40
Figure 1.6	Coverage Ratio of Imports, Country Total, by HS 2 Product Group, Brunei, 2015 and 2018	41
Figure 1.7	Prevalence Score of imports, Country Total, and by HS 2 Product Group, Brunei, 2015 and 2018	41
Figure 1.8	Frequency Index of Exports, Country Total, and by HS 2 Product Group, Brunei, 2015 and 2018	42
Figure 1.9	Coverage Ratio of Exports, Country Total, and by HS 2 Product Group, Brunei, 2015 and 2018	42
Figure 1.10	Prevalence Score of Exports, Brunei, 2015 and 2018	43
Figure 2.1	Cambodia's Gross Export Composition, HS 4-digit, 2016	46
Figure 2.2	Cambodia's Import Composition, HS 4-digit, 2016	48
Figure 2.3a	Frequency Index, by HS 2-digit Sector, Export, 2015 and 2018	60
Figure 2.3b	Frequency Index, by HS 2-digit Sector, Import, 2015 and 2018	60
Figure 2.4a	Coverage Ratio, by HS 2-digit Sector, Export, 2015 and 2018	62

Figure 2.4b	Coverage Ratio, by HS 2-digit Sector, Imports, 2015 and 2018	62
Figure 2.5a	Prevalence Score, by HS 2-digit Sector, Export, 2015 and 2018	64
Figure 2.5b	Prevalence Score, by HS 2-digit Sector, Import, 2015 and 2018	64
Figure 3.1	Export Composition, Indonesia, 2016	68
Figure 3.2	Import Composition, Indonesia, 2016	68
Figure 3.3	Tariff Reductions Under Most Favoured Nation and Free Trade Agreements, Indonesia, 1989–2017	69
Figure 3.4a	Frequency Index of Imports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018	77
Figure 3.4b	Coverage Ratio of Imports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018	78
Figure 3.4c	Prevalence Score of Imports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018	80
Figure 3.5a	Frequency Index of Exports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018	80
Figure 3.5b	Coverage Ratio of Exports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018	81
Figure 3.5c	Prevalence Score of Exports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018	81
Figure 4.1	Export Composition, HS 4, Lao PDR, 2017	86
Figure 4.2	Import Composition, Lao PDR, 2017	86
Figure 4.3	Effectively Applied Tariffs (AHS), Weighted Average Over Time, Lao PDR, 2003–2014	87
Figure 4.4	Coverage Ratio of Exports, Lao PDR, 2015 and 2018	91
Figure 4.5	Frequency Index of Exports, Lao PDR, 2015 and 2018	92
Figure 4.6	Prevalence Score of Exports, Lao PDR, 2015 and 2018	93
Figure 4.7	Coverage Ratio of Imports, Lao PDR, 2015 and 2018	94
Figure 4.8	Frequency Index of Imports, Lao PDR, 2015 and 2018	94
Figure 4.9	Prevalence Score of Imports, Lao PDR, 2015 and 2018	95
Figure 5.1a	Broad Composition of Exports, Malaysia, 2016 (%)	99
Figure 5.1b	Composition of Exports, by Subsector, Malaysia, 2016 (%)	99
Figure 5.2a	Broad Composition of Imports, Malaysia, 2016 (%)	101
Figure 5.2b	Composition of Imports, by Subsector, Malaysia, 2016	101
Figure 5.3	Effectively Applied Tariffs and Most Favoured Nation Weighted Average Tariffs, Malaysia, 1991–2016 (%)	103
Figure 5.4	Export Coverage Ratio, Malaysia, 2015 and 2018	110
Figure 5.5	Frequency Index of Exports, Malaysia, 2015 and 2018	111
Figure 5.6	Prevalence Score of Exports, Malaysia, 2015 and 2018	112
Figure 5.7	Import Coverage Ratio, Malaysia, 2015 and 2018	112
Figure 5.8	Frequency Index of Imports, Malaysia, 2015 and 2018	113
Figure 5.9	Prevalence Scores of Imports, Malaysia, 2015 and 2018	113

Figure 6.1a	Broad Composition of Exports, Myanmar, 2016	121
Figure 6.1b	Composition of Exports, by Subsector, Myanmar, 2016	121
Figure 6.2a	Broad Composition of Imports, Myanmar, 2016	122
Figure 6.2b	Composition of Imports, by Subsector, Myanmar, 2016	122
Figure 6.3	Import Tariffs, Myanmar, 1996–2015 (%)	124
Figure 6.4	Frequency Index of Exports, Myanmar, 2015 and 2018	131
Figure 6.5	Coverage Ratio of Exports, Myanmar, 2015 and 2018	132
Figure 6.6	Prevalence Score of Exports, Myanmar, 2015 and 2018	132
Figure 6.7	Frequency Index of Imports, Myanmar, 2015 and 2018	133
Figure 6.8	Coverage Ratio of Imports, Myanmar, 2015 and 2018	134
Figure 6.9	Prevalence Score of Imports, Myanmar, 2015 and 2018	134
Figure 7.1	Simple Average Tariff Rates for Most Favoured Nation and Free Trade Agreements (%)	143
Figure 7.2	Percentage Duty-free Lines for Most Favoured Nation and Free Trade Agreements (%)	143
Figure 7.3	Hierarchy of Laws in the Philippines	146
Figure 7.4	Frequency Index of Philippine Exports, 2015 and 2018	153
Figure 7.5	Coverage Ratio of Philippine Exports, 2015 and 2018	153
Figure 7.6	Prevalence Score of Philippine Exports, 2015 and 2018	154
Figure 7.7	Frequency Index of Philippine Imports, 2015 and 2018	155
Figure 7.8	Coverage Ratio of Philippine Imports, 2015 and 2018	156
Figure 7.9	Prevalence Scores of Philippine Imports, 2015 and 2018	157
Figure 8.1	Export Composition, Singapore, 2016	171
Figure 8.2	Import Composition, Singapore, 2016	171
Figure 8.3	Most Favoured Nation Tariffs, Singapore, 2000–2015	172
Figure 8.4	Frequency Index of Imports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018	179
Figure 8.5	Coverage Ratio of Imports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018	180
Figure 8.6	Prevalence Score of Imports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018	180
Figure 8.7	Frequency Index of Exports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018	181
Figure 8.8	Coverage Ratio of Exports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018	181
Figure 8.9	Prevalence Score of Exports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018	182
Figure 9.1	Composition of Thailand’s Exports, 2016	187
Figure 9.2	Composition of Thailand’s Imports, 2016	187
Figure 9.3	Hierarchy of Thailand’s Laws and Regulations	189
Figure 9.4	Appearance of the Office of the Council of State’s Website	190

Figure 9.5	Frequency Index of Thailand's Exports by Product Group, 2015 and 2018	198
Figure 9.6	Coverage Ratio of Thailand's Exports by Product Group, 2015 and 2018	198
Figure 9.7	Prevalence Score of Thailand's Exports by Product Group, 2015 and 2018	199
Figure 9.8	Frequency Index of Thailand's Imports by Product Group, 2015 and 2018	200
Figure 9.9	Coverage Ratio of Thailand's Imports by Product Group, 2015 and 2018	200
Figure 9.10	Prevalence Score of Thailand's Imports by Product Group, 2015 and 2018	201
Figure 10.1	Exports and Imports, Viet Nam, 2008–2018 (US\$ thousand, %)	209
Figure 10.2	Effectively Applied Tariffs (AHS), Weighted Average Over Time, Viet Nam, 2003–2016 (%)	211
Figure 10.3	Number of Issued Legal Documents, Viet Nam, 2014–2018	212
Figure 10.4	Responsibility for Non-tari Measures-related Regulations, Viet Nam	214
Figure 10.5	Top-20 Trade-restricting Measures Adopted by Asia-Pacific Economies since 2008	216
Figure 10.6	Frequency Index of Imports, Viet Nam, 2015 and 2018	223
Figure 10.7	Coverage Ratio of Exports, Viet Nam, 2015 and 2018	224
Figure 10.8	Prevalence Score of Exports, Viet Nam, 2015 and 2018	225
Figure 10.9	Frequency Index of Imports, Viet Nam, 2015 and 2018	226
Figure 10.10	Coverage Ratio of Imports, Viet Nam, 2015 and 2018	227
Figure 10.11	Prevalence Score of Imports, Viet Nam, 2015 and 2018	227

# TABLES

Table 1	NTMs by Type, 2015 and 2018	4
Table 2	Non-tariff Measures by Type and by Country, 2015 and 2018	6
Table 3	NTMs by Sector, 2015 and 2018	8
Table 1.1	Comprehensiveness of Non-Tariff Measures, Brunei, 2015 and 2018	36
Table 1.2	Non-tariff Measures by Issuing Institution, Brunei, 2015 and 2018 (number, %)	37
Table 1.3	Non-tariff Measures by Chapter, Brunei, 2015 and 2018 (number, %)	38
Table 1.4	Top-10 Non-tariff Measures, Brunei, 2015 and 2018 (number, %)	39
Table 2.1	Most Favoured Nation Simple Applied Average Tariff by Trade Agreement	49
Table 2.2	Hierarchy of Laws and Regulations in Cambodia	50
Table 2.3	Comprehensiveness of the Non-tariff Measure Database, 2015 and 2018	52
Table 2.4	Non-tariff Measures by Issuing Agency, 2015 and 2018	53
Table 2.5	Non-tariff Measures by Chapter, 2015 and 2018	55
Table 2.6	Top-10 Non-tariff Measures, 2015 and 2018	58
Table 3.1	Summary of Non-tariff Measure Regulations, Indonesia, 2018	71
Table 3.2	General Summary of Non-tariff Measures, Indonesia, 2015 and 2018	72
Table 3.3	Non-tariff Measures by Issuing Institution, Indonesia, 2015 and 2018 (number, %)	73
Table 3.4	Non-tariff Measures by Chapter, Indonesia, 2015 and 2018 (number, %)	75
Table 3.5	Top-10 Non-tariff Measures, Indonesia, 2015 and 2018 (number, %)	76
Table 4.1	Comprehensiveness of Non-tariff Measures, Lao PDR	88
Table 4.2	Number of Non-tariff Measures, by Issuing Institution, Lao PDR, 2015 and 2018	88
Table 4.3	Non-tariff Measures by Chapter, Lao PDR, 2015 and 2018	89
Table 4.4	Top-10 Non-tariff Measures, Lao PDR, 2015 and 2018	90
Table 5.1	Leading Exports, Malaysia, 2016 and 2017 (US\$ billion)	100
Table 5.2	Leading Imports, Malaysia, 2016 and 2017 (US\$ billion, %)	102
Table 5.3	Comprehensiveness of Non-tariff Measures, Malaysia, 2015 and 2018 (number)	107

Table 5.4	Non-tariff Measures by Issuing Institution, Malaysia, 2015 and 2018 (number, %)	107
Table 5.5	Non-tariff Measures by Chapter, Malaysia, 2015 and 2018 (number, %)	108
Table 5.6	Top-10 Non-tariff Measures, by Sub-chapter, Malaysia, 2015 and 2018 (number, %)	109
Table 5.A1	Trade-Related Acts and Regulations in Malaysia	116
Table 5.A2	Relevant Ministries and Departments in Malaysia	118
Table 6.1	Comprehensiveness of Non-tariff Measures, Myanmar, 2015 and 2018 (number, %)	126
Table 6.2	Incidence of Non-tariff Measures, by Issuing Institution, Myanmar, 2015 and 2018 (number, %)	127
Table 6.3	Incidence of Non-tariff Measures by Type, Myanmar, 2015 and 2018 (number, %)	128
Table 6.4	Top-10 Non-tariff Measures, Myanmar, 2015 and 2018 (number, %)	129
Table 7.1	Economic Indicators, Philippines, 2005, 2010, 2018	138
Table 7.2	Exports and Imports, Philippines, 2017 (US\$ million)	138
Table 7.3	Top Commodity Exports, Philippines, 2017 (US\$ million)	139
Table 7.4	Top Export Markets, Philippines, 2017	139
Table 7.5	Top Commodity Imports, Philippines, 2017 (US\$ million)	140
Table 7.6	Top Import Suppliers, Philippines, 2017 (US\$ million)	141
Table 7.7	Non-tariff Measure Comprehensiveness, Philippines, 2015 and 2018	146
Table 7.8	Non-tariff Measures by Issuing Institution, Philippines, 2015 and 2018 (absolute and percentage)	147
Table 7.9	Non-tariff Measures by Chapter, 2015 and 2018 (absolute and percentage)	148
Table 7.10	Top-10 Non-tariff Measure Codes, Philippines, 2015	149
Table 7.11	Top-10 Non-tariff Measure Codes, Philippines, 2018	150
Table 7.A1	Non-tariff Measure Reference List of Government Institutions, Philippines	166
Table 7.A2	Simple Average Tariff Rates and Percentage of Duty-Free Lines under Most Favoured Nation and Free Trade Agreements	168
Table 8.1	Comprehensiveness of Non-tariff Measures, Singapore	174
Table 8.2	Non-Tariff Measures by Issuing Institution, Singapore (number, %)	175
Table 8.3	Non-tariff Measures by Chapter, Singapore, 2015 and 2018	176
Table 8.4	Top-10 Non-tariff Measures, Singapore, 2015 and 2018 (number, %)	177
Table 9.1	Comprehensiveness of Non-tariff Measures in Thailand	191
Table 9.2	Non-tariff Measures in Thailand Classified by Issuing Institution	192

Table 9.3	Non-tariff Measures in Thailand Classified by Chapter	195
Table 9.4	Top 10 Non-tariff Measures in Thailand	196
Table 9.A1	Non-tariff Measures in Thailand Classified by Act or Emergency Decree	205
Table 10.1	Export Structure and Export Average Growth Rates to Major Destinations, Viet Nam (%)	210
Table 10.2	Import Structure and Import Average Growth Rates from Major Destinations, Viet Nam, 2008–2018 (%)	210
Table 10.3	Hierarchy of Legal Documents, Viet Nam	211
Table 10.4	Major Contextual Changes in Regulatory Reform Since 1986, Viet Nam	213
Table 10.5	Legal Comprehensiveness, Viet Nam, 2015 and 2018	218
Table 10.6	Legal Comprehensiveness, Viet Nam, 2015 and 2018	219
Table 10.7	Non-tariff Measures by Chapter, Viet Nam, 2015 and 2018 (number, %)	220
Table 10.8	Legal Comprehensiveness, Viet Nam, 2015 and 2018	222



# EXECUTIVE SUMMARY

Whilst tariffs have declined following disciplines instituted by the World Trade Organization (WTO), the use of non-tariff measures (NTMs) is on the rise worldwide. This trend is also reflected in the updated NTM database of the Economic Research Institute for ASEAN and East Asia (ERIA) and the United Nations Conference on Trade and Development (UNCTAD), where the number of NTMs in ASEAN has increased over time. Since NTMs have the potential to restrict trade, the increase has raised concerns about returning to protectionism, which could hamper the integration efforts of the Association of Southeast Asian Nations (ASEAN).

This report documents the trend and pattern of NTMs utilisation in ASEAN based on the updated ERIA–UNCTAD NTMs in ASEAN database, and discusses ongoing regional and national efforts in addressing NTMs. The database is a collective effort of ERIA, UNCTAD, and teams of national consultants, with continuous support from government officials and ASEAN bodies. The data were collected in all 10 ASEAN countries at the reporter-year-partner-product-NTM level. The data reflect all trade regulations that were in force up to 30 March 2018, providing a snapshot of each country. Data include bilateral NTMs, recording measures applied to the world and bilaterally to one or more countries. Products are defined for all ASEAN countries using the 8-digit ASEAN Harmonized Tariff Nomenclature 2017. Conversely, NTMs are defined in the 3-digit Multi-Agency Support Team Classification M4.

The new data shows an increase in NTMs across all 10 countries. Within 3 years, the total number of NTMs has risen by approximately 15%. On the one hand, this trend reflects how ASEAN Member States respond to various policy needs, including protecting consumers and enhancing competitiveness by improving product standards. As a country becomes more integrated into the global economy, it needs more and appropriate trade regulations. Having just a few NTMs could reflect gaps in consumer and environmental protection and potential under-regulation. On the other hand, the rise of NTMs in the context of tariff reduction suggests that NTMs are sometimes used as an additional tool to protect domestic producers. Regardless of the objectives, however, an increase in NTMs could raise trade costs, inhibiting trade expansion.

Amongst NTMs, technical measures account for the lion's share of NTMs, which is in line with the pattern observed in developed countries. Sanitary and phytosanitary measures (SPS) measures are highly targeted at agricultural and food products, whilst technical barriers to trade (TBT) are often used for non-food manufacturing products. TBT is particularly prevalent on chemicals, machinery and electrical machinery, and mineral products. Export-related measures, especially conformity assessment, and quantity and price controls also contribute a significant fraction of NTMs.

We observe notable cross-country heterogeneity in the structure of NTMs. Although on the rise in all 10 countries, the numbers of NTMs are substantially different across countries. Thailand has the largest number of NTMs, accounting for about one-third of all NTMs in ASEAN. The Philippines has the second largest but falls far behind, while Cambodia and Myanmar have the fewest. SPS measures are particularly popular in Thailand, Malaysia, Brunei Darussalam, and Myanmar, where over 30% of NTMs are SPS measures. The share of SPS measures is significantly lower than that of TBT in Cambodia, Indonesia, Lao People's Democratic Republic (Lao PDR), Singapore, and Viet Nam. Hard measures on price and quantity restrictions, and export-related measures are widely used amongst ASEAN Member States, notably Cambodia, Lao PDR, Myanmar, and Viet Nam, where these NTMs constitute around 40% of total NTMs. In Lao PDR, approximately 60% of NTMs are under these categories. The heavy use of these measures highlights the need for smooth and effective implementation.

Imports tend to be more heavily regulated in less developed economies. NTMs regulated more than 80% of imports – measured by number of products and import value – in Cambodia, Lao PDR, Myanmar, the Philippines, and Viet Nam in 2018. Myanmar exhibits a remarkable surge. Within 3 years, the ratio of import products and of import value covered by NTMs increased by approximately 50 and 20 percentage points, respectively, partly reflecting the country's effort to reintegrate into the global market after decades-long political turmoil. In Singapore, Brunei Darussalam, and Malaysia, in contrast, NTMs are more concentrated in trade-intensive products.

By product group, animal, vegetable, and food products are the most regulated sectors, with NTMs affecting more than 80% of their imports and exports. The average number of NTMs per product in these sectors is substantially higher than average – exceeding 10 measures each on the import side and three measures on the export side. The NTMs on agriculture and food products address health and safety concerns. In addition, trade-intensive manufacturing sectors, including those with deeper participation in global value chains, such as machinery and electrical machinery, and transportation, are heavily

regulated. As the impact of NTMs is compounded when a semi-finished product moves back and forth across borders, the high incidence of NTMs in these sectors could raise trade costs for exporters and importers at different stages along the supply chain. NTMs are less prevalent in resource-based sectors such as stone and glass, minerals, and metals, which are relatively homogeneous and require fewer specific standards.

The difference in the structure and prevalence of NTM should be interpreted with caution. First, a large NTM count does not imply stricter protection. Two countries may apply the same technical NTM to the same product. Yet, more often than not, there is a gap in the strictness of NTMs. Second, NTM count statistics reflect important sources of discrepancy in the way countries issue their regulations. For example, a country that promulgates product- or partner-specific regulations will see more NTMs than a country that uses a single regulation to regulate broad product categories. Third, a single import restriction can be significantly more restrictive than several transparent labelling and packaging requirements.

This report does not aim to distinguish between NTMs and non-tariff barriers, as it is impossible to do so. Such assessment requires comprehensive review and consultations with related stakeholders, including the issuing agencies and the private sector. Given ASEAN's ongoing efforts to enhance trade, the increasing use of NTMs is not necessarily alarming. Nevertheless, as poor design and implementation could incur significant costs, good regulatory practice should be taken seriously.

ASEAN, through various frameworks, principles, and agreements, has taken steps to address and manage NTMs. Although initiatives are region-wide, harmonisation and enforcement of NTMs require strong institutional commitment at the national level. Whilst significant progress is not yet observed, effective implementation of existing initiatives could produce promising results.

Several areas are identified to help address or manage NTMs.

First, **enhance the capacity of issuing and enforcement agencies.** For issuing agencies, technical assistance includes collecting NTMs, classifying them using an internationally comparable classification, validating NTM data, and uploading new NTMs to a public database. The technical knowledge of enforcement agencies, particularly those in charge of technical inspection and accreditation, will be improved by good education and training. The development of testing and accreditation facilities would contribute significantly to

enhancing the overall efficiency of NTM management, given the prevalence of conformity assessment for both SPS and TBT purposes.

Second, **establish an institutional mechanism similar to the National Trade Facilitation Committees (NTFCs)** to oversee and manage the implementation of NTMs to ensure consistency of regulations and avoid overlapping amongst enforcement authorities. A dedicated national institution to validate regulatory impact analyses or regulatory impact statements could accelerate public access to them and ensure they are updated on NTRs. The institution, supported by a competent workforce, could also carry out NTM regulatory review and stocktaking.

Third, **strengthen engagement with the private sector and research institutions** on possible approaches to managing NTMs. NTMs are neutral and, more often than not, eliminating them is not an option. A pragmatic approach should consider the costs and effectiveness of NTMs from the perspective of governments and producers, with evidence-based support from academia.

Fourth, **apply Good Regulatory Practice (GRP) core principles to ensure good regulatory management**. Some ASEAN Member States have made good progress in institutionalising GRP principles in their regulatory management system by adopting regulatory stocktake tools such as regulatory impact analysis or regulatory impact statement before new laws or regulations are adopted or implemented.

# NON-TARIFF MEASURES AND REGIONAL INTEGRATION IN ASEAN

**Ha Thi Thanh Doan**

Economic Research Institute for ASEAN and East Asia

**Samuel Rosenow**

United Nations Conference on Trade and Development

**Salvador M. Buban**

Economic Research Institute for ASEAN and East Asia

## **1. Introduction**

Whilst tariffs have declined following discipline instituted by the World Trade Organization (WTO), the use of non-tariff measures (NTMs) is on the rise worldwide (UNCTAD, 2013). This trend is also reflected in the updated NTM database of the Economic Research Institute for ASEAN and East Asia (ERIA) and the United Nations Conference on Trade and Development (UNCTAD), where the number of NTMs in ASEAN has increased over time. Since NTMs have the potential to restrict trade, the increase has raised concerns about returning to protectionism, which could hamper ASEAN's integration efforts.

Tariff reduction and the removal of non-tariff barriers (NTBs) are amongst the key components of ASEAN's efforts to enhance intra-regional trade. In principle, the ASEAN Trade in Goods Agreement (ATIGA), which came into force in 2010 (ASEAN Secretariat, 2010), explicitly stated obligations regarding NTMs. In practice, however, the integration agenda has focused primarily on tariffs, which have been reduced to 0.2% on average (ASEAN Secretariat, 2018). As room to liberalise tariffs further is limited, addressing NTMs is fundamental to realise the ASEAN Economic Community (AEC). Because NTMs constitute a grey area where trade policy meets public policy goals, effective NTM management must consider not only their trade-distorting effects but also their potential benefits.

The prerequisite for NTM management is a comprehensive and up-to-date database. The official ASEAN NTM database, which was collected in 2009 based on WTO notifications, does not reflect the actual incidence of NTMs in the region due to under-notification.<sup>1</sup> Moreover, ASEAN Member States (AMSs) have undergone substantial reform during the last 10 years. To respond to this urgent need, ERIA and UNCTAD have cooperated to construct a detailed ASEAN NTM database. The first database was launched in 2015, and an update was completed in early 2019 to capture the dynamics of regulatory reform in ASEAN.<sup>2</sup>

We analyse the application of NTMs in ASEAN countries, based on the updated ERIA–UNCTAD database, and discuss regional and national progress in addressing NTMs. Section 2 briefly describes NTMs. Section 3 documents the pattern of NTM application in ASEAN countries. To illustrate the evolution of NTMs, we compare the data collected in 2015 and 2018. We present descriptive statistics on the incidence of NTMs in ASEAN, based on standard indicators. Section 4 explores the correlation between NTMs and tariffs. This exercise assesses the possibility of NTMs being used as a protection tool in the context of tariff reduction. Section 5 discusses ASEAN’s ongoing efforts to address NTMs, broad initiatives, and sector-specific arrangements on NTMs. Section 6 summarises the key findings and recommends policies.

## **2. Non-tariff Measures: Definition and Classification**

NTMs are broadly defined as policy measures, other than ordinary customs tariffs, which can have an economic effect on international trade (UNCTAD, 2013). NTMs include a wide array of policy instruments relevant to international trade (Box 1). Some NTMs such as quotas, export restrictions, price controls, or contingent trade protective measures are traditionally used as a commercial policy tool. They are often regarded as NTBs, which aim to protect domestic producers, have clear restrictive impact, and are against WTO rules. Technical tools – such as sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBTs) – are primarily designed to protect consumers’ health and safety, animal welfare, and the environment. In principle, these measures serve legitimate public policy goals and thus are legal. The definition also covers behind-the-border measures such as government procurement restrictions, finance measures, measures affecting competition, intellectual property, and trade-related investment measures.

---

<sup>1</sup> The database can be retrieved from ASEAN Secretariat (2012).

<sup>2</sup> Ing, Cordoba, and Cadot (2016) provide the project background and a detailed description of data collection.

**Box 1: NTM Broad classification by MAST 4**

<b>Imports</b>	<b>Technical Measures</b>	A. Sanitary and Phytosanitary Measures
		B. Technical Barriers to Trade
		C. Pre-shipment Inspection and Other Formalities
	<b>Non-technical Measures</b>	D. Contingent trade protective measures
		E. Non-automatic import licensing, quotas, prohibitions, quantity-control measures and other restrictions other than SPS or TBT measures
		F. Price control measures including additional taxes and charges
		G. Finance measures
		H. Measures affecting competition
		I. Trade-related investment measures
		J. Distribution restrictions
		K. Restriction on post-sales services
		L. Subsidies (excluding export subsidies under P7)
		M. Government procurement restrictions
N. Intellectual property		
O. Rules of origin		
<b>Exports</b>	P. Export related measures	

Source: UNCTAD (2019).

Two points are worth noting here. First, contrary to the common negative perception of NTMs, UNCTAD's definition of NTMs is neutral. It does not judge the legitimacy of the measures or set the criteria to distinguish between general NTMs and discriminatory NTBs. If a regulation has the potential to impact trade by affecting the price or quantity of traded goods, it is categorised as an NTM. As such, the prevalence of NTMs is not necessarily a bad sign for the economy. As the economy grows and consumer wealth rises around the world, the demands on governments for health, safety, and environmental protection also increase. Some NTMs can even promote trade by reducing information asymmetries and enhancing product quality.<sup>3</sup>

However, NTMs, regardless of their objectives, can incur significant costs for producers, limiting trade flows. First, the procedural costs relate to a firm's efforts to prove compliance with NTMs, including monetary and time costs to search for information; conduct sampling, testing, and inspection; obtain certificates, permits, or licenses; or prove the

<sup>3</sup> See, for example, Moenius (2004), Disdier et al. (2015), and Chen et al. (2008).

origins of products. Poor implementation by enforcement agencies exacerbates the burden.<sup>4</sup>

Second, the adjustment costs arise from a firm's investment in capital to meet the new requirements of product quality. Even if two countries apply the same NTM structure, the stringency gap can restrict trade. Not adopting common international standards raises adjustment costs and discourages firms from trading. To overcome the standard gap, firms may need to adopt product and process innovation. Quality upgrading sometimes involves a switch to a new and more costly source of intermediate inputs. Over time, producers may be able to adapt to the NTMs and improve market access, but not all firms have the technology and financial capacity to do so. Adjustment costs are more pronounced for multi-destination firms due to inconsistent standards as well as small firms, which lack the resources to cover the costs.. Consequently, firms may divert their trade to markets with less restrictive NTMs or stop exporting. Both cases are likely to result in a reduction in trade flows or variety.<sup>5</sup>

Finally, in the context of global value chains, NTMs on inputs could add certain costs to firms in downstream sectors. Depending on a firm's position in the value chain, NTM-induced accumulated cost varies.

### 3. Incidence of Non-tariff Measures in ASEAN

This section presents a brief overview of the prevalence of NTMs in AMSs. Table 1 illustrates the aggregate trend in ASEAN by comparing the number and composition of NTMs in ASEAN in 2015 and in 2018. Two features stand out.

**Table 1: NTMs by Type, 2015 and 2018**

NTM Type	Description of NTM	2015		2018	
		Number of NTMs	%	Number of NTMs	%
A	Sanitary and phytosanitary measures	2,577	31.3	2,795	29.4
B	Technical barriers to trade	2,924	35.5	3,443	36.2
C	Pre-shipment inspection and other formalities	266	3.2	325	3.4

<sup>4</sup> The International Trade Center (2015) showed that 65% of NTMs on agricultural and 77% on manufacturing products are considered burdensome because of procedural obstacles. Amongst the most cited procedural obstacles are time constraint, informal payment, administrative burdens related to regulations, lack of transparency, and lack of sector-specific facilities.

<sup>5</sup> See, for example, Kee, Nicita, and Ollareaga (2009); Hoekman and Nicita (2011); Ing, Cordoba, and Cadot (2016); Fontagne and Orefice (2018); Melo et al. (2014); Fugazza, Ollareaga, and Ugarte (2017); Beestermoller et al. (2018); and Shepherd (2015).



NTM Type	Description of NTM	2015		2018	
		Number of NTMs	%	Number of NTMs	%
E	Non-automatic import licensing, quotas, prohibitions, quantity-control measures and other restrictions other than SPS or TBT measures	708	8.6	819	8.6
F	Price control measures including additional taxes and charges	389	4.7	438	4.6
G	Finance measures	13	0.2	18	0.2
H	Measures affecting competition	18	0.2	27	0.3
I	Trade-related investment measures	2	0	7	0.1
J	Distribution restrictions	5	0.1	8	0.1
L	Subsidies and other forms of support	0	0	1	0
M	Government procurement restrictions	1	0	1	0
N	Intellectual property	1	0	1	0
P	Export related measures	1,333	16.2	1,619	17
	<b>Total</b>	<b>8,237</b>	<b>100</b>	<b>9,502</b>	<b>100</b>

Source: ERIA–UNCTAD Raw NTMs in ASEAN Database, version 2019.

First, the total number of NTMs has increased by approximately 15% in the last 3 years. On the one hand, this trend reflects how AMSs respond to various policy needs, including protecting consumers and enhancing competitiveness by improving product standards. As a country becomes more integrated into the global economy, it needs more and appropriate trade regulations. Having just a few NTMs could reflect gaps in consumer and environmental protection and potential under-regulation. On the other hand, the rise of NTMs in the context of tariff reduction suggests that NTMs are sometimes used as a substitute for tariffs. Regardless of the objectives, however, an increase in NTMs could raise trade costs, inhibiting trade expansion.

Second, the structure of NTMs has remained relatively stable across the years. TBTs are the most prominent category of NTMs, followed by SPS measures. These technical measures account for about 70% of total NTMs. The prevalence of technical NTMs is similar in developed countries, where technical measures are widely used to protect consumers, the environment, and animal welfare.

Amongst non-technical NTMs, hard measures on price and quantity control constitute a non-negligible portion of NTMs in ASEAN. Taken together, NTMs under category E and category F accounted for 13% of total NTMs in 2015 and 2018. Except under specifically determined circumstances, quantity controls (category E) are generally prohibited under the General Agreement on Tariffs and Trade (GATT) 1994. Only a small fraction of these measures are quotas, prohibitions, and export-restraint arrangements. The most

used measure is non-automatic licensing (category E1). In all 10 AMSs, non-automatic licensing falls in the top-15 NTMs by share. Apart from economic reasons, some licensing requirements serve religious, political, or security goals, but the measures' objectives are not always clear-cut. Regarding price controls, the most used NTM is category F6, on additional charges and taxes levied in connection with government services, including fees on customs inspection, processing, and servicing, and on import licences. These measures are often used to complement SPS measures and TBT. In addition, import charges sometimes make up for declining tariff revenue.

Export-related measures (category P) constitute approximately 17% of NTMs. Conformity assessment is the most popular sub-category under P. Compared with NTMs on imports, export-related measures are less likely to be used with protectionist intent. The prevalence of NTMs on exports, however, could impose a substantial burden on exporters and, as a consequence, impede an economy's competitiveness. Burdens include the lack of good infrastructure, firms' limited capability, and weak enforcement agencies.

Table 2 details the distribution of NTMs by country. We group the composition of NTMs into five categories – A, B, E and F, P, and others.

**Table 2: Non-tariff Measures by Type and by Country, 2015 and 2018**

Country	Total (number)		A (in %)		B (in %)		E and F (in %)		P (in %)		Others (in %)	
	2015	2018	2015	2018	2015	2018	2015	2018	2015	2018	2015	2018
Brunei Darussalam	555	562	32.1	31.7	43.4	43.6	13.8	14.1	10.5	10.5	0.2	0.1
Cambodia	276	367	12.3	13.4	34.8	35.7	21.3	18.5	31.2	31.9	0.4	0.5
Indonesia	767	977	19.8	24.5	48.2	44.7	10.9	10.9	13.4	12.7	7.7	7.2
Laos	342	520	14.3	10.8	19.3	27.1	32.8	25.3	29.2	33.1	4.4	3.7
Malaysia	876	920	36.2	35.2	40.6	40.4	7.9	8.5	14.6	15.2	0.7	0.7
Myanmar	193	267	40.4	30.0	17.1	19.1	18.2	21.0	21.8	24.0	2.5	5.9
Philippines	1075	1220	29.4	29.8	27.7	29.3	20.8	20.4	18.6	17.0	3.5	3.5
Singapore	587	610	22.3	22.3	51.4	49.3	17.1	17.5	9.2	10.7	0	0.2
Thailand	3039	3295	39.6	38.1	33.4	33.3	8.7	8.7	13.0	13.7	5.3	6.2
Viet Nam	527	764	22.4	14.9	27.9	40.6	14.4	12.7	31.7	28.7	3.6	3.1
<b>Total/average</b>	<b>8237</b>	<b>9502</b>	<b>26.9</b>	<b>25.1</b>	<b>34.4</b>	<b>36.3</b>	<b>16.6</b>	<b>15.8</b>	<b>19.3</b>	<b>19.7</b>	<b>2.81</b>	<b>3.14</b>

Note: A= Sanitary and Phytosanitary; B= Technical Barriers to Trade; E = Non-automatic import licensing, quotas, prohibitions, quantity-control measures and other restrictions other than SPS and TBT; F = Price control measures; P = export-related measures.

Source: ERIA-UNCTAD Raw NTMs in ASEAN Database, version 2019.

Table 2 reveals notable cross-country heterogeneity in the structure of NTMs. Although on the rise in all 10 countries, the numbers of NTMs are substantially different across countries. Thailand has the largest number of NTMs, accounting for about one-third of all NTMs in ASEAN. The Philippines has the second largest but falls far behind, with 1,220 in 2018. Cambodia and Myanmar have the fewest, with 367 and 267, respectively.

However, the numbers are not easily comparable across countries for three reasons. First, a large NTM count does not imply stricter protection. Second, NTM count statistics reflect important sources of discrepancy in the way countries issue their regulations. For example, a country that promulgates product- or partner-specific regulations will see more NTMs than a country that uses a single regulation to regulate broad product categories. Third, a single import restriction can be significantly more restrictive than several transparent labelling and packaging requirements. Thus, in interpreting the prevalence of NTMs, one should utilise a combined set of criteria. Other indicators, presented later in this section, will shed more light on this issue.

Consistent with the trend observed in Table 1, SPS measures and TBT are used extensively by individual countries. For TBT, the increasing trend seems dominant. A decline in the share of TBT, if any, is relatively small. TBT measures contribute over 40% of total NTM stock in half the countries. SPS measures are particularly popular in Thailand, Malaysia, Brunei, and Myanmar, where over 30% of NTMs are SPS measures. The share of SPS measures is significantly lower than that of TBT in Cambodia, Indonesia, Lao People's Democratic Republic (Lao PDR), Singapore, and Viet Nam.

NTMs under E, F, and P are widely used amongst AMSs, notably Cambodia, Lao PDR, Myanmar, and Viet Nam, where these NTMs constitute around 40% of total NTMs. In Lao PDR, approximately 60% of NTMs are under E, F, and P. The heavy use of these measures highlights the need for smooth and effective implementation. Governments can achieve this by improving institutional capacity and infrastructure.

The use of NTMs varies not only across countries but also across products. Some products such as food, chemicals, machinery, and electrical machinery are heavily regulated to protect consumers and the environment. Others are less regulated due to their nature. Table 3 reports the number of NTMs, ASEAN-wide, by 1-digit Harmonised System (HS) sectors. Agricultural products, including animal products and vegetables, account for the lion's share of NTMs. Most NTMs in this sector are governed by ministries of agriculture as SPS measures and TBT for health and safety concerns. Food products are subject to tighter regulations for the same reason. On top of that, sensitive products such as rice and sugar are subject to quantity or price controls.

For non-food and non-agricultural products, TBT are more popular. Top-ranked sectors are chemicals and allied industries, machinery and electrical machinery, and mineral products. The first group accounts for around 11% of total NTMs, the second and third each for about 7%. Chemical products, including pharmaceuticals, fertilisers, explosives, and others, affect health and safety, so it is not surprising that they are heavily regulated. Indeed, the ministry of health is amongst the top issuing agencies for NTMs on chemical products. As for machinery and electrical machinery and mineral products, it is worth noting that they are trade-intensive.<sup>6</sup> The prevalence of NTMs on these products reflects the need to monitor trade. Such regulations can reduce information asymmetries and enhance the quality of imported final or intermediate inputs, but can also have trade-distorting effects if not well-designed and implemented.

**Table 3: NTMs by Sector, 2015 and 2018**

Sector	2015		2018	
	Total (number)	Share (in %)	Total (number)	Share (in %)
Animal & Animal Products	1,762	21.4	2,069	21.8
Chemicals & Allied Industries	936	11.4	1,089	11.5
Foodstuffs	1,148	13.9	1,226	12.9
Footwear / Headgear	20	0.2	23	0.2
Machinery / Electrical	520	6.3	636	6.7
Metals	202	2.5	223	2.3
Mineral Products	483	5.9	685	7.2
Miscellaneous	202	2.5	225	2.4
Plastics/Rubbers	213	2.6	239	2.5
Raw Hides, Skins, Leather, & Furs	9	0.1	7	0.1
Stone / Glass	178	2.2	194	2
Textiles	43	0.5	45	0.5
Transportation	164	2	214	2.3
Vegetable Products	2,242	27.2	2,488	26.2
Wood & Wood Products	115	1.4	139	1.5
<b>Total</b>	<b>8,237</b>	<b>100</b>	<b>9,502</b>	<b>100</b>

Note: Sectors are as defined by HS 2017 2-digit sections.

Source: Authors' (unweighted) calculations based on ERIA-UNCTAD Raw NTMs in ASEAN Database, version 2019.

<sup>6</sup> In 2017, electrical machinery and mechanical appliances accounted for approximately 35% of ASEAN exports and imports. Mineral fuels and mineral oils contribute to over 10% of ASEAN trade (ASEAN Secretariat, 2018).

NTM count statistics are not, per se, indicative of NTMs' potential impact on trade. Efforts have been made to measure the trade effect of NTMs, utilising trade data at the country-product level and, to some extent, the firm level. Since this report sets the scene for further analysis of NTMs, we utilise only simple indicators based on the inventory approach – in particular, we rely on frequency index, coverage ratio, and prevalence score.

The frequency index measures the share of traded products affected by at least one NTM. Since all products are treated equally, the frequency index does not reflect the importance of each product in the export or import basket. For example, if NTMs are applied to a small number of products, the frequency index is small. But if these products are trade-intensive, the NTMs' effect on trade can be large. The coverage ratio overcomes this weakness by measuring the share of trade value, instead of counting the number of products, affected by at least one NTM.

Notwithstanding their straightforward interpretation, the frequency index and coverage ratio suffer from one drawback: they do not count the number of NTMs per product. It is rare to observe a single NTM imposed on each traded product. Usually, several measures are combined. A product can be subjected to a sanitary standard under SPS chapter A, plus a technical measure on quality in TBT chapter B, together with non-automatic licensing under E. Within a chapter, different measures can also be applied in parallel. For TBT reasons, for instance, labelling, production requirement, product safety requirement, and conformity assessment can be applied simultaneously to a single product. Arguably, the more NTMs applied to the same product, the larger the potential trade effect on that product (Nicita and Gourdon, 2013).<sup>7</sup> The prevalence score is thus introduced to capture the average number of NTMs per product.

Finally, these indicators, despite being informative, do not capture the stringency of NTMs. Two countries may apply the same technical NTM to the same product. Yet, more often than not, there is a gap in the strictness of NTMs. Whilst risk to consumers is an important concern, stricter-than-necessary standards burden traders. Some countries may take advantage of the gap to use standards as a disguised trade barrier.

Figure 1 and Figure 2 compare the pattern of import NTMs by country in 2015 and in 2018. Both figures demonstrate significant cross-country differences in NTM prevalence. Imports tend to be more heavily regulated in less developed economies. NTMs regulated more than 80% of imports – measured by number of products and import value – in Cambodia, Lao PDR, Myanmar, and Viet Nam in 2018. Myanmar exhibits a remarkable surge. Within 3 years, its frequency index and coverage ratio have increased by

---

<sup>7</sup> The appendix explains the methodology.

approximately 50 and 20 percentage points, respectively, partly reflecting the country's effort to reintegrate into the global market after decades-long political turmoil. The Philippines' frequency index and coverage ratio are close to 80%. The four countries show little discrepancy between coverage ratio and frequency index indicators.

In Singapore, Brunei Darussalam, and Malaysia, in contrast, NTMs are more concentrated. The frequency index is about 50%, whilst the coverage ratio is noticeably larger. The gap between the coverage ratio and frequency index suggests that NTMs focus on more trade-intensive products.

The low prevalence of NTMs in Thailand seems to be in conflict with its large NTM count. Its NTMs target specific products that can only be partially defined by the 8-digit product code.<sup>8</sup> At the aggregate HS level, therefore, the actual range of products affected by NTMs remains relatively narrow.

Figure 1 and Figure 2 suggest a positive correlation between the trade value affected by NTMs and the average number of NTMs per product. On average, all countries apply multiple NTMs to a single product, whilst countries with larger coverage ratios and frequency indices tend to have larger prevalence scores. Viet Nam takes the lead, with approximately five NTMs per product, followed by Cambodia, Indonesia, and the Philippines. No country applies fewer than two NTMs per product. Cross-country discrepancy should be interpreted with caution: a large number may be evidence of heavy regulation, but differences may originate from how detailed a regulation is. In certain cases, the text is not detailed enough to allow the distinction of NTMs at the most disaggregated level. Then, measures are classified under a broader code, lowering the prevalence score.

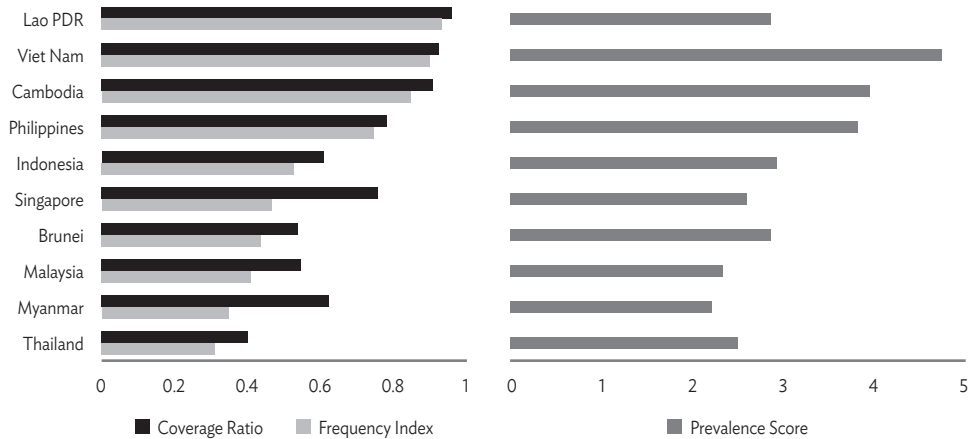
Turning to exports, the patterns in Figure 3 and Figure 4 are different. Whilst Cambodia, Lao PDR, Myanmar, the Philippines, and Viet Nam are still amongst the most rigorous users of NTMs, the application of NTMs to exports is more diverse than to imports across countries. The coverage ratio is remarkably larger than the frequency index for most countries, suggesting that NTMs concentrate on export-intensive products. Brunei shows a clear deviation, however, as about 40% of its export products are subject to NTMs but less than 5% of its export value is affected. This different pattern may be due to the concentrated structure of Brunei exports; oil and gas are the largest exports, contributing more than 90% of total export revenue.

---

<sup>8</sup> Please refer to chapter 9 for more detailed explanation.

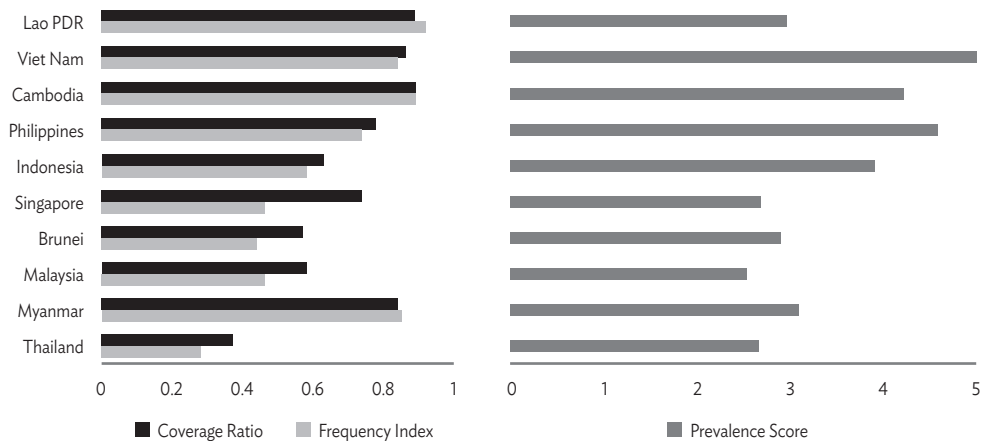
The largest NTM count per product is around 2.7. Half the countries apply fewer than one NTM per product.

**Figure 1: Incidence and Prevalence of Import Non-tariff Measures, by Country, 2015**



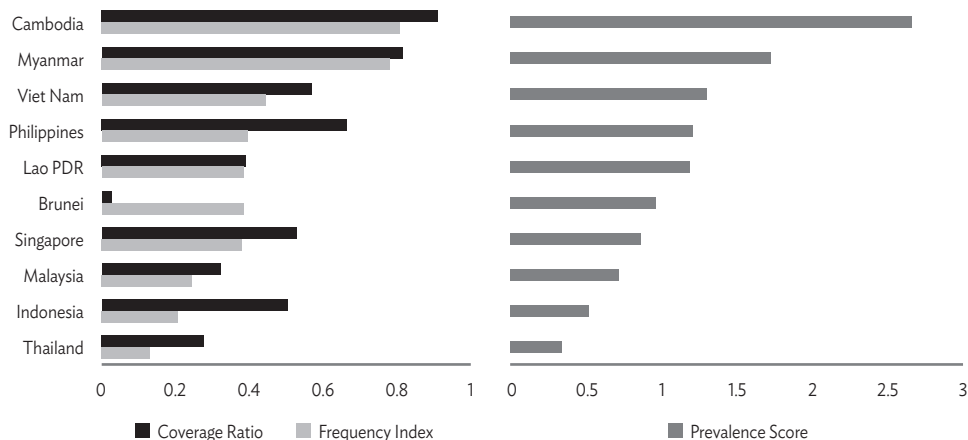
ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People’s Democratic Republic, NTM = non-tariff measure.  
 Note: Trade year used is based on the latest available import data at the HS 6-digit level (World Customs Organisation, 2017).  
 Source: Authors’ calculations based on the ERIA-UNCTAD Raw NTMs in ASEAN Database, version 2019

**Figure 2: Incidence and Prevalence of Import Non-tariff Measures by Country, 2018**



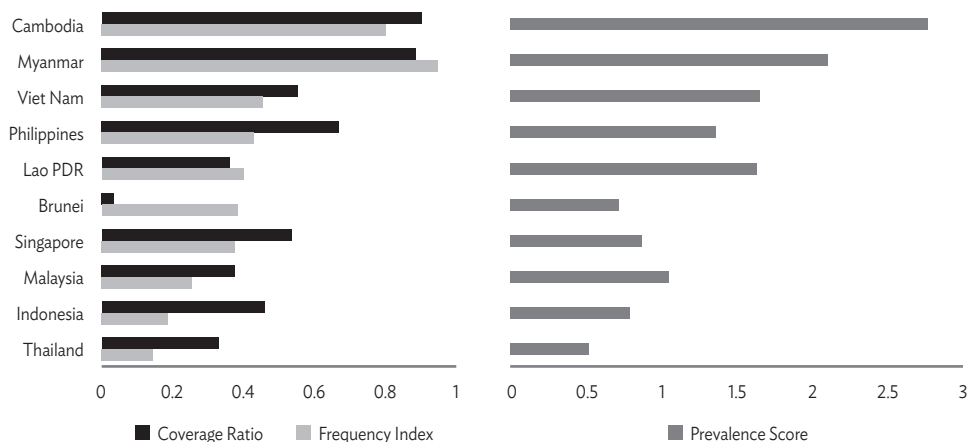
ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People’s Democratic Republic, NTM = non-tariff measure.  
 Note: Trade year used is based on the latest available import data at the HS 6-digit level (World Customs Organisation, 2017).  
 Source: Authors’ calculations based on the ERIA-UNCTAD raw NTMs in ASEAN Database, version 2019.

**Figure 3: Incidence and Prevalence of Export Non-tariff Measures, by Country, 2015**



ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People's Democratic Republic, NTM = non-tariff measure.  
 Note: Trade year used is based on the latest available import data at the HS 6-digit level (World Customs Organisation, 2017).  
 Source: Authors' calculations based on the ERIA-UNCTAD raw NTMs in ASEAN Database, version 2019.

**Figure 4: Incidence and Prevalence of Export Non-tariff Measures by Country, 2018**



ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People's Democratic Republic, NTM = non-tariff measure.  
 Note: Trade year used is based on the latest available import data at the HS 6-digit level (World Customs Organisation, 2017).  
 Source: Authors' calculations based on the ERIA-UNCTAD raw NTMs in ASEAN Database, version 2019.

Figure 5 and Figure 6 provide a snapshot of import NTMs by product group, giving rise to three notable observations. First, animal, vegetable, and food products are the most regulated sectors, with NTMs affecting more than 80% of their imports. The average number of NTMs per product in these sectors is substantially higher than average – exceeding 10 measures each. The NTMs on agriculture and food products address health and safety concerns.

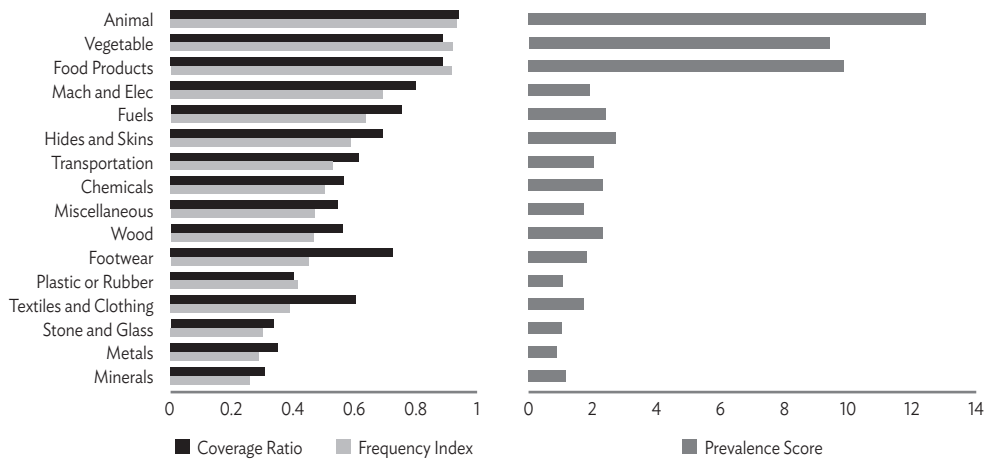


Second, trade-intensive manufacturing sectors, including those with deeper participation in global value chains, such as machinery and electrical machinery and transportation, are heavily regulated. As the impact of NTMs is compounded when a semi-finished product moves back and forth across borders, the high incidence of NTMs in these sectors could raise trade costs for exporters and importers at different stages along the supply chain.

Finally, NTMs are less prevalent in resource-based sectors such as stone and glass, minerals, and metals, which are relatively homogeneous and require fewer specific standards.

Figure 7 and Figure 8 illustrate the incidence of NTMs by export sector. Like imports, agricultural products are subject to a large incidence of NTMs. In manufacturing, NTMs are prominent in machinery and electrical machinery. However, the number of NTMs per export product and the ratio of exports affected by NTMs are generally smaller than those of imports. Resource-based products such as fuels and wood also exhibit a large incidence of NTMs, which may reflect the need to preserve natural resources.

**Figure 5: Incidence and Prevalence of Import Non-tariff Measures in ASEAN, by Sector, 2015**



ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People’s Democratic Republic, NTM = non-tariff measure.

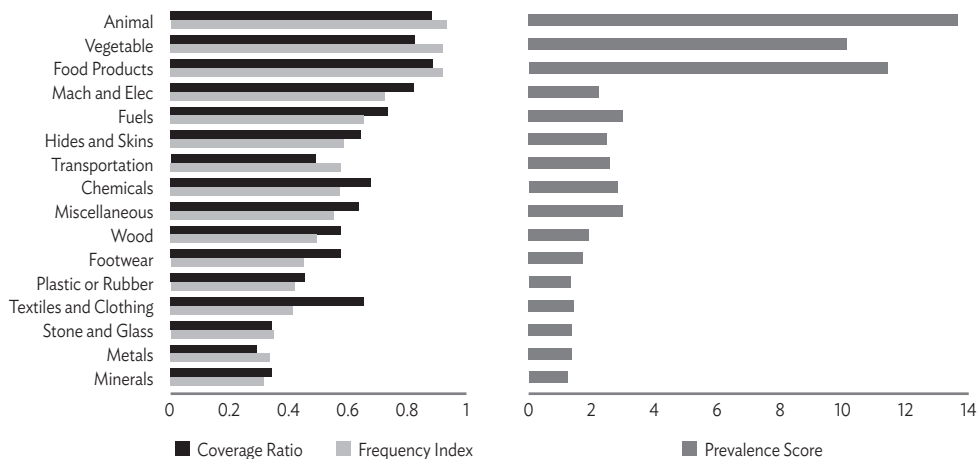
Notes:

1. Trade year used is based on the latest available import data at the HS 6-digit level (World Customs Organisation, 2017).

2. Sector as defined in HS 2017 2-digit sections (World Customs Organisation, 2017).

Source: Authors’ calculations based on the ERIA-UNCTAD raw NTMs in ASEAN Database, version 2019

**Figure 6: Incidence and Prevalence of Import Non-tariff Measures in ASEAN, by Sector 2018**



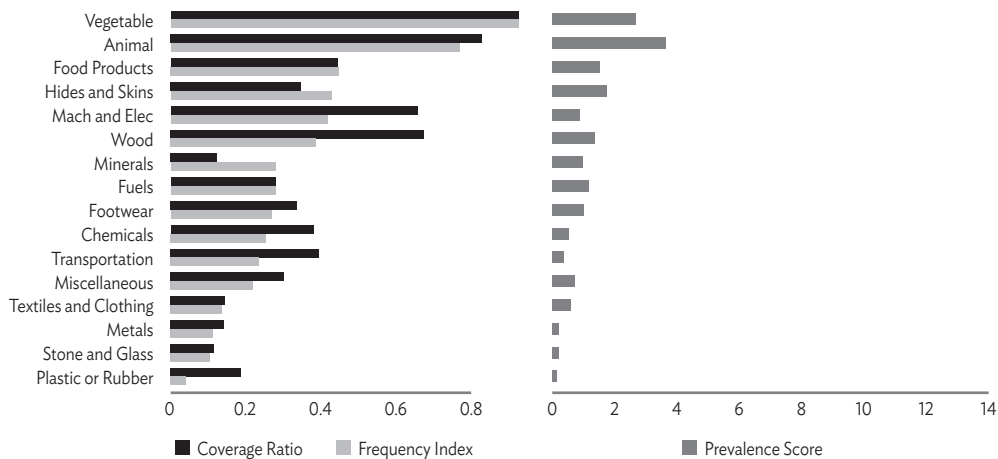
ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People's Democratic Republic, NTM = non-tariff measure.

Notes:

1. Trade year used is based on the latest available import data at the HS 6-digit level (World Customs Organisation, 2017).
2. Sector as defined in HS 2017 2-digit sections (World Customs Organisation, 2017).

Source: Authors' calculations based on the ERIA-UNCTAD raw NTMs in ASEAN Database, version 2019.

**Figure 7: Incidence and Prevalence of Export Non-tariff Measures in ASEAN, by Sector, 2015**



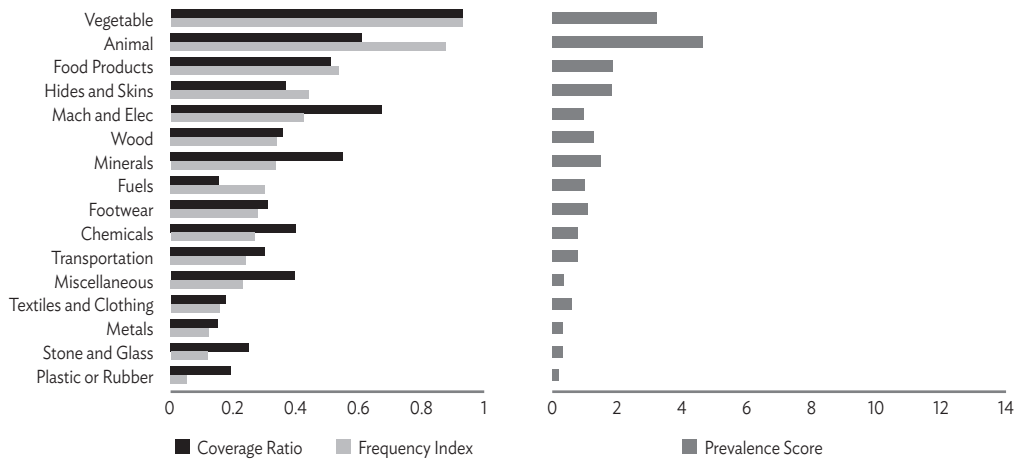
ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People's Democratic Republic.

Notes:

1. Trade year used is based on the latest available import data at the HS 6-digit level (World Customs Organisation, 2017).
2. Sector as defined in HS 2017 2-digit sections (World Customs Organisation, 2017).

Source: Authors' calculations based on ERIA-UNCTAD Raw NTMs in ASEAN Database, version 2019.

**Figure 8: Incidence and Prevalence of Export Non-tariff Measures in ASEAN by Sector, 2018**



Notes:

1. Trade year used is based on the latest available import data at the HS 6-digit level (World Customs Organisation, 2017).

2. Sector as defined in HS 2017 2-digit sections (World Customs Organisation, 2017).

Source: Authors' calculations based on ERIA–UNCTAD Raw NTMs in ASEAN Database, version 2019.

Overall, the pattern of NTM application in ASEAN countries is largely in line with international practice, where most NTMs are SPS measures or TBT. Agricultural products and manufacturing sectors with deep participation in global value chains – such as machinery, electronics, and transportation – are amongst the most heavily regulated.

## 4. Complementarity Between Tariffs and Non-tariff Measures

NTMs can sometimes be used to achieve the same policy outcomes as tariffs: to protect domestic producers and to reclaim revenue loss due to tariff liberalisation. The expanding imposition of NTMs in the context of tariff reduction suggests that they might be used as a substitute for tariffs (Ing, Cordoba, and Cadot, 2016). If low tariffs are found alongside heavy NTM use, a country may likely be replacing tariffs with NTMs for protection.<sup>9</sup>

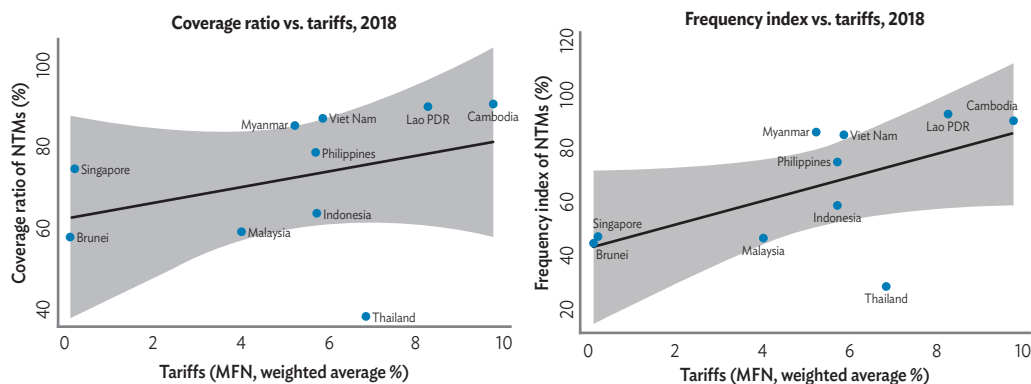
To explore whether NTMs are levied to complement or substitute for tariffs, we compute simple correlation between tariffs and indicators of NTM pervasiveness at the country level. Results are in Figure 9. Contrary to the opposite movement found at the aggregate

<sup>9</sup> The interpretation of the opposite case, when high tariffs couple with low NTM counts, is not straightforward. The modest use of NTMs could be a sign of under-regulation, amongst others.

level, Figure 9 demonstrates complementarity between NTMs and tariffs. Although large variance exists across countries, a positive correlation is observed. Countries with more protective tariff regimes tend to impose more NTMs, and vice versa. A clear deviation is Thailand, where a relatively high tariff level pairs with significantly lower NTM imposition.

Richer countries, particularly Singapore and Brunei, are at the lowest end of the shaded area, which might suggest that they are more committed to reducing all types of trade barriers. In contrast, a combination of high tariffs and large NTM prevalence in countries at the higher end in the panels, such as Cambodia and Lao PDR, may indicate stronger protection.<sup>10</sup>

**Figure 9: Complementarity between tariffs and Non-tariff Measures**



MFN = most favoured nation, NTM = non-tariff measure.

Note: The fitted line is obtained from a linear regression of coverage ratio or frequency index of NTMs on tariffs. The shaded area captures confidence interval of the mean.

Source: Authors' calculations based on ERIA-UNCTAD Raw NTMs in ASEAN Database, version 2019.

## 5. Addressing Non-tariff Measures in ASEAN – The Way Forward

### 5.1 Regional Initiative

#### *Mechanism at Work*

ASEAN's efforts to address NTMs is manifested in various agreements, strategic action plans, and guidelines. Four areas have been the focus of ASEAN in relation to NTMs: (1) ATIGA, (2) AEC 2025 Trade Facilitation Strategic Action Plan (SAP), (3) Guidelines for

<sup>10</sup> Figure 9 does not indicate a causality relationship.

the Implementation of ASEAN Commitments on Non-Tariff Measures on Goods, and (4) Good Regulatory Practice (GRP) Core Principles.

**First**, the ATIGA, which contains several provisions relevant to ensuring transparency and management of NTMs: Article 11 (Notification Procedures), Article 12 (Publication and Administration of Trade Regulations), Article 13 (ASEAN Trade Repository), Article 40 (Application of Non-Tariff Measures), and Article 42 (Elimination of Other Non-Tariff Barriers). These provisions are similar to the AMS obligations in the WTO agreement.

For instance, Article 11 of the ATIGA contains the notification procedures that an AMS must follow for any measure, including NTMs, that may potentially affect the ATIGA's operation. This provision allows other AMSs to comment within a certain period before the measure takes effect. Any notification of the measure shall be made to the ASEAN Senior Economic Officials Meeting (SEOM) and the ASEAN Secretariat.

Articles 12 and 13 set the obligations for ensuring transparency of trade-related information. Article 13 provides for the establishment of a trade repository, in which NTM information is a key component.<sup>11</sup> The original idea was to have a centralised ASEAN trade repository, to be maintained by the ASEAN Secretariat. Later, however, the consensus was that establishing the national trade repositories (NTRs) would serve as an interim step towards developing the ASEAN trade repository.

Article 40 stipulates that AMSs shall not adopt or maintain any NTMs on intra-ASEAN export and import activities, unless such action is consistent with AMS rights and obligations under the WTO or ATIGA. Article 40 also notes that any application of measures should be consistent with other related provisions in the ATIGA, particularly Articles 11, 12, and 13.

Article 42 obligates AMSs to review the ASEAN NTM database mentioned in Article 40 to identify, with a view to eliminating, NTBs other than those identified as quantitative restrictions. NTBs will be eliminated through various ASEAN bodies such as the Coordinating Committee for the Implementation of the ATIGA (CCA), ASEAN Consultative Committee on Standards and Quality (ACCSQ), and ASEAN Committee on SPS, where these bodies will submit a recommendation to the ASEAN Free Trade Area (AFTA) Council through the SEOM. The provision indicates the tranches and timelines

---

<sup>11</sup> Nine areas of trade-related information include (1) tariff nomenclature; (2) most favoured nation tariffs, preferential tariffs offered under this Agreement and other Agreements of ASEAN with its Dialogue Partners; (3) Rules of Origin; (4) NTMs; (5) national trade and customs laws and rules; (6) procedures and documentary requirements; (7) administrative rulings; (8) best practices in trade facilitation applied by each AMS; and (9) list of AMS authorised traders.

by which AMSs will eliminate the identified NTBs, and such elimination shall be agreed by the AFTA Council.

In addition to the general provisions on NTMs, the ATIGA contains provisions on standards, technical regulations, and conformity assessment procedures. Chapter 7, particularly Articles 73–76, outlines procedures and requirements to address TBT through (1) Harmonisation of Standards, Technical Requirements and Conformity Assessment Procedures; (2) Mutual Recognition Arrangements (MRAs); and (3) Development of Single Regulatory Regime in certain priority integration sectors (ASEAN Secretariat, 2004). The objective of the ASEAN Agreement for the Integration of Priority Sectors is to identify measures to be implemented by AMSs, with clear timelines, to integrate the priority sectors into ASEAN in a progressive, expeditious, and systematic manner. Of the 11 priority sectors, there are only 4 – air travel, e-ASEAN, fisheries, and tourism – that the TBT Agreement does not cover as part of the work of ACCSQ. In addition to the seven remaining sectors, ASEAN has confirmed the inclusion of building and construction materials as a priority sector under the purview of the ACCSQ (for the TBT Agreement).

**Second**, the SAP (ASEAN Secretariat, 2017), particularly item 3, which provides a strategic objective that ‘Put[s] in place an effective and responsive regional approach to efficiently address the trade distorting effect of NTMs with a view to pursuing legitimate policy objectives whilst reducing cost and time of doing business in ASEAN’ (ASEAN Secretariat, 2017).

The SAP sets five key goals related to NTMs: (1) update the ASEAN NTM database, utilising the ERIA–UNCTAD NTMs in ASEAN database as a primary input; (2) cross-notify NTMs in case an AMS comes across an NTM issued by another AMS that has not been properly notified; (3) enhance the ASEAN Solutions for Investments, Services and Trade (ASSIST) mechanism – an Internet-based platform and non-binding mechanism that allows the private sector to submit complaints about NTMs, amongst other components; (4) strengthen AMS national trade facilitation committees (NTFCs) to provide a regulatory oversight function to review existing NTMs; and (5) establish a mechanism to provide the opportunity for AMSs to comment, to a certain extent, on proposed new or revised laws and regulations on border measures before their adoption.

The SAP aims to harmonise technical requirements and simplify administrative procedures based on international standards and MRAs (ASEAN Secretariat, 2017), to help traders reduce time and cost in complying with rules and procedures for trading products in ASEAN.

**Third**, the Guidelines for the Implementation of ASEAN Commitments on Non-Tariff Measures on Goods, which provide a general framework to improve the transparency and management of NTMs. The recently adopted non-binding guidelines provide for operationalising key ATIGA elements and provisions related to NTMs, such as Article 11 (Notification Procedures), Article 12 (Publication and Administration of Trade Regulations), Article 13 (ASEAN Trade Repository), Article 40 (Application of Non-Tariff Measures), and Article 42 (Elimination of Other Non-tariff Barriers). The guideline provisions endorsed by the AFTA Council will cover new NTMs but may not sufficiently address the need to review the barrier effect of current NTMs.

Fourth, adoption of the ASEAN GRP Core Principles.<sup>12</sup> AMSs recently undertook a regional initiative to help improve approaches in preparing laws and regulations at the national level. Given renewed emphasis for better regulations and to follow through on the importance of GRP in the AEC Blueprint 2025 on GRP, the ASEAN Economic Ministers (AEM) adopted the ASEAN Work Plan on GRP 2016–2025 at the 23rd AEM Retreat in March 2017, and the AEC Council Ministers endorsed it in April 2017. It has also been underscored that enhanced regulatory practice and capacity of individual AMSs are key to the successful delivery of national development agendas, and to implementing regional commitments and achieving ASEAN’s long-term competitiveness.

### ***ASEAN Institutions Related to Non-tariff Barriers***

Overseeing the implementation of these measures and initiatives mostly falls under the ASEAN Trade Facilitation Joint Consultative Committee (ATF-JCC), the CCA, and the ACCSQ.

In relation to NTMs, the CCA, as provided in Article 42 (Elimination of Other Non-Tariff Barriers) of the ATIGA, and in consultation with the relevant ASEAN bodies, is tasked to ‘review any non-tariff measure notified or reported by any other Member State or by the private sector with a view to determining whether the measure constitutes as a NTB’. If the review results in identification of an NTB, the AMS imposing it shall eliminate it in accordance with the provisions of the ATIGA.

---

<sup>12</sup> The elements of the ASEAN GRP Core Principles are (1) achieve clarity on policy rationale, objectives, and institutional frameworks; (2) produce benefits that justify costs and are least distortive to the markets; (3) be consistent, transparent, and practical; (4) support regional regulatory cooperation; (5) promote stakeholder engagement and participation; and (6) be subject to regular review for continued relevance, efficiency, and effectiveness.

The ATF–JCC should develop a strategic action plan for trade facilitation; draft, periodically review, and update the ASEAN Work Programme on Trade Facilitation, which will set out clear targets and timeframes for implementation, factoring in all initiatives pursued by the relevant bodies; and direct and coordinate the trade facilitation activities of all relevant ASEAN bodies playing a role in trade facilitation.

The ACCSQ was established to facilitate the removal of TBT amongst AMSs to expand intra- and extra-ASEAN trade by harmonising standards, identifying and initiating sectoral MRAs, and harmonising sectoral regimes. This is in line with monitoring implementation of the ATIGA in relation to standards, technical regulations, and conformity assessment procedures, amongst others. The work is extended to partners outside ASEAN that provide support on standards, technical regulations, and conformity assessment procedures such as the ASEAN free trade agreements and cooperation with dialogue partners. The focus of ASEAN’s work is on agreed priority areas or sectors, which cover capacity building and institutional strengthening (ASEAN Secretariat, 2010).

### ***Preliminary Assessment***

ASEAN has provided pathways to addressing NTMs through the various ATIGA provisions, the SAP, implementing guidelines, and other initiatives related to NTMs. However, progress in populating the NTM sections of AMSs’ trade repositories varies substantially. Some AMSs have a centralised trade repository where the NTMs can be found, whilst others only link NTMs to government agency websites.<sup>13</sup>

As stipulated in Article 13 of the ATIGA, NTRs should contain all trade information, including on NTMs, in a single repository to ease updating and monitoring of NTM implementation. For example, some import NTMs provide for a detailed list of requirements, including forms to be used or filled up, whilst others have more general information. Sharing the updated ERIA–UNCTAD database on NTMs will help AMSs populate their NTM section and verify the NTMs in the database.

ASEAN needs to work further on obligating AMSs to notify NTMs before they are implemented. Although Article 11 (Notification) of the ATIGA is mandatory, we are not aware of any consequences for an AMS that fails to comply with it. Stakeholders might not, therefore, be able to make informed decisions on trade.

---

<sup>13</sup> Please refer to individual country’s chapters for more details.



The enhanced version of ASSIST allows the private sector to report an NTM or trade-related barrier elements of NTMs, but information is still confined to parties involved in the complaints. Although complaints can be filed anonymously, companies may fear reprisals from government agencies, which could discourage private companies from using the facility.

The ACCSQ oversees standards and conformance with obligations under TBT and has put in place MRAs and a harmonised regulatory regime (Box 2), but implementation is uneven across AMSs. Some have yet to establish an accreditation body, relying instead on accredited testing facilities in other AMSs to fully benefit from MRAs.

Remaining challenges include enhancing of AMSs' technical infrastructure capability to support adoption of harmonisation standards; the ability to support local industry by making available accredited testing and certification of products in some AMSs; and continuous training of personnel to support and sustain the work on standards, technical regulations, and conformity assessment.

### **Box 2: Sectoral Initiatives to Address Technical Barriers to Trade**

#### **Existing Mutual Recognition Arrangements (MRAs)**

- ASEAN Sectoral MRA for Electrical and Electronic Equipment (2002)
- ASEAN Sectoral MRA for Good Manufacturing Practice Inspection of Manufacturers for Medicinal Products (2009)
- ASEAN MRA on Bio-Equivalence Study Report (2017)
- MRA on Inspection and Certification System on Food Hygiene for Prepared Foodstuff (two more AMSs to sign)

#### **Forthcoming MRAs**

- ASEAN MRA on Type Approval for Automotive Products (for finalisation in 2019)
- ASEAN MRA on Building and Construction Materials (for finalisation in 2019)

#### **Harmonised Regulatory Regimes and Directives**

- Agreement on the ASEAN Harmonised Cosmetic Regulatory Scheme (2003) with ASEAN Cosmetic Directive
- Agreement on the ASEAN Harmonised Electrical and Electronic Equipment Regulatory Regime (2005)
- ASEAN Medical Device Directive (2014)

**Agreement on Harmonised Technical Requirements (forthcoming)**

- ASEAN Agreement on Regulatory Framework for Traditional Medicines
- ASEAN Agreement on Regulatory Framework for Health Supplements

As the NTM database country reports found, no single authority in AMSs ensures that NTMs are implemented effectively. The absence of a coherent mechanism and institution could create difficulty not only for collecting and classifying data but also for drafting good regulations. The lack of coordination could create inconsistency in regulations issued by government agencies across ministries.

The NTFCs, which were envisaged to coordinate all regulations and policies, are still under development in various AMSs. A related issue is the need to ensure that government bodies consider the views of the private sector and other stakeholders on preparing and implementing regulations or NTMs.

## 5.2 Non-tariff Measures as Part of National Competitiveness Agendas

Recognising the importance of GRP in coming up with coherent, efficient, and cohesive regulations and measures, individual AMSs have embarked on initiatives to improve their regulatory environments.<sup>14</sup> The initiatives include Malaysia's PEMUDAH Task Force, Thailand's Guillotine Committee, the Philippines' Project Repeal, and Viet Nam's Project 30.

**Malaysia's** PEMUDAH is a public-private task force established by ministries. It is mandated to reduce bureaucracy in business-government dealings and improve how government regulates the business sector. PEMUDAH is mandated to monitor, review, and recommend changes to the laws, regulations, and administrative procedures to reduce the burden on the private sector. Working with PEMUDAH is the Malaysia Productivity Corporation (MPC), which is identified in the 10th Malaysian Plan to support the work of the private sector and 'unleash its growth potential' (Seman and Majid, *forthcoming*). The MPC is tasked to spearhead the comprehensive review of business regulations, including improvement of procedures to increase the productivity and competitiveness of major economic sectors. Malaysia launched the National Policy on the Development and Implementation of Regulations in 2013 and formalised it in 2014. This was an important

<sup>14</sup> These initiatives aim to reduce regulatory burden in general, of which NTM-related regulations are one component.

step in establishing a whole-of-government commitment to improve regulatory practices, where GRP was embedded in preparing or amending regulations. The policy aims to ensure that regulations are developed in accordance with international best practices in regulatory management.

The MPC and PEMUDAH review and revise regulations and procedures through a large number of public and private sector working groups and task forces. The NPIDR mandates the use of regulatory impact analysis and regulatory impact statements for all new regulations. All regulations are reviewed every 5 years using the ‘reducing unnecessary regulatory burden’ methodology, where reviews are comprehensive, in-depth, and transparent. The regulatory tools to review regulations – business process re-engineering and NTM stocktaking – are not adopted directly by the agencies but are centralised in the MPC and PEMUDAH. Malaysia’s efforts to advance GRP include establishing the United Public Consultation Portal to provide the public easy access to regulatory consultations through a single website.

In 2017, **Thailand** launched the Guillotine Project to fast-track the review of laws and regulations. It is an initiative of the Fast Action Law Reform Committee, established in 2018 by the Prime Minister’s Office. Phase 1 focused on reviewing laws and regulations to reduce or amend some of them to improve Thailand’s World Bank ‘ease of doing business’ ranking. Work permits and visas were reviewed and initial recommendations issued in October 2018. Other areas covered included eliminating the requirement that business organisations have a company seal before investing in Thailand, eliminating the regulatory framework requiring business organisations to get approval from the labour department, and introducing an automated risk-based system to help select companies for a risk audit. Phase 2 focused on reviewing laws and regulations relating to the issuance of 1,500 permits and licenses, to eliminate redundant licences and streamline burdensome, complex procedures for starting new businesses, and to promote efficient business activity and economic development (Srisangnam and Tinkan, *forthcoming*).

The private sector recommended priority issues or areas. The inventory of laws and regulations, including the regulatory guillotine process, where about 1,000 regulations were examined for reform, repeal, or deletion, was undertaken under the First Action Law Reform Committee. The committee proposed enhancing the conduct of regulatory impact analysis to be in line with international standards and practices.

The reform led to Thailand’s rise to 26th out of 190 economies in the 2018 ‘ease of doing business’ ranking, up from 48th in 2017. The World Bank recognised Thailand as one of the top-10 most improved economies in 2018.

Regulatory reforms in the **Philippines** have seen notable progress over the past years. In 2016, the Philippines, through the National Competitiveness Council (NCC), launched an anti-red-tape challenge called Project Repeal, a government-wide initiative to repeal outdated rules and reduce the cost of doing business (Llanto and Ortiz, 2019). The NCC is a public-private sector task force on competitiveness, created under Presidential Executive Order No. 571, which was amended by Executive Order No. 44 in June 2011, giving the task force its present name and expanding its membership.

On the 1st Repeal Day in June 2016, only 8 government agencies participated but, in 2017, a total of 86 government line and attached agencies joined. The NCC reported that 3,777 rules and issuances were repealed on the 1st Repeal Day, 1,098 on the 2nd, and 976 on the 3rd.

The government's commitment to continue improving the regulatory environment was manifested in Republic Act No. 11032 or the Ease of Doing Business and Efficient Government Service Delivery Act of 2018, which amended Republic Act No. 9485 or the Anti-Red Tape Act of 2007. The law aims to simplify and expedite the processing and delivery of government services – related to business or not – in all government offices, and to promote transparency. The law established the Anti-Red Tape Authority, 'the primary institution that will head the implementation of the national policy on anti-red tape and EODB [ease of doing business] as well as monitor and evaluate the compliance of government agencies and offices to such policies' (Llanto, 2019).

**Viet Nam's** Project 30 is a key regulatory reform to simplify at least 30% of administrative procedures, amongst others. It seeks to reduce administrative costs by at least 30% and close implementation gaps between the domestic regulatory system and international commitments, particularly the WTO. The reform plans to establish the first unified national database for administrative procedures and help improve the country's competitiveness by encouraging investment and increasing productivity.

The results of Project 30 were remarkable, including setting up an electronic database containing more than 5,000 administrative procedures accessible to the public; reducing administrative burdens on businesses and citizens, especially regarding invoicing (saving US\$20 million a year), tax declarations and collections (US\$50 million), and customs procedures (US\$30 million) (Vo, 2019; and encouraging investment and boosting investor confidence by simplifying administrative procedures.

## 6. Conclusion and Policy Recommendations

We present the key findings drawn from the updated ERIA–UNCTAD NTMs in ASEAN database, and provide a snapshot of ASEAN’s on-going initiatives to deal with NTMs at the regional and country levels.

We observe an increase in NTMs across all 10 countries. Within 3 years, the total number of NTMs has risen by approximately 15%. Technical measures account for the lion’s share of NTMs, which is in line with the pattern observed in developed countries. SPS measures are highly targeted at agricultural and food products, whilst TBT are often used for non-food manufacturing products. Export-related measures and quantity and price controls also contribute to a non-trivial fraction of NTMs.

Given the complexity of NTMs, their increasing use should be interpreted with caveats. The increase in NTMs reflects the dynamics of regulatory reform in AMSs. In certain circumstances, however, NTMs have also served as disguised barriers to international trade and become a convenient tool to provide undue protection to certain products or industries.

More important, regardless of their objectives, NTMs can contribute greatly to increasing trade costs, reducing an economy’s competitiveness. Addressing NTMs, especially in the context of declining tariffs, should, therefore, be a priority in national competitiveness agendas.

ASEAN, through various frameworks, principles, and agreements, has taken steps to address and manage NTMs. Although initiatives are region-wide, harmonisation and enforcement of NTMs require strong institutional commitment at the national level. Whilst significant progress is not yet observed, effective implementation of existing initiatives could produce promising results.

Several areas are identified to help address or manage NTMs.

First, **enhance the capacity of issuing and enforcement agencies.**<sup>15</sup> For issuing agencies, technical assistance includes collecting NTMs, classifying them using an internationally comparable classification, validating NTM data, and uploading new NTMs to a public database.<sup>16</sup> The technical knowledge of enforcement agencies, particularly those in charge

<sup>15</sup> The two groups may overlap.

<sup>16</sup> ERIA has shared the 2019 updated NTM data from the ERIA–UNCTAD database, which AMSs will refer to when populating their NTRs and linking them to the ATR. The capacity building provided by ERIA and UNCTAD will help ensure the sustainability of the NTM section of NTRs and enhance transparency.

of technical inspection and accreditation, will be improved by good education and training. The development of testing and accreditation facilities would contribute significantly to enhancing the overall efficiency of NTM management, given the prevalence of conformity assessment for both SPS and TBT purposes.

Second, **establish an institutional mechanism similar to NTFCs** to oversee and manage the implementation of NTMs to ensure consistency of regulations and avoid overlapping amongst enforcement authorities. A dedicated national institution to validate regulatory impact analyses or regulatory impact statements could accelerate public access to them and ensure they are updated on NTRs. The institution, supported by a competent workforce, could also carry out NTM regulatory review and stocktaking.

Third, **strengthen engagement with the private sector and research institutions** on possible approaches to managing NTMs. NTMs are neutral and, more often than not, eliminating them is not an option. A pragmatic approach should consider the costs and effectiveness of NTMs from the perspective of governments and producers, with evidence-based support from academia.

Fourth, **apply GRP core principles to ensure good regulatory management**. Some AMSs have made good progress in institutionalising GRP principles in their regulatory management system by adopting regulatory stocktake tools such as regulatory impact analysis or regulatory impact statement before new laws or regulations are adopted or implemented.

## References

ASEAN Secretariat (2018), *ASEAN Statistical Yearbook 2018*. Jakarta: ASEAN Secretariat. <https://asean.org/storage/2018/12/asyb-2018.pdf> (accessed 19 April 2019).

ASEAN Secretariat (2018), *ASEAN Community Progress Monitoring System 2017 – Tariff Liberalisation*. Jakarta: ASEAN Secretariat. <https://www.aseanstats.org/wp-content/uploads/2018/10/Tariff-Liberalisation.pdf> (accessed 18 April 2019).

ASEAN Secretariat (2017), 'AEC 2025 Trade Facilitation Strategic Action Plan'. <https://asean.org/storage/2012/05/AEC-2025-Trade-Facilitation-SAP-FINAL-rev.pdf>

ASEAN Secretariat (2012), 'Non-Tariff Measures Database'. [https://asean.org/?static\\_post=non-tariff-measures-database](https://asean.org/?static_post=non-tariff-measures-database) (accessed 27 April 2019).

- ASEAN Secretariat (2010), 'ASEAN Trade in Goods Agreement'. <http://agreement.asean.org/media/download/20140119034633.pdf> (accessed 12 March 2019).
- ASEAN Secretariat (2004), 'ASEAN Framework Agreement for the Integration of Priority Sectors Vientiane, 29th November 2004'. [https://asean.org/?static\\_post=asean-framework-agreement-for-the-integration-of-priority-sectors-vientiane-29th-november-2004](https://asean.org/?static_post=asean-framework-agreement-for-the-integration-of-priority-sectors-vientiane-29th-november-2004)
- Beestermöller, M., A. C. Disdier, and L. Fontagné (2018), 'Impact of European Food Safety Border Inspections on Agri-food Exports: Evidence from Chinese firms', *China Economic Review*, 48, pp.66–82.
- Chen, M. X. and A. Mattoo (2008), 'Regionalism in Standards: Good or Bad for Trade?' *Canadian Journal of Economics/Revue canadienne d'économique*, 41(3), pp.838–63.
- Disdier, A-C., L. Fontagné, and O. Cadot (2015), 'North-South Standards Harmonization and International Trade', *World Bank Economic Review*, 29(2015), pp.327–52.
- Fontagné, L. and G. Orefice (2018), 'Let's try next door: Technical Barriers to Trade and multi-destination firms', *European Economic Review*, 101, pp.643–63.
- Fugazza, M., M. Olarreaga, and C. Ugarte (2018), 'On the Heterogeneous Effects of Market Access Barriers: Evidence from Small and Large Peruvian exporters', *CEPR Discussion Paper*, No. DP12876, London: Center for Economic Policy Research.
- Hoekman, B. and A. Nicita (2011), 'Trade Policy, Trade Costs and Developing Country Trade', *World Development*, 39(12), pp 2069–79.
- Ing, L.Y, S. Cordoba, and O. Cadot (eds.) (2015), *Non-tariff Measures in ASEAN*. Jakarta: Economic Research Institute for ASEAN and East Asia. Geneva: United Nations Conference on Trade and Development.
- International Trade Center (2015), 'The Invisible Barriers to Trade – How Businesses Experience Non-tariff Measures'. <http://www.intracen.org/uploadedFiles/intracenorg/invisiblebarriers.pdf> (accessed 26 April 2019).
- Kee, H. L., A. Nicita, and M. Ollarreaga (2009), 'Estimating Trade Restrictiveness Indices', *The Economic Journal*, 119, pp.172–99.

Llanto, G.M. and M.K.P. Ortiz (2019), 'Regulatory Management System Baseline Survey Results and Analysis: Philippines' (unpublished).

Melo, O., A. Engler, L. Nahuehual, G. Cofre, and J. Barrena (2014), 'Do Sanitary, Phytosanitary, and Quality-related Standards Affect International Trade? Evidence from Chilean fruit exports', *World Development*, 54, pp.350–59.

Moenius, J. (2004), 'Information Versus Product Adaptation: The Role of Standards in Trade'. SSRN 608022. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=608022](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=608022) (accessed 25 January 2019).

Seman, A.L. and Y. Majid (*forthcoming*), Towards Institutionalization of Good Regulatory Practice (GRP) and Requisite Regulatory Management System (RMS) in ASEAN: RMS Baseline Survey Results and Analysis. Unpublished.

Srisangnam, P. and P. Tinkan (*forthcoming*), Regulatory Management System in Thailand and the Case Study of 2017–2019. Unpublished.

United Nations Conference on Trade and Development (UNCTAD) (2019), *International Classification of Non-tariff Measures*. Geneva: United Nations. [https://unctad.org/meetings/en/SessionalDocuments/ditc\\_tab\\_NTM\\_Week\\_INTERIM\\_2019\\_en.pdf](https://unctad.org/meetings/en/SessionalDocuments/ditc_tab_NTM_Week_INTERIM_2019_en.pdf) (accessed 2 May 2019).

United Nations Conference on Trade and Development (UNCTAD) (2013), *Non-tariff Measures to Trade: Economic and Policy Issues for Developing Countries*. Geneva: United Nations.

United Nations (2019), 'International Trade Statistics Database (UN Comtrade)'. <https://comtrade.un.org/> (accessed 27 February 2019).

Vo, T.T. (2019), 'Making Regulations Right and Effective: Viet Nam's Experience and Lessons'. In Intal, P. and M. Pangestu, *Integrated and Connected Seamless ASEAN Economic Community*, Jakarta: ERIA. Pp.255–68. [http://www.eria.org/uploads/media/17.AV2040\\_VOL4\\_GRP\\_VietNam.pdf](http://www.eria.org/uploads/media/17.AV2040_VOL4_GRP_VietNam.pdf)

World Customs Organisation (2017), *The Harmonized Commodity Description and Coding System*. <https://unstats.un.org/unsd/tradekb/Knowledgebase/50018/Harmonized-Commodity-Description-and-Coding-Systems-HS> (accessed 18 January 2019).



## Appendix : Methodology and Variable Definition

### Non-tariff Measure Data

Non-tariff measure (NTM) data were collected in all 10 ASEAN countries at the reporter-year-partner-product-NTM level. The data reflect all trade regulations that were in force up to 30 March 2018, providing a snapshot of each country. Data include bilateral NTMs, recording measures applied to the world and bilaterally to one or more countries. Products are defined for all ASEAN countries using the 8-digit ASEAN Harmonized Tariff Nomenclature (AHTN) 2017. Conversely, NTMs are defined in the 3-digit Multi-Agency Support Team (MAST) Classification M4 (UNCTAD, 2019).

### Tariff Data

Tariffs – effectively applied (AHS) and most favoured nation (MFN) – come from World Integrated Trade Services (WITS) and reflect unweighted country averages (across imported products defined at the Harmonised System [HS] 6-digit product level). Tariff data from 2017 are extrapolated for 2018.

### Methodology

The United Nations Conference on Trade and Development (UNCTAD) processed the raw NTM data as follows to ensure cross-country consistency:

- (1) Products are defined at the 6-digit product level of HS 2017, the most disaggregated product definition with internationally comparable trade data.
- (2) Horizontal NTMs – measures that apply to all products alike in a country – are dropped. Specifically, UNCTAD defines horizontal NTMs as a single measure affecting at least 95% of products in a country. An example would be a generic import licence for any imported product.
- (3) Partial NTMs – measures that cover an HS 6-digit product only partially in a country – are dropped. Specifically, UNCTAD defines partial NTMs as measures covering only some of the national tariff lines at 8 digits per HS 6-digit product under consideration. This implies that measures with partial coverage at the AHTN 8-digit level are also dropped. Products dropped due to partial coverage are those affected partially only for a specific reporter-partner-NTM code.
- (4) NTMs for products beyond HS 6-digit 980000 are dropped because HS chapters 98 and 99 are not harmonised but reserved for national use and, therefore, are not comparable between countries.

To compute the coverage ratio, UNCTAD relies on the South–South Trade Database (SSTdb), developed in-house, for export and import values. SSTdb provides estimates of bilateral trade flows at the HS 6-digit level for all countries and periods where actual trade flows are missing (see Annex in UNCTAD [2009b]). Drawing from UN Comtrade, UNCTAD Globstat, and the World Trade Organization’s Integrated Data Base, SSTdb uses mirroring, replication, averaging, interpolation, and extrapolation of trade flows. Export and import values from SSTdb are then averaged over the last 3 available years to adjust for year-specific fluctuations.

### Variable Definition

- (1) NTM count statistics. Results in Tables 1, 2, and 3 report NTM raw data, reflecting (a) NTMs at the AHTN 8-digit product level, (b) horizontal NTMs (measures that apply to all products alike in a country), and (c) partial coverage at the AHTN 8-digit product level.

The number of NTMs reflects differences in consumer protection and the structure of regulations across countries, and not trade restrictions per se. Regulations often reflect a basic and legitimate public demand for consumer protection that should be taken as given. Low NTM count statistics could reflect national gaps in countries’ consumer and environmental protection and thus potential under-regulation. The way countries issue regulation has a bearing on how many NTMs we count. For example, a country that promulgates product- or partner-specific regulations will see more NTMs than a country that uses a single law to regulate all imported products. These examples show that NTM counts should be taken with a grain of salt; they reflect differences in consumer protection and regulation structure across countries.

$$\text{Frequency index: } F_i = \frac{\sum_{j=1}^J \sum_{p=1}^{HS} NTM_{ijp} D_{ijp}}{\sum_{j=1}^J \sum_{p=1}^{HS} D_{ijp}} \times 100$$

where subscript  $p$  denotes product and  $i$  denotes the country imposing the NTM.  $NTM_{ijp}$  is a dummy variable denoting the presence of an (import) NTM in country  $i$  and product  $p$  of the selected HS aggregation level (typically HS 6) and applied to imports from country  $j$ .  $D_{ijp}$  is a dummy variable taking the value 1 when country  $i$  imports any quantity of product  $p$  from country  $j$ , and zero otherwise. Thus, the denominator measures the number of imported products.

The frequency index sums over each partner  $j$  to account for the fact that some NTMs are bilateral, i.e., applied only to some countries. When calculating the frequency index for export measures (associated with MAST NTM chapter P),  $D_{ijp}$  takes exports instead of imports, and  $NTM_{ijp}$  denotes the presence of an export NTM in country  $i$  to country  $j$ .

$$(2) \text{ Coverage ratio: } C_i = \frac{\sum_{j=1}^J \sum_{p=1}^{HS} NTM_{ijp} V_{ijp}}{\sum_{j=1}^J \sum_{p=1}^{HS} V_{ijp}} \times 100$$

where subscript  $p$  denotes product and  $i$  denotes country imposing the NTM. As in the frequency index,  $NTM_{ijp}$  is a dummy variable denoting the presence of an NTM in country  $i$  and product  $p$  of the selected HS aggregation level (typically HS 6) and applied to imports from country  $j$ . Thus, the denominator measures the value of imported products.  $V_{ijp}$  represents the import value of country  $i$  in product  $p$  used for import measures. When calculating the coverage ratio for export measures,  $V_{ijp}$  takes export values instead of import values.

$$(3) \text{ Prevalence score: } P_i = \frac{\sum_{j=1}^J \sum_{p=1}^{HS} NTM_{ijp} \#NTM_{ijp} D_{ijp}}{\sum_{j=1}^J \sum_{p=1}^P D_{ijp}} \times 100$$

where subscript  $p$  denotes product and  $i$  denotes country imposing the NTM.  $\#NTM_{ijp}$  represents the number of distinct NTMs (at 3 digits) country  $i$  has in product  $p$  of the selected HS aggregation level (typically HS 6) and applied to imports from country  $j$ . As in the frequency index,  $NTM_{ijp}$  is a dummy variable denoting the presence of an NTM in country  $i$  and product  $p$  of the selected HS aggregation level (typically HS 6) and  $D_{ijp}$  is a dummy variable taking the value 1 when country  $i$  imports any quantity of product  $p$  from country  $j$ , and zero otherwise. Thus, the denominator measures the number of imported products. When calculating the prevalence score for export measures,  $D_{ijp}$  takes exports instead of imports.

NTM count statistics and the three NTM indicators computed over different aggregations represent the unweighted average for that aggregation.

# UPDATING NON-TARIFF MEASURES IN BRUNEI DARUSSALAM

**Christina Ruth Elisabeth<sup>1</sup>**

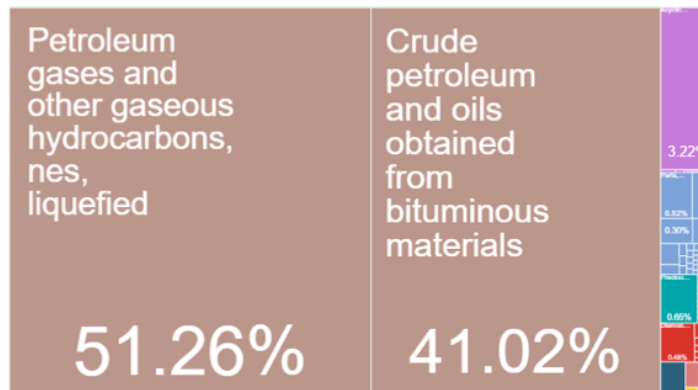
University of Indonesia

## 1. Introduction

### 1.1. Trade Structure

The economy of Brunei Darussalam is highly dependent on oil and gas, which account for about two-thirds of output and over 90% of merchandise exports and government revenues (WTO, 2015).

**Figure 1.1: Export Composition, Brunei, 2016**



Note: Data is computed at Harmonized System (HS) Code 2-digit levels.

Source: CID (2019).

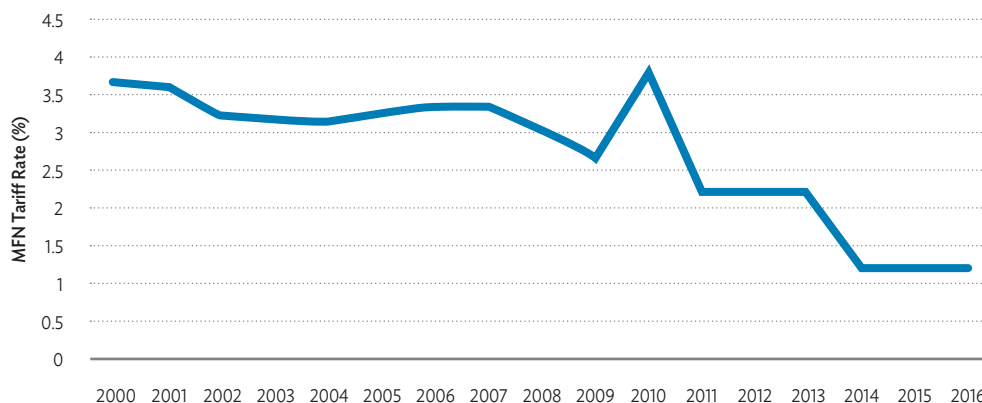
<sup>1</sup> The author would like to thank Mr. B. Realino Yudianto (Prasetiya Mulya University) for his useful assistance in collecting the regulations.



has concluded FTAs with Australia–New Zealand, China, India, Japan, and the Republic of Korea. Bilaterally, Brunei has concluded an economic partnership agreement with Japan, and the Trans-Pacific Strategic Economic Partnership with Chile, New Zealand, and Singapore.

The average most favoured nation (MFN) tariff was reduced from 3.66% in 2011 to 1.21% in 2016. Despite bilateral tariffs with India, the tariff under the FTA was significantly lower than the average MFN in 2016 (Figure 1.3). The tariff rate was 0.29% under the ASEAN–Australia–New Zealand Free Trade Area (AANZFTA) and 0.16% under the ASEAN–Japan Comprehensive Economic Partnership (AJCEP).

**Figure 1.3: Most Favoured Nation Tariff Trends, Brunei, 2000–2016**

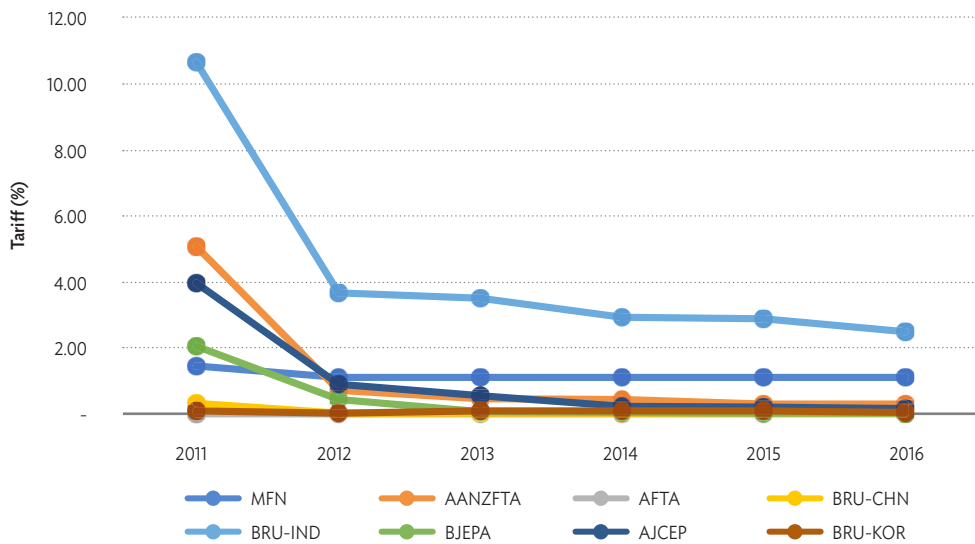


Note: Computed at Harmonized System 6-digit levels.  
 Source: World Bank (2019).

In 2011–2016, the average AANZFTA tariff decreased by 4.8% and the average AJCEP tariff by 3.8%. The most progressive reduction was in the bilateral tariff between Brunei and India, which decreased by 8.18%, followed by the bilateral tariff between Brunei and Japan, which decreased by 2.03%. The bilateral tariff between Brunei and China remains small at 0.02%.

In 2016, under Harmonised System (HS) 2, average MFN tariffs were 0%–9.8%. The highest tariff was on headgear (9.8%) and musical instruments (9.1%). Tariffs were 0% on agri-food products.

**Figure 1.4: Tariff Reductions under Most Favoured Nation and Free Trade Agreements, Brunei, 2011–2016**



Note: Data on MFN tariffs is computed at HS 2-digit levels and others at 6-digit levels.

AANZFTA = ASEAN–Australia–New Zealand Free Trade Area, AFTA = ASEAN Free Trade Area, AJCEP = ASEAN–Japan Comprehensive Economic Partnership, BJEPA = Brunei–Japan Economic Agreement, BRU–CHN = Brunei–China (bilateral agreement), BRU–IND = Brunei–India (bilateral agreement), BRU–KOR = Brunei–Republic of Korea (bilateral agreement), MFN = most favoured nation.

Source: WTO (2019).

In 2015, Brunei applied 555 NTMs, which affected 60.39% of its total trade. As trade regulations are dynamic, data on NTMs must be updated. In 2015–2018, the government updated 254 regulations, of which 70 contained NTMs as published on the Attorney General’s Chambers website ([www.agc.gov.bn](http://www.agc.gov.bn)). This study will discuss the process and results of updating NTMs by using the 2018 United Nations Conference on Trade and Development (UNCTAD) classification.

## 1.2. Hierarchy of Laws and Regulations

Brunei has centralised the source of online regulations on the Attorney General’s Chambers website, from which more than 90% of trade-related regulations can be accessed. Other sources are the websites of the Ministry of Health and of Trading Across Borders.

The hierarchy of regulations is, from top to bottom, acts, orders, regulations, rules, and notifications. Most NTMs are in the form of regulations and rules. Many NTMs are found in ministry notifications. All updated NTM regulations are in English.

As comprehensiveness is critical, we did the following:

1. Checked all updated regulations on the Attorney General's Chambers website for 2015–2018; determined whether the regulations contained NTMs and found 254 updated regulations, of which 70 contain NTMs.
2. Checked all regulations and determined whether they had been amended or repealed.
3. Checked ministry websites to determine whether any regulations had not been published on the Attorney General's Chambers website.
4. Checked whether Brunei was following new regulations of international conventions.

## 2. Descriptive Non-tariff Measure Statistics

### 2.1. Comprehensiveness of Non-tariff Measures

In 2018, there were two updated NTMs: Customs (Prohibition and Restriction on Imports and Exports) (Amendment) Order 2017 and Fire Safety Order 2016, from which seven updated NTMs were derived in 2018.

Transparency improved significantly. In 2018, 20 regulations were reported to the World Trade Organization (WTO), while in 2015, only two were (WTO, 2018). In 2018, 60.57% of products were affected by NTMs, compared with 60.39% in 2015.

**Table 1.1: Comprehensiveness of Non-tariff Measures, Brunei, 2015 and 2018**

No	Comprehensiveness	2015	2018
1	Total number of coded regulations	68	70
2	Total number of coded regulations reported to WTO	2	20
3	Total number of coded NTMs	555	562
4	Total affected traded products (HS lines, national tariff lines)		
	a) Total number of affected traded products <sup>a)</sup>	5,988	6,006
	b) Share of the number of affected traded products to the number of total products <sup>b)</sup>	60.39%	60.57%
5	Total number of issuing institutions	26	26

HS = Harmonized System, NTM = non-tariff measure, WTO=World Trade Organization.

a) One product may be affected by more than one measure.

b) Brunei has 9,916 tariff lines.

Source: Author, based on UNCTAD (2018).



## 2.2. Non-tariff Measures by Issuing Institution

There were only slight changes in issuing institutions in 2018. The Ministry of Health issued more than half the NTMs in 2015 and 2018, followed by the Royal Customs and Excise Department and the Department of Agriculture and Agrifood. The change in the proportion of issuing institutions in 2018 was due to the Ministry of Home Affairs issuing five new NTMs and the Royal Customs and Excise Department issuing two.

**Table 1.2: Non-tariff Measures by Issuing Institution, Brunei, 2015 and 2018 (number, %)**

No	Issuing Institution	2015		2018	
		Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
1	Ministry of Health	354	63.78	354	62.99
2	Royal Customs and Excise, Ministry of Finance	29	5.23	31	5.52
3	Department of Agriculture and Agrifood, Ministry of Industry and Primary Resources (MIPR)	22	3.96	22	3.91
4	Ministry of Religious Affairs	15	2.70	15	2.67
5	Fisheries Department, MIPR	12	2.16	12	2.14
6	Ministry of Health, Ministry of Religious Affairs, Department of Agriculture and Agrifood, MIPR	12	2.16	12	2.14
7	Authority for Info-communications Technology Industry, Ministry of Communication	11	1.98	11	1.96
8	Department of Energy and Industry, The Brunei Darussalam Intellectual Property Office	10	1.80	10	1.78
9	Brunei Industrial Development Authority	9	1.62	9	1.60
10	Forestry Department, MIPR	9	1.62	9	1.60
	Other institutions	72	12.97	77	13.70
	<b>Total</b>	<b>555</b>	<b>100</b>	<b>562</b>	<b>100</b>

Source: Author, based on UNCTAD (2018).

## 2.3. Non-tariff Measures by Chapter, 2015 and 2018

Most NTMs were technical barriers to trade (TBT), which accounted for more than 43% of total NTMs in 2018. They were followed by sanitary and phytosanitary (SPS) and export measures, which accounted for 31.7% and 10.5%, respectively (Table 1.3).

Overall, the change in 2018 was due to the increment of TBT (chapter B), non-automatic licensing (chapter E), and export-related measures (chapter P), which were increased by four, two, and one NTM, respectively.

**Table 1.3: Non-tariff Measures by Chapter, Brunei, 2015 and 2018 (number, %)**

No	Chapter	2015		2018	
		Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
A	Sanitary and phytosanitary (SPS) measures	178	32.1	178	31.7
B	Technical barriers to trade (TBT)	241	43.4	245	43.6
C	Pre-shipment inspection and other formalities	1	0.2	1	0.2
D	Contingent trade protective measures	-	-	-	-
E	Non-automatic licensing, quotas, prohibitions, and quantity-control measures other than SPS or TBT	53	9.5	55	9.8
F	Price control measures, including additional taxes and charges	24	4.3	24	4.3
G	Finance measures	-	-	-	-
H	Measures affecting competition	-	-	-	-
I	Trade-related investment measures	-	-	-	-
J	Distribution restrictions	-	-	-	-
K	Restriction on post-sales services	-	-	-	-
L	Subsidies (excluding export subsidies under P7)	-	-	-	-
M	Government procurement restrictions	-	-	-	-
N	Intellectual property	-	-	-	-
O	Rules of origin	-	-	-	-
P	Export-related measures	58	10.5	59	10.5
	<b>Total</b>	<b>555</b>	<b>100</b>	<b>562</b>	<b>100</b>

NTM = non-tariff measure.

Note: NTMs are defined based on the UNCTAD (2018) classification.

Source: Author, based on UNCTAD (2018).

## 2.4. Top-10 Non-tariff Measure Codes, 2015 and 2018

In 2018, the composition of the top-10 NTMs was the same as in 2015. Product quality (B7) was the highest, followed by restricted use of certain substances (A22). All B7, A22, and B6 NTMs originated from the Public Health (Food) Regulations. The labelling requirement of B31 and A31 originated from regulations related to food, medicine, tobacco, and chemical products.

In 2018, non-automatic import-licensing (E1) increased by one measure: (1) two additional NTMs originated from Customs (Prohibition and Restriction on Imports and Exports) (Amendment) Order, 2017 and Fire Safety Order and reduction; and (2) one NTM was removed from the Miscellaneous Licences Act, resulting in there being no specific product code for this NTM. The increasing number for Export Prohibition of

Technical Reason (P11) came from additional NTMs from Customs (Prohibition and Restriction on Imports and Exports) (Amendment) Order, 2017.

**Table 1.4: Top-10 Non-tariff Measures, Brunei, 2015 and 2018 (number, %)**

No	NTM Type	NTM Description	2015		2018	
			Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
1	B7	Product-quality, -safety, or -performance requirement	114	20.54	114	20.28
2	A22	Restricted non-automatic import-licensing use of certain substances in foods and feeds and their contact materials	79	14.23	79	14.06
3	E1	Procedures other than authorisations for SPS or TBT reasons	42	7.57	43	7.65
4	B6	Product identity requirement	40	7.21	40	7.12
5	B31	Labelling requirements	39	7.03	39	6.94
6	A31	Labelling requirements	23	4.14	23	4.09
7	A83	Certification requirement	13	2.34	13	2.31
8	P11	Export prohibition for technical reasons	11	1.98	12	2.14
9	A21	Tolerance limits for residues of or contamination by certain (non-microbiological) substances	10	1.80	10	1.78
10	A64	Storage and transport conditions	10	1.80	10	1.78
	Others		174	31.35	179	31.85
	Total		555	100	562	100

NTM = non-tariff measure.

Source: Author, based on the UNCTAD (2018) database.

## 3. Non-tariff Measure Indicators

### 3.1 Import Products

The frequency index is used to measure the intensity of NTMs in product lines. The frequency index of imports changed slightly in 2018 (Figure 1.5). That year, the intensity of NTMs increased for fuels and imported chemical products. The increasing frequency index for imported fuels was the result of the application of six new NTMs of the Fire Safety Order. In 2018, almost 70% of fuel products were subject to at least one NTM. The increasing frequency index for chemical products was the result of the application of one new NTM from Customs (Prohibition and Restriction On Imports And Exports) (Amendment) Order, 2017.

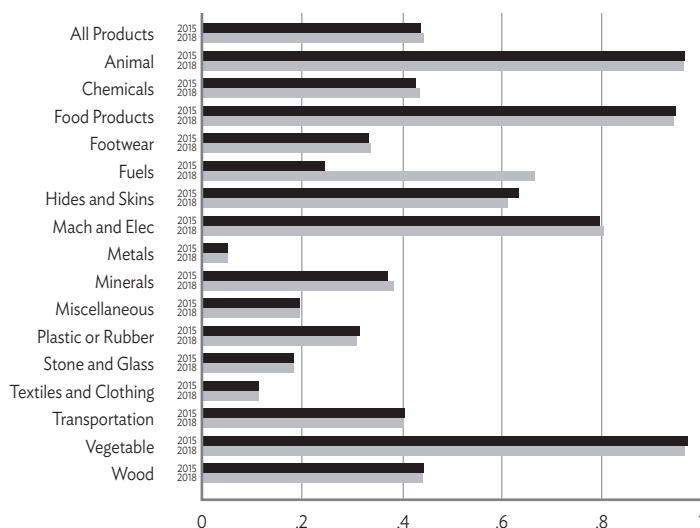
The frequency index for imports was highest – close to 1 – for animal, vegetable, and food products, with more than 90% affected by at least one NTM. The frequency index for imports was lowest – below 0.2 – for metal, textiles, and clothing.

The coverage ratio was calculated to measure the share of total imports exposed to NTMs. The import coverage ratio for fuels, minerals, stone and glass, and textiles and clothing increased in 2018 (Figure 1.6). The import coverage ratio decreased for chemicals, footwear, hides and skins, machinery and electronics, plastic and rubber, transportation, and wood. There was significant increase in the coverage ratio of fuels due to the application of new NTMs. In 2018, almost 100% of imported fuels were subject to NTMs.

On average, each product is subject to approximately 3 NTMs. However, the prevalence score was significantly higher for animals, food products and vegetable, accounting for more than 12 NTMs each. On the other hand, number of NTMs per product is relatively small for manufacturing, except for food products. Imposing high NTMs in agricultural and food products is meant to ensure consumer safety.

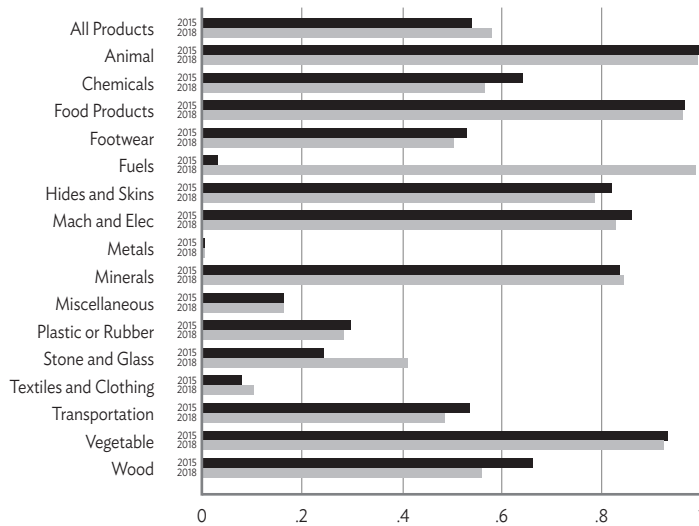
The highest prevalence score of imports was for agri-food products – animal, vegetable, and food products – which, on average, were subjected to more than 12 NTMs, mostly from Public Health (Food) Regulations, Animal Quarantine Services, and Halal Meat Rules.

**Figure 1.5: Frequency Index of Imports, Country Total, by HS 2 Product Group, Brunei, 2015 and 2018**



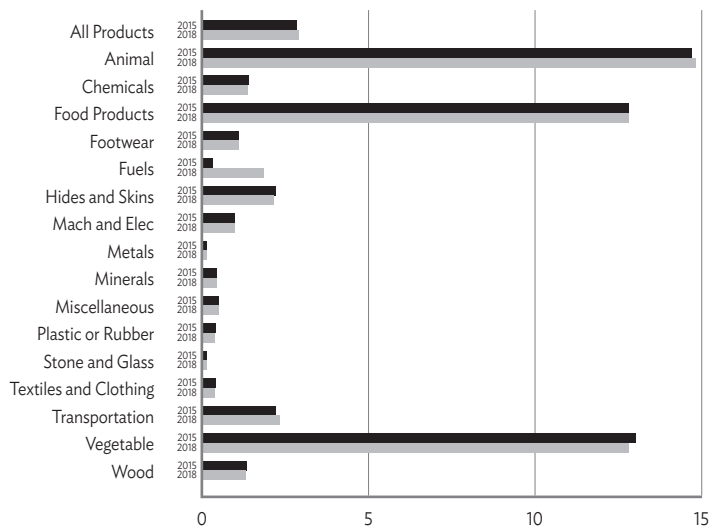
Source: UNCTAD (2018).

**Figure 1.6: Coverage Ratio of imports, Country Total, and by HS 2 Product Group, Brunei, 2015 and 2018**



Source: UNCTAD (2018).

**Figure 1.7: Prevalence Score of Imports, Country Total, by HS 2 Product Group, Brunei, 2015 and 2018**



Source: UNCTAD (2018).

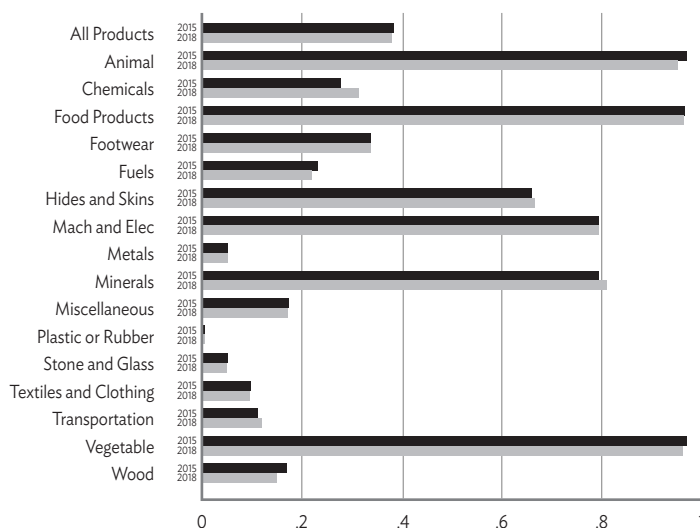
### 3.2 Export Products

In 2018, the export frequency index changed slightly, increasing for chemicals, hides and skins, minerals, and transportation (Figure 1.8) due to Customs (Prohibition and Restriction On Imports And Exports) (Amendment) Order, 2017.

On average, the coverage ratio for exports was lower than for imports. In 2018, the coverage ratio increased for chemicals, machinery and electronics, and stone and glass products (Figure 1.9). The export coverage ratio decreased for footwear, hides and skins, minerals, vegetables, and wood. In 2018, more than 80% of the export value of hides, skins, and minerals was subject to NTMs.

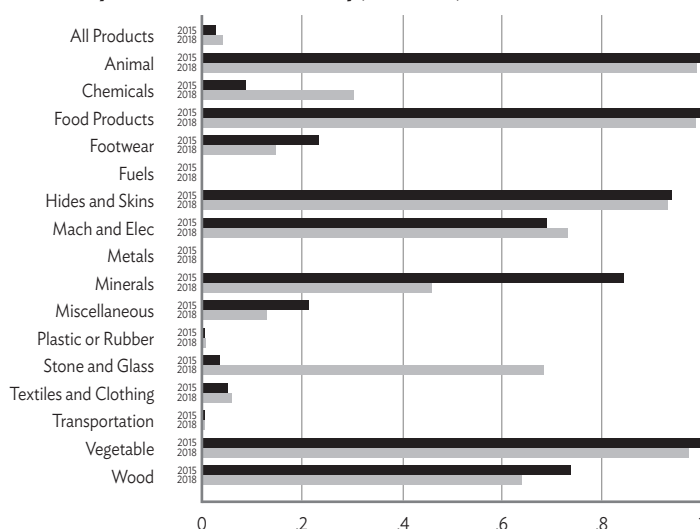
In contrast, the agri-food prevalence score was low, with animal products subjected to an average of almost five NTMs, and food and vegetables to less than two.

**Figure 1.8: Frequency Index of Exports, Country Total, and by HS 2 Product Group, Brunei, 2015 and 2018**



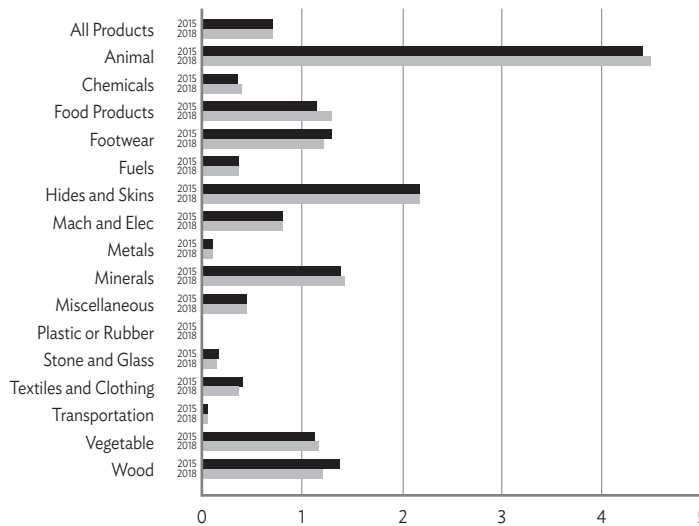
Source: UNCTAD (2018).

**Figure 1.9: Coverage Ratio of Exports, Country Total, and by HS 2 Product Group, Brunei, 2015 and 2018**



Source: UNCTAD (2018).

**Figure 1.10: Prevalence Score of Exports, Brunei, 2015 and 2018**



Source: UNCTAD (2018).

The NTM frequency index was high for imports and exports of animal, vegetable, and food products, which may indicate high standards of consumer health and safety.

## 4. Conclusions and Policy Recommendations

In 2015–2018, only seven NTMs were updated, due to two updated regulations. In 2018, 60.57% of products were affected by NTMs. TBT remains the largest group of NTMs, accounting for 43.5%. More than 62% of NTMs were issued by the Ministry of Health. Product quality (B7) and the restricted use of certain substances in foods and feeds (A22) were the most frequently used NTMs.

The NTM indicators show that Brunei is still applying intensive NTMs to animal, vegetable, and food imports and exports, and that high standards for consumer and environmental protection are being followed. Brunei imposes relatively few NTMs on manufactured imports, excluding hides and skins, and machinery and electronic products. The high number of NTMs imposed on exports is due to Brunei following international conventions and standards.

Exports are dominated by oil and gas. Brunei applies more NTMs to imported than exported fuels. In 2018, the frequency index of imported fuels increased to 0.7 compared with 0.3 in 2015. This does not necessarily indicate protectionism since the objective of applying NTMs is to ensure consumer safety.

However, to improve transparency, the government should increase notifications of NTM regulations to WTO. To improve information on NTMs for the business sector, the government should update comprehensive information on NTMs on the Trading Across Borders website.

## **References**

Center for International Development at Harvard University (CID) (2019), Atlas of Economic Complexity. <http://atlas.cid.harvard.edu> (accessed 15 February 2019).

United Nations Conference on Trade and Development (UNCTAD) (2018), Upcoming NTMs Database 2018. Geneva: UNCTAD.

World Bank (2019), MFN Tariff Brunei. <https://data.worldbank.org> (accessed 28 March 2019).

World Trade Organization (WTO) (2015), *Trade Policy Review Brunei Darussalam 2014*. Geneva: WTO.

World Trade Organization (2018), Notifications from Brunei Darussalam. [https://www.wto.org/english/thewto\\_e/countries\\_e/brunei\\_darussalam\\_e.htm](https://www.wto.org/english/thewto_e/countries_e/brunei_darussalam_e.htm) (accessed 15 February 2019).

World Trade Organization (2019), Tariff Download Facility Brunei. <http://tariffdata.wto.org> (accessed 15 February 2019).



# NON-TARIFF MEASURES: CAMBODIA

**Chan Hang Saing, Sereirot Yoeng, and Seyhah Ven**

Cambodia Development Resource Institute, Cambodia

## 1. Introduction

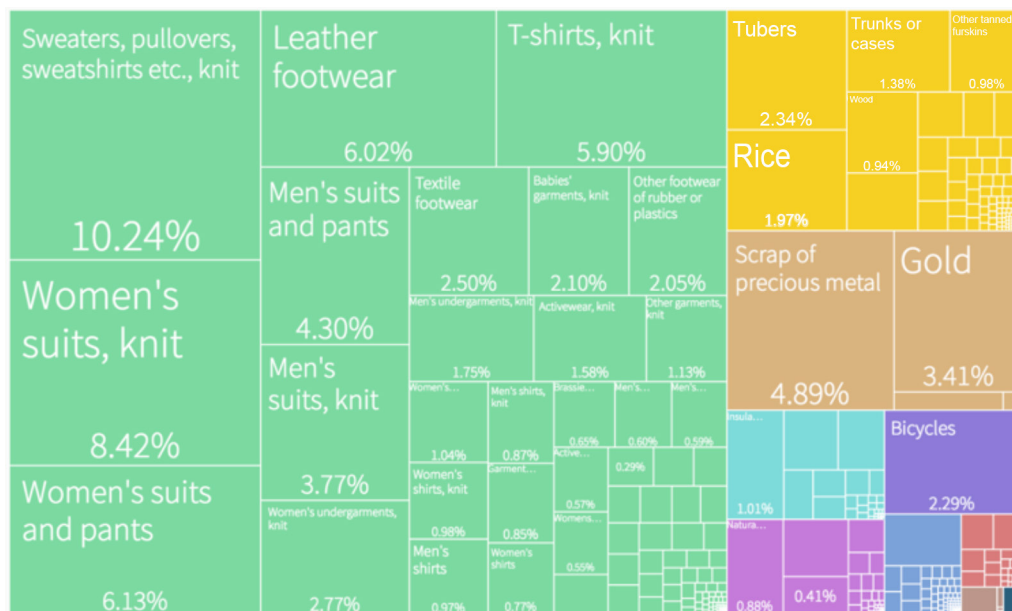
### 1.1. Cambodia's Export Structure

In 2016, Cambodia's gross exported goods were valued at US\$15.7 billion (Figure 2.1). Harmonised System (HS) 4-digit-level goods are classified into textiles and furniture, vegetables, food stuff and wood, stone and glass, minerals, metals, chemicals and plastics, transport vehicles, machinery, electronics, and others (Center for International Development [CID], 2018). Cambodia's exports were dominated by textiles, worth US\$11.1 billion (70.1% of total exports); sweaters, pullovers, sweatshirts (knit), women's suits (knit), women's suits and pants, leather footwear, T-shirts (knit), and men's suits and pants were the main export items in this category. Approximately 50% of textile exports were destined for Europe, with a large proportion going to Germany (22.6%), the United Kingdom (UK) (19.5%), France (13.6%), and Spain (10.4%). This suggests that withdrawal of the Everything but Arms (EBA)<sup>1</sup> preferential trade scheme, likely effective in August 2020, and Brexit, whether soft or hard, may have significant implications for Cambodia's textile exports to Europe. North America bought around US\$3.26 billion (29.4%) of Cambodia's textile exports, with a large proportion going to the United States (US) (71.3%) and Canada (24.9%). Asia received about US\$1.99 billion (17.9%), with Japan buying half, followed by China (11.9%), the Republic of Korea (henceforth, Korea) (7.9%), and Hong Kong (4.3%).

---

<sup>1</sup> Since March 2001, EBA has provided tariff-free import of all products except arms and weapons from least-developed countries. If the scheme is withdrawn from Cambodia, the country may face a tariff rate of around 9%, which is currently imposed on Viet Nam's textile exports to Europe. The European Union (EU)-Viet Nam Free Trade Agreement will soon be effective and allow Viet Nam's textiles to enter EU tariff-free.

**Figure 2.1: Cambodia’s Gross Export Composition, HS 4-digit, 2016**



Source: CID (2018).

Total agricultural exports were US\$1.67 billion, followed by stone and glass at US\$1.36 billion. Around 73% of agricultural exports were destined for Asia; the top buyers were Viet Nam (45.4%), China (20%), and Thailand (17%). Japan absorbed 5.0%, Hong Kong 3.6%, and Malaysia 2.7%. Tubers (US\$367 million) and rice (US\$309 million) topped the list of agricultural exports. Tubers were mainly destined for Viet Nam (52.9%), Thailand (43.9%), and China (3.2%). Cambodia’s main rice export market destination was Europe (64.7%) (HS 1006). France imported about 27% of Cambodian rice exports, Germany 19%, Poland 10.6%, the UK 4.7%, and Italy 4%. Other agricultural exports included cashew nuts and coconuts (US\$105 million), sugarcane and sucrose (US\$35.6 million), animal feeds (US\$33.9 million), soy bean (US\$22.7 million), palm oil (US\$12 million), starches (US\$11.7 million), unmanufactured tobacco (US\$7.8 million), pepper (US\$6.24 million), and corn (US\$6.69 million). Sugarcane and sucrose were exported to Europe only. Importers included Bulgaria (59%), Czech Republic (13.9%), Germany (8.7%), France (7.7%), and Poland (6.6%).

Exports of electronics totalled US\$439 million, including insulated electrical wire (US\$159 million); telephones (US\$83.1 million); electrical transformers (US\$70.8 million); electric motors and generators (US\$36.9 US\$); microphone parts (US\$22.1 million); and radio, telephone, and TV parts (US\$18.8 million). More than two-thirds of electronic exports went to Thailand (29.4%), Hong Kong (23.3%), and China (19.2%), with Japan receiving only 8.4%, Korea 6.4%, and Viet Nam 3.2%. Transport vehicle exports

were valued at US\$360 million, mainly bicycles (97.4%). Approximately 87.2% of bicycle exports were destined for Europe, mainly Germany (44.8%), the UK (25%), and Belgium (11.9%). Bicycle exports have grown rapidly during the last 5 years; Cambodia was the top bicycle exporter to the European Union (EU) in terms of volume in 2017. This suggests that the withdrawal of the EBA scheme and Brexit may have significant implications for the expansion and survival of this sector.

In sum, Cambodia's export structure is highly concentrated in textiles (Figure 2.1), suggesting that exports are vulnerable to fluctuations in the prices of textile products as well as possible changes in preferential arrangements, such as EBA. Product diversification into other sectors is highly important to secure stable foreign exchange earnings. Textile export markets must also be diversified since most exports are destined mainly for the US and the EU.

## 1.2. Cambodia's Import Structure

Imports were valued at US\$16.2 billion in 2016 (Figure 2.2). Groups of imports are similar to those of exports, based on the CID database. Textiles had the largest import value (US\$4.53 billion), followed by agriculture (vegetables, food stuff) and wood (US\$2.67 billion), minerals (US\$1.73 billion), chemicals and plastics (US\$1.53 billion), transport vehicles (US\$1.45 billion), and machinery (US\$1.42 billion). Fabrics, whether knitted or woven, and footwear parts dominated the textiles category; other knitted fabrics alone constituted about 41.4% of total textile imports. This explains the high export value of textiles since fabrics are imported to be cut, trimmed, and reassembled for re-export to third markets. Almost three-quarters of textile imports went to China (53.5%), Hong Kong (12.0%), and Taiwan (9.0%). Viet Nam bought 9%, Korea 4.7%, and Thailand 4.4%.

Agricultural imports were valued at US\$2.67 billion, mainly waters (flavoured or sweetened), cigars and cigarettes, sugarcane and sucrose, and other raw fur skins. Agricultural imports were mainly from Thailand (36.4%), Viet Nam (14.0%), Indonesia (9.0%), and China (7.0%). Imports of poultry were valued at US\$7.14 million, corn US\$8.12 million, and rice US\$6.02 million. Of mineral imports, petroleum oils (refined) comprised 71.00%, cement 9.50%, petroleum gases 4.70%, and coal 4.42%.

Of imported transport vehicles, cars comprised about 39.00%, followed by parts of motorcycles and wheelchairs (20.17%), motorcycles (10.33%), tractors (6.50%), and buses (1.90%). Of machinery imports, computers comprised 5.56%, printers and copiers 2.47%, and harvesting and agricultural machinery 5.15%. Cambodia's trade balance was negative US\$500 million in this fiscal year 2016.



**Table 2.1: Most Favoured Nation Simple Applied Average Tariff by Trade Agreement<sup>2</sup>**

Regional Trade Agreement	2014 (%)	2016 (%)
Most favoured nation–WTO	11.1	11.8
ASEAN Trade in Goods Agreement	3.24	0.6
ASEAN–Australia–New Zealand FTA	24.14	9.4
ASEAN–Republic of Korea FTA	6.31	3.4
ASEAN–India FTA	8.34	8.3
ASEAN–China FTA	3.24	2.0
ASEAN–Japan FTA	24.89	-

FTA = free trade agreement, WTO = World Trade Organization.

Sources: WTO (2014, 2016). WTO's tariff download facility for 2014; WTO's trade policy review for 2016.

Under the WTO framework, Cambodia reduced its most favoured nation (MFN) simple average rate to 11.1% in 2014 but reverted it to 11.8% in 2016 (Table 2.1). Applied tariffs went down markedly in 2014–2016 under the ASEAN Trade in Goods Agreement (ATIGA), with the rate in 2016 near zero. Although the preferential rate under the ASEAN–Australia–New Zealand Free Trade Agreement (AANZFTA) remained the highest amongst those of other regional trade agreements (RTAs) in 2016, it exhibited the largest drop during 2014–2016. Tariffs for other RTAs such as the ASEAN–Republic of Korea FTA (AKFTA) and ASEAN–China FTA (ACFTA) also dropped in 2014–2016, but not for the ASEAN–India FTA (AIFTA). According to articles on the schedule of tariff reduction in RTAs that Cambodia signed, it is scheduled to reduce tariffs to zero with China by 2015, with India and Korea by 2018, with Australia and New Zealand by 2024, and with Japan by 2026.

## 1.4. Hierarchy of Laws and Regulations

This section describes how the Cambodian team collected trade-related regulations to update those collected in 2015. We gathered legal documents published from January 2015 to March 2018. To make the regulations as comprehensive as possible, the team used four main sources of information: monthly legal updates of private law firms, the National Trade Repository and WTO notification, websites of government ministries, and the Royal Gazette. We relied mainly on the Royal Gazette because it collects all regulations issued by all ministries.

<sup>3</sup> For the details of tariff reduction across RTAs and at HS disaggregated levels, see General Department of Customs and Excise (GDCE) (2018). Since data provided is in PDF format, we are not able to present the trends of tariff reduction over time.

Laws and regulations are classified according to legal force, from highest to lowest (Table 2.2).

**Table 2.2: Hierarchy of Laws and Regulations in Cambodia**

Priority	Title	Description	Example
1	Constitutional Law of the Kingdom of Cambodia	Supreme law of the kingdom, passed on 21 September 1993. Other laws and regulations adopted by various government institutions shall comply with the constitutional law.	
2	Laws ( <i>chbab</i> )	Generally adopted by the National Assembly and the Senate and promulgated by the King or acting head of state. International treaties have the same legal force since they are also passed by the National Assembly and the Senate and signed by the King.	Law on animal health and production, adopted on 4 February 2016
3	Royal decree ( <i>preah reach kret</i> )	An executive regulation requested by the Council of Ministers of the King, who later issues it. Its general aims are to organise the functions of government institutions; create new public institutions; and appoint officials, ambassadors, and judges.	Royal decree on the organisation and functioning of the National Committee for Disaster Management, signed by the King on 24 December 2015
4	Sub-decree ( <i>anu kret</i> )	An executive regulation prepared by the ministries, adopted by the Council of Ministers, and endorsed by the Prime Minister. It clarifies provisions in a law by describing the functions of government institutions and appointing senior government officials.	Sub-decree No. 149 on publishing Khmer-language warning messages on the negative health effects of tobacco consumption and putting pictures on the packages of tobacco products, issued on 4 February 2015
5	Ministerial order or proclamation ( <i>prakas</i> )	A ministerial or inter-ministerial decision drafted and signed by the ministries to implement and clarify specific provisions of higher-level laws.	<i>Prakas</i> No. 44 on the management of battery disposal, issued by the Ministry of Environment on 27 October 2016
6	Decision ( <i>sech kdei samrach</i> )	Usually issued by the Prime Minister. It is temporary and disappears when it attains its objective. Decisions can also be issued by the Council of Ministers, ministries, governors, or other public institutions.	Decision No. 115 on the establishment of the committee for organising the third extraordinary meeting of the Mekong River Commission, issued on 19 December 2017
7	Circular ( <i>sarachor</i> )	Issued by the Prime Minister or a minister to provide instructions stated in the laws or regulations but not legally binding.	<i>Sarachor</i> No. 05 on the use of the lunar and solar calendar in legal and administrative documents, issued on 14 December 2017
8	Local regulation or bylaw ( <i>deika</i> )	Approved by local councils. It has legal force within the jurisdiction of local councils and must not conflict with national laws or regulations.	<i>Deika</i> on the decision on the request for the translation of three verdicts into English and one verdict into Dutch, issued by the office of the co-investigating judges of extraordinary chambers in the courts of Cambodia on 21 June 2016

Source: The Cambodian Law Library (2018).

First, we went through the online *Monthly Law Update*, published by a law firm in Cambodia, BNG Legal (BNG Legal, 2018), and *Legal and Tax Updates*, produced by another law firm, DFDL (DFDL, 2018), to create our first list of regulations. We relied more on DFDL because it has provided summaries of legal updates up to March 2018, whilst BNG's *Monthly Law Update* stopped in November 2017. We started by going through all publications of the two firms as we believed they would provide us with a list that we could verify against lists generated from other sources.

Next, we reviewed the National Trade Repository, or the Trade Portal (Cambodia National Trade Repository, 2018), which is the official source of regulatory information for traders who would like to import and export products. Unfortunately, we were not able to identify any regulations from early 2015 onwards. We checked the WTO notification (WTO, 2018) but saw no updated regulations during the collection period (April 2018).

Third, we explored all websites of government ministries that are obliged to be members of the National Committee for Non-Tariff Measures, established on 19 September 2014 under Sub-Decree No. 257 RNKR/BK issued by the Ministry of Economy and Finance (MEF). The committee consists of 21 representatives from 20 ministries. We obtained the sub-decree from government officials we worked with from MEF's Economic Integration and ASEAN Department. The task was challenging since links to ministries were often broken or not accessible or no longer available, but we were able to collect regulations from most ministries.

Finally, we went painstakingly through each issue of the Royal Gazette from January 2015 to March 2018 to identify trade-related regulations and create another list of trade-related regulations covering all regulations produced by all ministries. The Royal Gazette is published 96–100 times a year by the General Department of Royal Gazette and Computer Services of the Office of the Council of Ministers. We cross-checked the three lists to arrive at the final legal comprehensiveness, which was submitted to the United Nations Conference on Trade and Development (UNCTAD) advisor.

The revision exercise, which mainly reviewed measures collected in 2015 to remove those that were not non-tariff measures (NTMs), as well as their corresponding regulations, was undertaken to ensure data quality. We were concerned that some regulations containing NTMs might not have been covered in 2015 and therefore conducted a legal comprehensiveness exercise covering 1993–2015. We reviewed all series of the Royal Gazette during the period and found 28 regulations that contained NTMs and had not been collected in 2015. They had been missed mainly because the previous collection did not cover all issues of the Royal Gazette.

## 2. Descriptive Non-tariff Measure Statistics

### 2.1. Comprehensiveness of Non-tariff Measures, 2015 and 2018

In 2015, 78 regulations were identified as containing at least one NTM; we obtained the number after removing regulations containing no NTMs and adding regulations containing NTMs but which had not been collected in 2015. We found 28 regulations that had not been collected in 2015, or about 35.9% of the total regulations in the same year. About 30.4% (84) of the total number of NTMs (276) had not been collected in 2015, which may have implications for studies that used the 2015 NTM database since the proportion of missing regulations is substantial. Twenty regulatory agencies oversaw issuing and enforcing those regulations (Table 2.3).

**Table 2.3: Comprehensiveness of the Non-tariff Measure Database, 2015 and 2018**

No	Comprehensiveness	Number in 2015	Number in 2018
1	Total number of coded regulations	78	109
2	Total number of NTMs reported to the WTO	-	-
3	Total number of coded NTMs	276	367
4	Total affected products (HS lines, national tariff lines)		
	a. Total number of affected products	-	-
	b. Share of the number of affected products to the number of total products	-	-
5	Total number of regulatory agencies	20	22

HS = Harmonised System, NTM = non-tariff measure, WTO = World Trade Organization.

Source: Authors, based on collected database.

The collection for the 2018 update adds another 31 regulations identified to contain at least one NTM, from 1 February 2015 to 31 March 2018. We observed regulations that contained several measures that protect animal health, human health, and the environment. For instance, one key regulation – the law on animal health and production – was put in place for implementation in February 2016. A strict requirement to register animal feeds, raw ingredients, and additives was introduced in January 2018. Other regulations to protect human health, including the law on the control of tobacco products, were introduced in May 2015, and technical regulations on the safety and quality standards of soy sauce, fish sauce, salt, and several others were introduced in March 2016.

To better preserve the environment, the government introduced the law on the management of disposal of electronic and electric products in February 2016 and the law



on the management of plastic bags in October 2017. Out of these regulations, 101 NTMs were identified during the period. To our surprise, no regulation was repealed during the period, neither was any regulation in the 2015 collection. We observed amendments of certain provisions of the adopted laws that were not trade-related, but not of any NTM-related regulations. In 2018, two more regulatory agencies issued NTM-related regulations.

## 2.2. Non-tariff Measures by Issuing Agency, 2015 and 2018

NTM-related regulations are usually issued in two ways. A single ministry or agency can issue trade-related regulations, whilst occasionally two to five multiple or joint ministries can issue regulations that aim to, for instance, improve food standards and safety. The layers of approval required for each regulation depend on the regulation's position in the legal hierarchy. For instance, although a ministry may issue a sub-decree, the sub-decree is effective only after it is approved by the Council of Ministers and endorsed by the Prime Minister. It does not have to be debated in the National Assembly and the Senate.

Based on our revised data collected in 2015, the Ministry of Agriculture, Forestry and Fisheries (MAFF) issued the most NTMs (25.7% of the total), followed by the Ministry of Industry, Mines and Energy (MIME) and the Ministry of Health (MOH) (Table 2.4). The leading role of MAFF, followed by MOH, may suggest that the government was trying to enhance the protection of human and animal health. The Ministry of Industry and Handicraft (MIH), which split from MIME in 2013, issued about 8.7% of all NTMs, but the combined number of NTMs issued by the two ministries shows they issued about 23.7% of all NTMs in 2015. This suggests that the government placed importance on product quality and safety.

**Table 2.4: Non-tariff Measures by Issuing Agency, 2015 and 2018**

No	Issuing Institution	2015		2018	
		Number of NTMs	Proportion of NTMs (%)	Number of NTMs	Proportion of NTMs (%)
1	Ministry of Agriculture, Forestry and Fisheries	71	25.7	110	30.0
2	Ministry of Industry, Mines and Energy	39	14.1	39	10.6
3	Ministry of Health	35	12.7	63	17.2
4	Ministry of Industry and Handicraft	24	8.7	46	12.5
5	Ministry of Agriculture, Forestry and Fisheries; Ministry of Health	12	4.3	12	3.3
6	Ministry of Environment	11	4.0	11	3.0
7	Ministry of Interior	9	3.3	9	2.5

No	Issuing Institution	2015		2018	
		Number of NTMs	Proportion of NTMs (%)	Number of NTMs	Proportion of NTMs (%)
8	Ministry of Commerce	8	2.9	8	2.2
9	Ministry of Economy and Finance	8	2.9	9	2.5
10	Ministry of Agriculture, Forestry and Fisheries; Ministry of Economy and Finance	7	2.5	7	1.9
11	National Bank of Cambodia	5	1.8	5	1.4
12	National Metrology Center	5	1.8	5	1.4
13	Others	42	15.2	43	11.7
	Total	276	100	367	100

Source: Authors, based on collected database.

We also observed that 4.3% of the regulations were jointly issued by MAFF and MOH, reflecting their efforts to protect human and animal health. The Ministry of Environment (MOE) issued about 4.0% of all NTMs, the Ministry of Commerce (MOC) 3.0%. MAFF frequently issued joint NTMs in 2015. Overall, MAFF, MIME (and MIH), MOH, and MOE led in issuing NTMs.

In 2018, MAFF alone added another 39 NTMs, or about 30% of the total NTMs from February 2015 to March 2018 (Table 2.4). MIME did not add any new NTMs because it was split into MIH and the Ministry of Mines and Energy in 2013; nonetheless, MIH added another 22 NTMs to the 2015 database, fewer than the 28 NTMs added by MOH. The ministries that issued the most NTMs in 2018 were not different from those in 2015 – MAFF, MIH, and MOH; MOE and MOC issued the second-highest number of NTMs in 2018. The increase in the number of NTMs issued by various agencies was not dramatic in 2015–2018 since Cambodia still lacks standards for product quality and safety. As the trade volume expands and the number of new varieties of imported products increases, Cambodia needs national product standards that are in line with its regional and global trading partners.

### 2.3. Non-tariff Measures by Chapter, 2015 and 2018

Our classification of NTMs is based on the 2018 version of the international classification of NTMs compiled by UNCTAD: all measures are grouped into 16 chapters and coded as A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, and P. Import measures comprise technical (A, B, C) and non-technical measures (D to O), whilst chapter P alone is for export-related measures (Table 2.5). Since countries usually are cautious about protecting human and animal health and the environment, they tend to give the most weight to chapters A and B.

**Table 2.5: Non-tariff Measures by Chapter, 2015 and 2018**

	Chapter	2015		2018	
		Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
A	Sanitary and phytosanitary (SPS) measures	34	12.3	49	13.4
B	Technical barriers to trade (TBT)	96	34.8	131	35.7
C	Pre-shipment inspection and other formalities	1	0.4	1	0.3
E	Non-automatic licensing, quotas	44	15.9	53	14.4
F	Price control licensing, quotas, prohibitions, and quality control measures other than for SPS or TBT reasons	15	5.4	15	4.1
G	Finance measures	0	0.0	0	0.0
H	Measures affecting competition	0	0.0	0	0.0
I	Trade-related investment measures	0	0.0	0	0.0
J	Distribution restrictions	0	0.0	0	0.0
L	Subsidies (excluding export subsidies under P7)	0	0.0	1	0.3
M	Government procurement restrictions	0	0.0	0	0.0
N	Intellectual property	0	0.0	0	0.0
P	Export-related measures	86	31.2	117	31.9
	<b>Total NTMs</b>	276	100	367	100

NTM = non-tariff measure.

Source: Authors, based on collected database.

Table 2.5 shows the distribution of NTMs across the 16 chapters in 2015 and 2018. Cambodia did not introduce NTM measures for all 16 chapters, and NTM measures are concentrated in chapters A, B, E, F, and P. In 2015, chapters B and P had the largest number of NTM measures. For import measures, chapter B constituted about a third of all NTMs, whilst chapter A constituted only 12.3%, which is unusual since chapter A normally has coverage higher than or equivalent to that of chapter B in other countries. We cannot yet explain this phenomenon, which requires further and thorough analysis.

We also observed several NTMs in chapter E (non-automatic licensing and quota) in 2015, the proportion of which was around 15.9%, whilst NTMs were present in chapter F (price) but constituted only 5.4% of all NTMs. This suggests that the government is somewhat restrictive on imports such as drugs, explosive ordnance, cultural objects, pesticides and fertilisers, traditional medicine, solid waste, crop seeds, agricultural material, animals and wild plants, ozone-depleting substances, and metals and stones for reasons other than authorisation for sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT). For instance, according to the law managing imports of pesticide and fertiliser, such products require permission from MAFF and only after certain standards for the container

(e.g. label with instructions in Khmer), amongst others, are met. Imports of household waste and the like are prohibited for other than SPS and TBT reasons under the sub-decree on waste management.

For export-related measures, close to about a third of NTMs fell under chapter P, which is substantial. Most NTMs in chapter P were introduced for either SPS or TBT reasons and affected products such as animals and animal products, cultural objects, drugs, pesticides and fertilisers, crop seeds, and wild animals and wild plants. Regulations in which NTMs were detected include, for instance, the sub-decree on sanitary inspection of animals and animal products, the law on cultural heritage protection, the sub-decree on waste management, the sub-decree on phytosanitary inspection, the law on crop seed management, and the rights of seed breeders and others. We observed only one measure for pre-shipment inspection (chapter C), and no NTM falls under the rest of the chapters.

A pattern similar to the NTM distribution in 2015 was observed in 2018. Chapters A, B, and E were predominant amongst import measures, whilst chapter P still constituted around a third of NTM measures in 2018. TBT (chapter B) showed the largest increase in the number of NTMs (35), followed by export-related measures (chapter P), which experienced an increase in the number of NTMs by 31 in 2015–2018. SPS (chapter A) increased by 15 measures, whilst non-automatic licensing and quota (chapter E) increased by 9. We did not observe any new price control measures between the two periods, but one import subsidy measure was introduced in 2018.

Regulations contributed to the substantial increase in NTMs in chapter A, including the law on animal health and production; and *prakas* on required standards for products such as fish sauce, soy sauce, animal feed, raw ingredients, and additives. Regulations that contributed to the large increase in NTMs in chapter B were the law on animal health and production, *prakas* on technical regulations for soy sauce and fish sauce, *prakas* on technical standards for electrical and electronic products, and *prakas* on sample application and the procedure for provision of seed quality. This implies that the government had stepped up efforts to guard human and animal health and the environment.

In total, 91 NTM were introduced in 2015–2018, fewer than in other ASEAN countries such as Viet Nam (237), Thailand (256), Indonesia (210), the Lao People's Democratic Republic (Lao PDR) (178), and the Philippines (145). Most importantly, the total number of NTMs (367) in Cambodia as of March 2018 was lower than in other ASEAN countries such as Thailand (3,295), the Philippines (1,220), Indonesia (977), Malaysia (920), Viet Nam (764), Singapore (610), Brunei (562), and Lao PDR (520). However, since NTMs may either facilitate or hinder the flow of trade in goods, one should avoid concluding that

the trade flow across a country with fewer NTMs is less restricted than that across a country with more NTMs. Cambodia has much fewer NTMs than other countries in the region.

## 2.4. Top-10 Non-tariff Measures, 2015 and 2018

Based on UNCTAD's 2018 classification, each of the 16 chapters is disaggregated into two- and three-digit levels. For instance, A8 (conformity assessment related to SPS) is composed of A85 (traceability requirements), a sub-chapter of which can be A852 (processing history). Similar classification is applied to other chapters. Certain NTM chapters, however, do not have sub-chapters. For instance, chapter B7 (requirement for product quality, safety, or performance) does not have sub-chapters such as B71, B72, or B711. This is an ideal situation where law and regulation clearly state the specific objectives of the NTMs, which allows one to identify NTMs at the most disaggregated level possible. We found that not all laws and regulations that contain NTMs allow us to identify NTMs at the most disaggregated level as some of those regulations do not provide a clear objective for each NTM. Below are examples of some of the problems we encountered.

Article 17 of Sub-decree No. 168 on the management of plastic bags states that 'thin plastic bags with handles are prohibited from importation, domestic production, retail, and use except: A) plastic bags with at least 0.03 millimetre thickness and B) plastic bags with the bottom width measured not less than 25 centimetres or 10 inches. All imported and domestically produced plastic bags other than those stated above must be authorised by the Ministry of Environment except non-trade import with the amount not more than 100 kilograms'. Although this is obviously E1, which is non-automatic import-licensing procedures other than authorisations for SPS or TBT reasons, no specific objective of this measure was stated that allows us to further disaggregate the measure to either, for instance, E11 (licensing for economic reasons) or E12 (licensing for non-economic reasons). Therefore, getting to more disaggregated levels, such as E112 (licensing for specified use) and E121 (licensing for religious, moral, or cultural reasons), is clearly impossible.

Similarly, Article 51 of the law on crop seed management and rights of seed breeders states, 'Export and import of seed, including seed used for testing, study, and experimentation shall be permitted by the Ministry of Agriculture, Forestry, and Fishery. Ownership transfer made to another person with a license for export and import shall have an agreement in advance from the Ministry of Agriculture, Forestry, and Fishery'. We identified E1 from this article but were not able to further disaggregate this NTM into sub-chapters given its absence of clear and specific objectives.

Our NTM collection exercise did not allow us to generate an ideal and complete set of NTMs at the most disaggregated level possible. Table 2.6 presents the top-10 NTMs imposed by various regulatory agencies in 2015 and 2018. The table does not provide two- or three-digit sub-chapters for all NTM measures.

In 2015, we observed three main groups of NTMs that constituted the top-10 NTMs: non-automatic import-licensing procedures other than authorisations for SPS or TBT reasons, TBT, and export technical measures for SPS and TBT reasons. Measure E1 (non-automatic import-licensing procedures other than authorisations for SPS or TBT reasons) was at the top and constituted around 11.6% of all NTMs. B31 (labelling requirements: official language to be used and technical information of the product, such as voltage, components, instruction on use, safety, and security advice) was the second, constituting 8%. P11 (export prohibition for technical reasons: technical specification of products and conformity assessment) was the third, 7.2%.

**Table 2.6: Top-10 Non-tariff Measures, 2015 and 2018**

Rank	NTM Type	2015		NTM Type	2018	
		Number of NTMs	Proportion of NTMs (%)		Number of NTMs	Proportion of NTMs (%)
1	E1	32	11.6	E1	37	10.1
2	B31	22	8.0	B7	26	7.1
3	P11	20	7.2	B31	25	6.8
4	B83	14	5.1	P11	24	6.5
5	P162	12	4.3	B83	20	5.5
6	B7	11	4.0	P162	14	3.8
7	B84	10	3.6	B84	12	3.3
8	P43	10	3.6	P12	12	3.3
9	P12	9	3.3	P163	11	3.0
10	B81	7	2.5	P43	10	2.7
	Others	129	46.7	Others	176	48.0

NTM = non-tariff measure.

Source: Authors, based on the collected and coded database.

Other measures concerning TBT (chapter B) include B83 (certification requirement) and B84 (inspection requirement). There was also B7 (product quality, safety or performance requirement: safety, e.g. fire-resistance; performance, e.g. effectiveness in achieving the claimed result; quality, e.g. content of defined ingredients or durability). Export measures such as P43 (export charges and/or fees levied in connection with services provided) and P12 (export quota for technical reasons) also emerged in 2015. P162 (product quality,

safety, or performance requirement before export) was amongst the top-10 NTMs. However, it is surprising that import SPS measures were not amongst the top-10 NTMs in 2015, suggesting that measures tend to be concentrated in TBT (chapter B), non-TBT, or non-SPS import-related measures (chapter E1); and SPS and TBT export-related measures (chapter P1).

In 2018, the top-10 NTMs did not differ substantially from those in 2015. B7 increased significantly in 2015–2018 and was ranked second after E1 in 2018, suggesting that there were more efforts to increase requirements for the quality, safety, and performance of imported products to mitigate human health and environment risks that may arise from the consumption of imported products.

Overall, between the two periods, the government gave more weight to non-automatic import-licensing procedures other than authorisations for SPS or TBT reasons (E1); product quality, safety, or performance requirements (B7); labelling requirements (B31); export prohibition for technical reasons: technical specification of products and conformity assessment (P11); and certification requirements for imports (B83).

### **3. Non-tariff Measure Indicators**

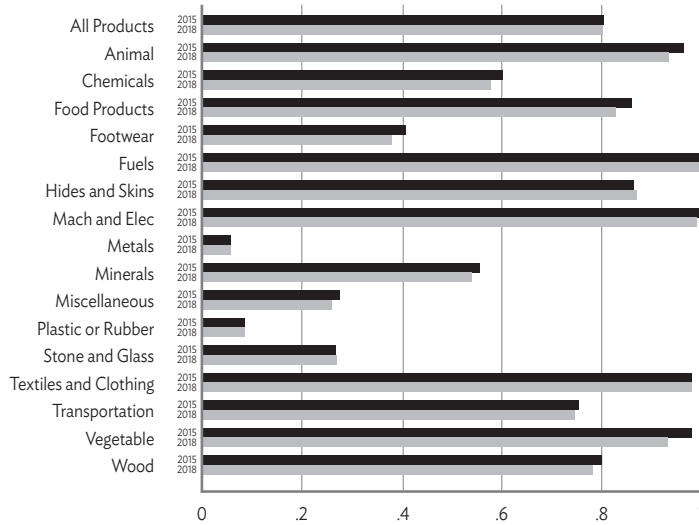
#### **3.1. Frequency Index**

This section uses the frequency index to describe the extent to which Cambodia's imports and exports are subjected to NTMs. The frequency index, which accounts for the presence or absence of an NTM and summarises the percentage of products to which one or more NTMs are applied, is usually used to measure the degree to which an import or export is subjected to NTMs. The frequency index for imports includes imported product lines for NTM import chapters A to I, whilst that for exports covers exported product lines for NTM export chapter P.

Figure 2.3a shows the frequency index for exports at the HS 2-digit level in 2015–2018. About 80% of all export product lines were subjected to at least one NTM in 2015, whilst the frequency index in 2018 was not different from that in 2015. Three export product groups in 2015 and 2018 were subjected to at least one NTM. The first group includes animal and food products, fuels, hides and skins, machinery and electronics, textiles and clothing, transport vehicles, vegetables, and wood, with 75%–100% subjected to at least one NTM in 2015; this pattern did not change much in 2018. The second group comprises chemicals, footwear, and minerals, with 40%–60% subjected to at least one NTM in 2015; the frequency indexes for these exports dropped slightly in 2018. The last group includes

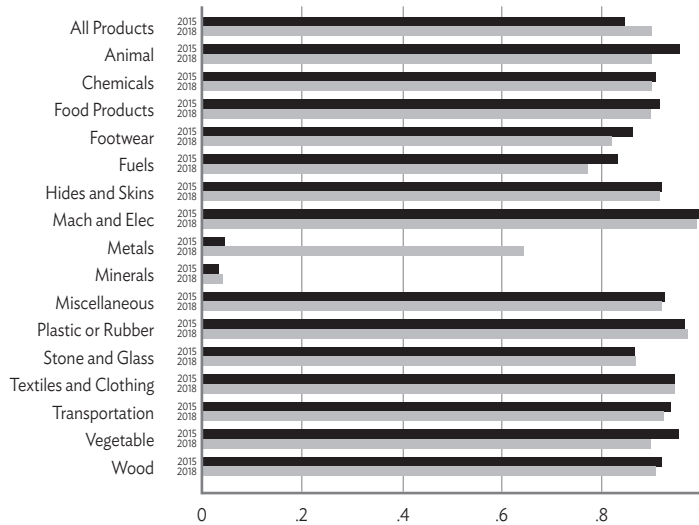
metal, plastic or rubber, and stone and glass, with 10%–25% subjected to at least one NTM in 2015 and 2018.

**Figure 2.3a: Frequency Index, by HS 2-digit Sector, Exports, 2015 and 2018**



Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

**Figure 2.3b: Frequency Index, by HS 2-digit Sector, Imports, 2015 and 2018**



Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

Figure 2.3b shows the frequency index of imported products in 2015–2018. The index for all products was around 85 % in 2015 and went up to around 95% in 2018, suggesting that almost all exports were subjected to at least one NTM in 2015 and 2018. Two major



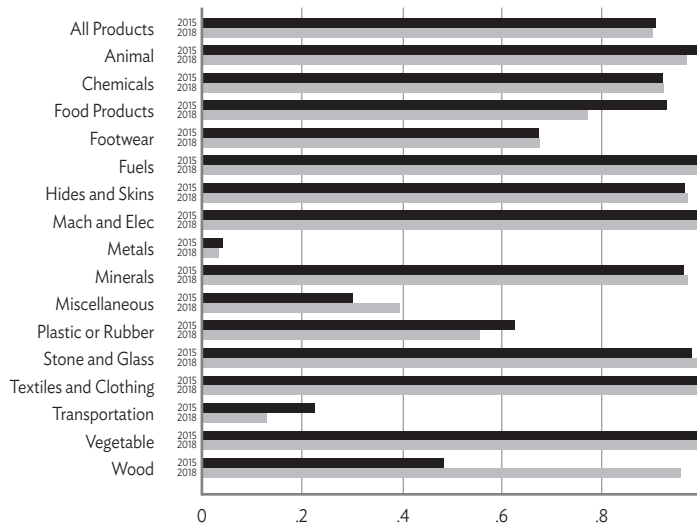
import groups were subjected to at least one NTM in 2015 and 2018. Almost all imported products, except metals and minerals, exhibited frequency indexes of 80%–98% in 2015 and 2018. Imported minerals are subject to fewer than one NTMs per product in both years. Fewer than 10% of metal import product lines were subjected to one or more NTMs in 2015, but their frequency index went up to around 65% in 2018. This significant rise resulted primarily from the introduction of Prakas No. 70 on the adoption of 73 international product standards (ISO) on 6 February 2017. The prakas requires that metal and other products stated in the prakas and imported into Cambodia adhere to international product standards.

### 3.2. Coverage Ratio

Using the coverage ratio as a measure, this section shows the extent to which imports and exports are subjected to NTMs. The coverage ratio, which is the percentage of trade subjected to NTMs of the importing country and provides a measure of the importance of NTMs for overall imports and exports, is used as an alternative to the frequency index. The frequency index provides equal weight to all HS 2-digit trade sectors, whilst the coverage ratio provides more weight to trade sectors that have higher trade value and uses import or export values instead of import or export product lines. As in the frequency index, import values are used for NTM import chapters A to I, whilst export values are used for export chapter P.

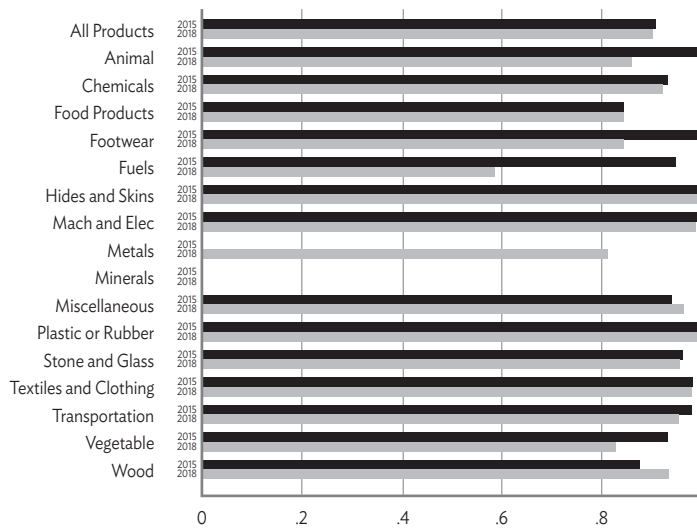
Figure 2.4a shows the coverage ratio for exports of products at the HS 2-digit level in 2015 and 2018. After attaching a different weight or trade value to each product group, we show that the coverage ratio for exports was around 90% in 2015 and 2018. Using this measure, we show that several exported products, such as animals, fuels, hides and skins, machinery and electronics, minerals, stone and glass, textile and clothing, and vegetables, exhibit a high coverage ratio (90%–100%) in 2015 and 2018. The coverage ratio for exports of food products was around 90% in 2015 but decrease to approximately 70% in 2018, although the law on animal health and production was introduced on 1 February 2016, we observe a decline in the coverage ratio of exports of food products, from 90% to around 80%. The coverage ratio for footwear exports was around 65% in 2015 and 2018. The coverage ratio for wood exports was close to 50% in 2015 but jumped to almost 100% in 2018, suggesting an increase in the export of wood subjected to NTMs, as the coverage ratio gives more weight to exports with higher value, and we did not observe any wood-related NTMs introduced in 2018. The coverage ratio for plastic and rubber exports was slightly below 60% in 2015 but increased slightly to above 60% in 2018. The coverage ratio for plastic and rubber exports, and transport vehicle exports showed a slight decline. Metal exports exhibited a coverage ratio of less than 5% in 2015 and 2018.

**Figure 2.4a: Coverage Ratio, by HS 2-digit Sector, Exports, 2015 and 2018**



Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

**Figure 2.4b: Coverage Ratio, by HS 2-digit Sector, Imports, 2015 and 2018**



Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

Figure 2.4b shows the coverage ratio for imported products at the HS 2-digit level in 2015 and 2018. Using this new measure for imports, we observe that more than 90% of imports were subjected to at least one NTM in 2015 and 2018. Coverage ratios for imports such as chemicals, hides and skins, machinery and electronics, plastic or rubber, stone and glass, textiles and clothing, and transport vehicles were 95%–100% in 2015 and 2018. Similar to exports, coverage ratio of animal imports also declined from 100% to around 85%.

Coverage ratio of footwear imports declined more than frequency index, suggesting a decrease in trade value share of this product in the import basket. The coverage ratio of fuel imports also decreased significantly from 90% to 60%, suggesting that fuel imports decreased substantially in 2015–2018. The coverage ratio for mineral imports was almost nil in 2015 and 2018. Surprisingly, the coverage ratio for metal imports was almost nil in 2015 but jumped to over 80% in 2018, suggesting that metal imports increased substantially because of the introduction of Prakas No. 70 on the adoption of 73 international product standards (ISO), including metal, on 6 February 2017.

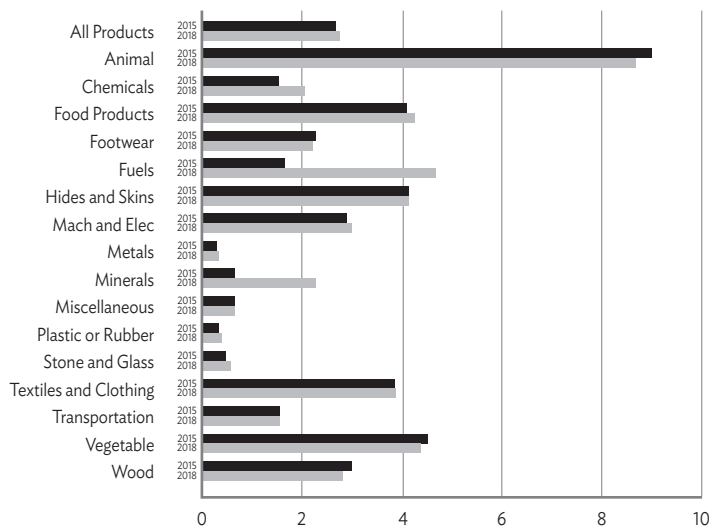
Even if the coverage ratio is used instead of the frequency index to measure the extent to which NTMs were being imposed on imports and exports, we observe that imports faced a higher incidence of NTMs than exports. The coverage ratios for imports, which were slightly lower than 80%, suggest that most imports, except minerals, were affected by at least one NTM.

### 3.3. Prevalence Score

By using the prevalence score, this section presents the incidence of NTMs imposed on imports and exports. The prevalence score provides the average number of NTMs imposed on each product at the HS 6-digit level. The higher the prevalence score for a product, the higher the incidence of NTMs imposed on it.

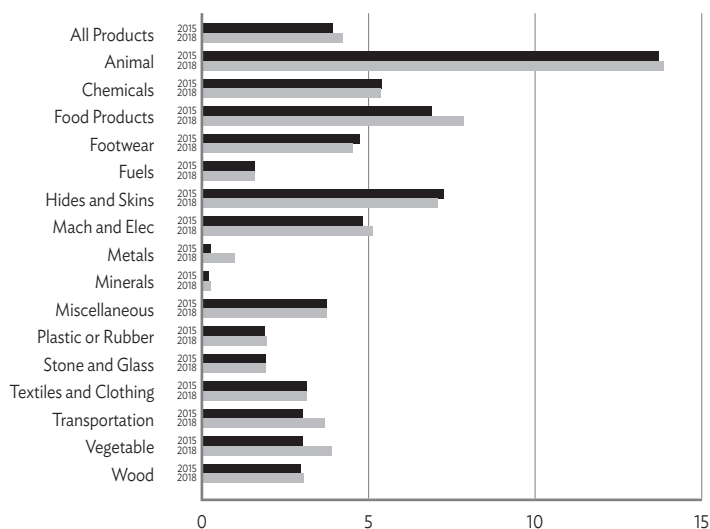
Figure 2.5a shows the prevalence score for exports in 2015 and 2018. On average, all exported products were subjected to about three NTMs in 2015, which did not change in 2018. Animal exports had the highest prevalence score (9) in 2015 and 2018, whilst food products were on average subjected to around four NTMs, suggesting that the authorities took strong precautionary measures to protect animal and human health. Exports of food, hides and skins, textiles and clothing, and vegetables were on average subjected to around four NTMs in 2015 and 2018. Machinery and electronics and wood were on average subjected to around three NTMs in 2015 and 2018. Chemicals were on average subjected to fewer than two NTMs in 2015 but later subjected to two NTMs in 2018. Footwear was subjected to around two NTMs in 2015 and 2018. Fuel was subjected to fewer than two NTMs in 2015 but to about four in 2018. A similar pattern was observed for mineral exports. Metals, plastic or rubber, and stone and glass were on average subjected to less than one NTM in 2015 and 2018, whilst transport vehicle exports were subjected to around one NTM in 2015 and 2018.

**Figure 2.5a: Prevalence Score, by HS 2-digit Sector, Export, 2015 and 2018**



Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

**Figure 2.5b: Prevalence Score, by HS 2-digit Sector, Import, 2015 and 2018**



Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

Figure 2.5b shows the prevalence scores of imports in 2015 and 2018. All imports exhibit a prevalence score of slightly below five in 2015, and the score for all imports increased only slightly in 2018. Animal imports show the highest prevalence score of around 14 in 2015 and 2018, suggesting that animal products were much more likely affected by NTMs than other imported products. Food products and hides and skins were on average subjected to about seven NTMs in 2015 and 2018, whilst chemicals, footwear, and machinery and electronics were on average subjected to around five NTMs. Imports of textiles and

clothing, transport vehicles, vegetables, and wood were on average subjected to around four NTMs in both years, whilst imports of fuels, plastic or rubber, and stone and glass were subjected to around two NTMs.

Overall, imported products exhibited a much higher incidence of NTMs than exported products did in 2015 and 2018. The same pattern was also observed for frequency ratios and coverage ratios. Using the prevalence score, we observed that animal products, particularly imports, experienced the highest incidence of NTMs, followed by food products, suggesting that the authorities were taking precautionary measures, e.g. quality and safety product standards, to protect human and animal health.

## 4. Conclusion

Cambodia embarked on trade liberalisation in the mid-1990s, joined ASEAN in 1999, and became a member of the WTO in 2004. The country entered into several trade deals with China, India, Japan, Australia, and New Zealand, amongst others. Since the deals require member states to gradually reduce import duties on a reciprocal basis, Cambodia's tariff rates on most imports have gone down substantially during the last decade. Like other countries, however, particularly in ASEAN, Cambodia introduced NTMs to protect human and animal health, as well as the environment.

This study is part of ASEAN members' efforts to collect trade-related laws and regulations and identify NTMs within them to update the database of NTMs imposed by ASEAN members. To ensure the quality of data, we collected all trade-related regulations before 2015 to detect whether there were NTMs not recorded during 2015. We found that several measures had not been properly identified and recorded, and we addressed them all.

Our data collection showed that MAFF, MIME, MOE, and MOC imposed the most NTMs in 2018. The total number of NTMs was 276 in 2015 and 367 in 2018. TBT, export-related measures, and SPS measures had the largest shares of NTMs in 2015 and 2018. E1 was ranked at the top, followed by others such as B7, B31, B83, and B84, suggesting that the government had taken steps to ensure the quality and safety of imported products and to protect human and animal health. By using the frequency index, coverage ratio, and prevalence score, we showed that almost all product groups at the HS 2-digit level for imports and exports were subjected to at least one NTM, but that most imports exhibited a higher incidence of NTMs than exports did in 2015 and 2018.

## References

- BNG Legal (2018), *Monthly Law Update*, <http://bnglegal.com/index.php/our-library/?#4> (accessed 22 April 2018)
- Cambodian Law Library, The (2018), *About the Cambodian Law*. <http://en.chbab.net/about-cambodian-law> (accessed 22 April 2018).
- Cambodia National Trade Repository (2018), *Legal Documents*, <https://www.cambodiantr.gov.kh> (accessed 22 April 2018).
- Center for International Development (CID), Harvard University (2018), *ATLAS of Economic Complexity*. <http://atlas.cid.harvard.edu/explore/?country=118&partner=undefined&product=undefined&productClass=SITC&startYear=undefined&target=Product&year=2016> (accessed 19 September 2018).
- DFDL (2018), *Legal and Tax Updates*, <https://www.dfdl.com/resources/legal-and-tax-updates/> (accessed 22 April 2018).
- General Department of Customs and Excise of Cambodia (GDCE) (2018), *Preferential Treatment under Agreements*. <http://www.customs.gov.kh/publication-and-resources/preferential-treatment%E2%80%8B-under-agreements/> (accessed 20 September 2018).
- Organisation for Economic Co-operation and Development (OECD) (2018), *International Classification of Non-Tariff Measures: Interim 2018 Version*. Paris: OECD.
- World Trade Organization (WTO) (2017), *Trade Policy Review: Cambodia*. WTO's secretariat report. Geneva: WTO. [https://www.wto.org/english/tratop\\_e/tpr\\_e/s364\\_e.pdf](https://www.wto.org/english/tratop_e/tpr_e/s364_e.pdf) (accessed 18 April 2018).
- World Trade Organization (2018), *Notifications*, [https://docs.wto.org/dol2fe/pages/fe\\_browse/fe\\_b\\_s006.aspx](https://docs.wto.org/dol2fe/pages/fe_browse/fe_b_s006.aspx) (accessed 22 September 2018).
- World Trade Organization (2018), *Tariff Download Facility*. <http://tariffdata.wto.org/ReportersAndProducts.aspx> (accessed 20 September 2018).

# INDONESIAN NON-TARIFF MEASURES: UPDATES AND INSIGHTS

**Ernawati Munadi**

Wijaya Kusuma University, Surabaya, Indonesia<sup>1</sup>

## 1. Introduction

### 1.1. Trade Structure

Indonesia is blessed with rich natural resources that can be used as manufacturing inputs as well as final products. Natural resource-based sectors, such as agriculture, forestry, fishery, and mining and quarrying, are important in generating revenue and employment and in improving livelihoods, and will continue to be vital.<sup>2</sup> In 2016, merchandise exports were dominated by primary products (Figure 3.1), with the biggest contribution coming from palm oil (8.96%), coal (8.64%), petroleum gases (4.53%), petroleum oil and crude (3.23%), and natural rubber (2.32%).

Imports are mainly secondary and manufacturing products, some for final consumption, others for industrial inputs (Figure 3.2). During 2016, imports were dominated by minerals (petroleum, oils and refined, made up 6.75% of imports, while petroleum, oils and crude, made up 4.14% of exports); electronics (telephones, transmission apparatus for radio telephones, and TV sets made up 2.08% of imports and 1.53% of exports); motor vehicle parts (1.85%, imports); and aircraft and spacecraft (1.48%, imports).

---

<sup>1</sup> The author is grateful to Indah Rahayu. Special thanks are also given to Doan Thi Thanh Ha from the Economic Research Institute for ASEAN and East Asia (ERIA), and the United Nations Conference on Trade and Development (UNCTAD) team for their comments during data compilation. Project funding from ERIA is gratefully acknowledged.

<sup>2</sup> During 2012–2015, the natural resource-based sectors contributed 13.4% on average to gross domestic product (GDP). In 2016, 22.7 million people 15 years old and over – or about 22.5% of people in that age group who were working – worked in agriculture, forestry, fishery, and mining and quarrying (Central Bureau of Statistics [BPS], 2017). The natural resource-based sector contributed to the highest work absorption, about 34%, during 2012–2016.





decreased 12.9% annually, with the average tariff at 15.4%. The most favoured nation (MFN) tariff declined 13.6% annually, with the average MFN tariff at 17.3%.

**Figure 3.3: Tariff Reductions Under Most Favoured Nation and Free Trade Agreements, Indonesia, 1989–2017**



HS = Harmonised System, MFN = most favoured nation.

Note: Figures are computed at the HS (combined) 2-digit level.

Source: Author (2019), based on World Integrated Trade Solution (2019).

Tariffs declined as a result of important trade reforms undertaken in the 1980s and 1990s, which were triggered by economic crises, the slowdown in domestic and international economic growth, and commitments made under regional and multilateral cooperation. The balance-of-payments crisis of 1980–1986 resulted from the drop in oil prices, which led to deregulation reform involving dramatic institutional changes to cut red tape, improve custom clearance processes, and simplify investment procedures.

The 1990–2000s reform was driven by regional and multilateral international cooperation agreements. After many years of slow progress in economic cooperation within the Association of Southeast Asian Nations (ASEAN), Indonesia finally joined the ASEAN Free Trade Area (AFTA) in 1991. The 1990s economic recession led to the first Asia-Pacific Economic Cooperation (APEC) Economic Leaders Meeting and a breakthrough in World Trade Organization (WTO) negotiations and the creation of the WTO on 1 January 1995.

The government used the momentum, strengthened by its hosting of the 1994 APEC meeting, to put in place important reforms to make the economy more competitive. Tariffs were removed in 1993 as were a number of foreign ownership restrictions in

1993 and 1994 (Ing et al., 2018). Tariff reform continued until 2003 as part of ASEAN and APEC commitments. As a result, MFN tariffs decreased sharply, with the simple average of MFN tariffs falling by two-thirds in 1989–2007 to 7.4% and the simple average applied tariff rate to 6.2%. Indonesia became a low-tariff country by developing-country standards; the average MFN tariff in developing countries was 8.3% (Molnar and Leshner, 2009; Hoekman et al., 2002). The preferential tariff decreased significantly. The ASEAN Trade in Goods Agreement tariff, for example, has been zero since 2017.

After 2007, the discussion of trade policy was dominated by concerns over the impact of import competition on domestic industry. The impact of free trade agreements (FTAs) and unfair trading practices of overseas companies pressured domestic trade policy. The import substitution policy also drove international trade policy. The government stepped up efforts to substitute imports with locally produced goods to curb overseas purchases and to attract new investments to locally produce raw materials, intermediary goods, and capital goods. The government could limit or halt exports of strategic commodities to ensure adequate local supplies. Recent policies were applied to commodities such as rattan, cocoa, and mineral ores. Indonesia's first-ever Trade Bill gave the government a greater role in restricting exports or imports to protect domestic industry. Since import tariffs on most commodities were already low, the government considered using NTMs to protect the domestic market from foreign penetration (Tijaja and Faisal, 2014).

In 2012–2014, world merchandise trade grew at less than 1%. Trade protectionism increased globally through safeguards and import and export restrictions in many countries, including Indonesia, prompting the government to take steps to save the domestic economy. One was to increase national competitiveness by boosting downstream industry by (1) restricting exports of raw materials, (2) establishing processing industries that could produce domestic intermediate goods and encourage export performance, (3) restricting imports, and (4) requiring local content. Uncertain global trade contributed to Indonesia's increasing tariffs and use of NTMs after 2014 to secure domestic industry from global competition (Hertanti, 2017). The use of NTMs grew, as indicated by the increasing number of coded NTMs from 676 in 2015 to 977 in 2018, as well as other NTM indicators.

## **1.2. Hierarchy of Laws and Regulations**

Laws are at the top of the hierarchy, followed by government regulations. Both have general terms and principles, and their implementation usually needs lower-level ministerial regulations, which contain detailed guidelines and are where NTM regulations are mostly found.

The Indonesia National Single Window (INSW) website is an important source of NTM regulations. The INSW hosts the prohibitions and restrictions (LARTAS) database. LARTAS collects state revenue. The website is managed and updated regularly by the customs agency. Before it can implement NTM regulations, it must notify the Ministry of Finance. The LARTAS database lists the regulations but does not provide the regulation documents, which are available from government agency websites such as the Ministry of Trade website ([www.inatrade.kemendag.go.id](http://www.inatrade.kemendag.go.id)) for technical barriers to trade (TBT), pre-shipment inspection, labelling, port limitation, and licensing. The Ministry of Industry website is important for TBT, particularly with regard to the Indonesia National Standard (SNI). The websites of the Indonesian Monitoring Agency for Food and Medicine (BPOM) and quarantine agencies are important for sanitary and phytosanitary (SPS) measures.

Table 3.1 lists ASEAN NTMs updated in 2018. The research team identified NTM-related regulations from the (1) Ministry of Trade, (2) Ministry of Agriculture, (3) Ministry of Environment and Forestry, (4) Ministry of Industry, (5) State Secretariat, (6) Ministry of Energy and Mineral Resources, (7) Ministry of Transportation, (8) Ministry of Health, (9) Ministry of Finance, (10) Ministry of Marine and Fisheries, (11) National Agency of Drug and Food Control, (12) Indonesian National Police, and (13) Ministry of Communication and Information.

The research team checked 381 regulations, of which 239 were trade related. Of these, 169 were coded in 2015, i.e., they were in the 2015 NTM database, and 80 were issued in 2015–2018. Some new regulations replaced older ones. Of the 169 regulations coded in 2015, only 74 were unchanged.

**Table 3.1: Summary of Non-tariff Measure Regulations, Indonesia, 2018**

No.	Summary	Number
1	Number of issuing agencies	13
2	Number of identified regulations	381
3	Number of trade-related regulations	239
4	Number of regulations coded in 2015	169
	4a. Unchanged	74
	4b. Revoked and replaced	48
	4c. Amended	38
	4d. Revoked	9
5	New regulations	80
6	Number of regulations coded in 2018	192

Source: Author, based on ERIA–UNCTAD (2018).

The 239 regulations can be categorised as follows:

1. Unchanged. Coded in 2015 and unchanged; 74 regulations fell under this category in 2018.
2. Repealed and replaced. Coded in 2015 but replaced because they were no longer suitable. For example, Ministry of Trade Regulation No. 07/2018 on the import of clinker cement and cement replaced Ministry of Trade Regulation No. 40/2013 on the import of clinker cement and cement. When Regulation No. 07/2018 was issued, the government repealed Regulation No. 40/2013. There were 48 regulations in this category in 2018.
3. Amended. Coded in 2015 and amended several times, often only the implementation date or procedures but not the measures. There were 38 regulations in this category in 2018.
4. Revoked. Coded in 2015 and revoked because they were no longer suitable. Nine regulations have been revoked since 2015.
5. New. Issued after 2015. Some replaced previous regulations (48, see category 2) and 22 were new, for a total of 70.

In 2018, the team identified 192 regulations: 80 new, 74 unchanged, and 38 amended.

## 2. Non-tariff Measure Statistics

### 2.1. General Summary of Non-tariff Measures, 2015 and 2018

NTM regulations were compiled from 13 government agencies (Table 3.2). The number of NTM regulations increased by almost 14%, from 169 in 2015 to 192 in 2018. The number of coded NTMs increased significantly from 767 in 2015 to 977 in 2018.

The 977 coded NTMs affected 7,759 tariff lines or 77.5% of total tariff lines. This figure increased by about 3% over 2015, when 767 coded NTMs affected 7,540 national tariff lines or 75.3% of total tariff lines. This means that the new regulations distributed and contributed only 3% of tariff lines previously not subject to NTMs.

**Table 3.2: General Summary of Non-tariff Measures, Indonesia, 2015 and 2018**

No.	Comprehensiveness	Number	Number
1	Total NTM-related regulations	169	192
2	Total NTMs reported to WTO	-	292
3	Total number of coded NTMs	767	977

No.	Comprehensiveness	Number	Number
4	Total affected products (HS lines, national tariff lines)		
	a. Total number of affected products	7,540	7,759
	b. Share of the number of affected products to the number of total products (%)	75.3%	77.5%
5	Total issuing institutions	13	13

HS = Harmonised System, NTM = non-tariff measure, WTO = World Trade Organization.

Note: The total number of NTMs reported to the WTO in 2015 is not available

Source: Author, based on ERIA-UNCTAD (2018).

## 2.2. Non-tariff Measure-related Regulations by Issuing Institution, 2015 and 2018

Since 2015, NTM-related regulations have been spread out among 13 agencies. The Ministry of Trade has always contributed the most (28.6% in 2018). The Ministry of Industry accounted for 27.4% in 2018, the Ministry of Agriculture contributed 19.9%, and the Ministry of Marine and Fishery, 7.7%. The Ministry of Trade's contribution to the number of NTMs decreased from 30.4% in 2015 to 28.6% in 2018. The Ministry of Industry's contribution also declined from 31.3% to 27.4%, while the Ministry of Agriculture's contribution increased from 17.2% to 19.9% (Table 3.3).

**Table 3.3: Non-tariff Measures by Issuing Institution, Indonesia, 2015 and 2018 (number, %)**

Number	Issuing Institution	2015		2018	
		Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
1	Ministry of Trade	233	30.4	279	28.6
2	Ministry of Finance	6	0.8	6	0.6
3	Ministry of Industry	240	31.3	268	27.4
4	Ministry of Agriculture	132	17.2	194	19.9
5	Ministry of Marine and Fisheries	61	8.0	75	7.7
6	Ministry of Energy and Mineral Resources	22	2.9	26	2.7
7	Ministry of Environment and Forestry	5	0.7	22	2.3
8	The Indonesian National Police	4	0.5	4	0.4
9	Ministry of Communication and Information	21	2.7	24	2.5
10	The National Agency of Drug and Food Control	10	1.3	48	4.9
11	Ministry of Health	24	3.1	24	2.5

Number	Issuing Institution	2015		2018	
		Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
12	State Secretariat	7	0.9	7	0.7
13	Ministry of Environment	2	0.3	0	0.0
	<b>Total</b>	<b>767</b>	<b>100.0</b>	<b>977</b>	<b>100.0</b>

NTM = non-tariff measure.

Source: Author, based on ERIA-UNCTAD (2018).

### 2.3. Non-tariff Measures by Chapter, 2015 and 2018

Change in the pattern of NTMs was limited in 2015–2018. Technical measures dominated, accounting for about 75% of all NTMs. Non-technical measures accounted for about 12%. Export-related measures contributed about 13% to the number of NTMs, unchanged in 2015–2018.

TBT measures are the most common NTMs, but their share declined to about 7.28%. The share of SPS measures increased significantly from 19.8% to 24.5%, mostly because of SNI regulations on food products. Some SNI regulations were issued by the Ministry of Industry: e.g., on wheat flour as a foodstuff; mineral waters, including demineralised waters, natural mineral waters, and dew drinking waters; and tuna in cans and sardines and mackerel in cans. BPOM issued quality standard regulations on food: one in 2015, four in 2016–March 2018. A regulation issued by the Ministry of Marine and Fisheries and the Ministry of Environment on mandatory fish quarantine increased the number of SPS measures. NTMs now serve to protect consumer health and safety as well as the environment.

The percentage of pre-shipment inspection and other formalities (chapter C) as well as of non-automatic licensing, quotas, prohibitions, and quantity-control measures other than SPS or TBT reasons (E) declined, even as the numbers slightly increased (Table 3.4). The use of pre-shipment inspection and other formalities (C) often received complaints, particularly the pre-shipment inspection (C1) and the requirement to pass through a specified port of customs (C3). Pre-shipment regulation negatively impacted the Indonesian consumer because higher import costs were reflected in higher prices (AIPEG, 2014). Ultimately, the regulation had a negative impact on competitiveness, particularly for retailers and small and medium-sized enterprises.

The use of non-automatic licensing, quotas, prohibitions, and quantity-control measures for other than SPS or TBT reasons (E) often received complaints. The process of getting import approval, which required technical recommendation, was claimed to be unnecessarily complicated and included duplication of the documents requested. More important, the process of getting technical recommendation increased costs for the importer, which were eventually passed on to buyers (anonymous interview, 2017). Therefore, the decline in use of non-automatic licensing, quotas, prohibitions, and quantity-control measures for other than SPS or TBT reasons (E) was a good sign. The increasing use of price control measures in 2015–2018, including additional taxes and charges (F), and measures affecting competition (H) was alarming as they had non-legitimate objectives.

**Table 3.4: Non-tariff Measures by Chapter, Indonesia, 2015 and 2018 (number, %)**

Chapter	2015		2018		
	Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)	
A	Sanitary and phytosanitary (SPS) measures	152	19.8	239	24.5
B	Technical barriers to trade (TBT)	370	48.3	437	44.7
C	Pre-shipment inspection and other formalities	53	6.9	58	5.9
D	Contingent trade protective measures	0	-	0	-
E	Non-automatic licensing, quotas, prohibitions, and quantity control measures for other than SPS or TBT reasons	75	9.8	85	8.7
F	Price control measures, including additional taxes and charges	8	1.1	21	2.2
G	Finance measures	0	-	0	-
H	Measures affecting competition	5	0.7	12	1.2
I	Trade-related investment measures	1	0.1	1	0.1
J	Distribution restrictions	0	-	0	-
K	Restriction on post-sales services	0	-	0	-
L	Subsidies (excluding export subsidies under P7)	0	-	0	-
M	Government procurement restrictions	0	-	0	-
N	Intellectual property	0	-	0	-
O	Rules of origin	0	-	0	-
P	Export-related measures	103	13.4	124	12.7
		767	100.00	977	100.00

NTM = non-tariff measure.

Source: Author, based on ERIA–UNCTAD (2018).

## 2.4. Incidence of Non-tariff Measures by Type

From the 977 coded NTMs identified in 2018, 88 types were identified. The top-10 NTMs were mostly applied to imports. Their contribution declined from 63.2% in 2015 to 55.7% in 2018; the contribution of other NTM types increased from 36.8% to 44.3%.

Labelling for TBT reasons was the most common use of NTMs in 2015 (10.9% of all NTMs) and 2018 (9.7%). Product quality standard was the second-most implemented NTM in 2015 (9.5%) and 2018 (8.8%). In 2018, certification for TBT reasons ranked third, accounting for 7.7%, followed by non-automatic import-licensing procedures other than authorisations covered under SPS and TBT chapters, accounting for 7.3%. Testing requirement for TBT reasons ranked fifth.

**Table 3.5: Top-10 Non-tariff Measures, Indonesia, 2015 and 2018 (number, %)**

No	NTM Type	NTM Description	2015		2018	
			Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
1	B31	Labelling requirement for TBT reasons	84	10.95	95	9.72
2	B7	Product-quality, -safety, or -performance requirement	73	9.52	86	8.80
3	B83	Certification requirement	66	8.60	75	7.68
4	E1	Non-automatic import-licensing procedures other than authorisations covered under SPS and TBT chapters	64	8.34	71	7.27
5	B82	Testing requirement	60	7.82	66	6.76
6	B85	Traceability requirements for TBT reasons	36	4.69	36	3.68
7	A83	Certification requirement for SPS reasons	33	4.30	45	4.61
8	C3	Requirement to pass through specified port of customs	27	3.52	28	2.87
9	C1	Pre-shipment inspection	25	3.26	24	2.46
10	B81	Product registration/approval requirement for TBT reasons	17	2.22	18	1.84
		Others	282	36.77	433	44.32
		<b>Total</b>	<b>767</b>	<b>100.00</b>	<b>977</b>	<b>100.00</b>
		10 NTMs	485	63.23	544	55.68

NTM = non-tariff measure, SPS = sanitary and phytosanitary, TBT = technical barriers to trade.

Note: Rank is based on 2015 figures.

Source: Author, based on ERIA-UNCTAD (2018).



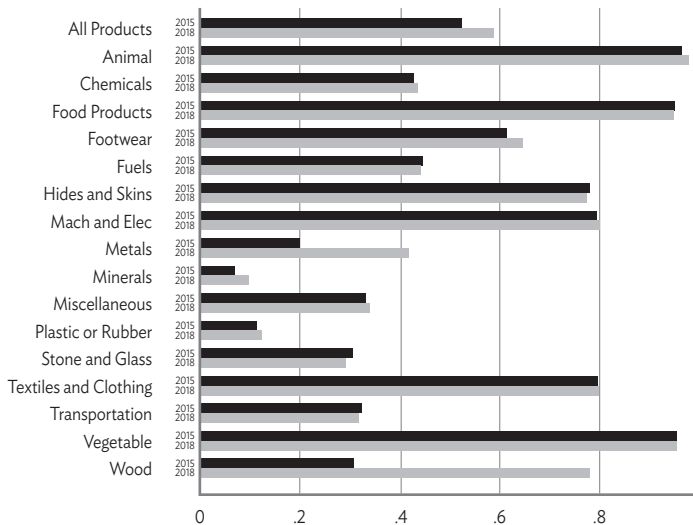
### 3. Non-tariff Measure Indicators

The trends and patterns observed in NTM incidence were reflected in the NTM indicators, which showed that government efforts to simplify NTMs were not successful. The frequency index, coverage ratio, and prevalence score increased in 2018 over 2015, implying that regulatory reforms since 2015 had not streamlined the number of NTMs. The reform programme aimed to maintain momentum and boost trust in the economy, which performed relatively well amidst the global economic slowdown. From September 2015 to November 2018, 16 economic policy packages were released, which saw streamlining NTMs as the first step to making Indonesia more competitive (Ministry of Trade, 2016).

#### 3.1. Import Non-tariff Measure Indicators

In 2015, all products had a frequency index for imports of almost 0.55, implying that 55% of import tariff lines were subject to at least one NTM (Figure 3.4a), affecting about 61% of imports, as indicated by a coverage ratio of 0.61. The increase in number of NTM regulations and codes impacted the frequency index for imports, which increased to almost 0.6 in 2018 and affected about 62% of imports (Figure 3.4a, Figure 3.4b).

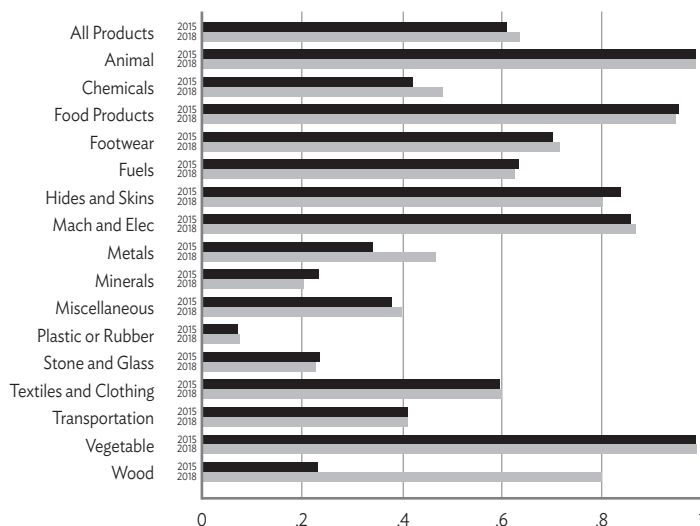
**Figure 3.4a: Frequency Index of Imports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018**



HS = Harmonised System.

Source: Author, based on ERIA–UNCTAD (2018).

**Figure 3.4b: Coverage Ratio of Imports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018**



HS = Harmonised System.

Source: Author, based on ERIA-UNCTAD (2018).

The indicators revealed that the product groups with the most import NTMs were animal, food, and vegetable products, shown by the frequency index of almost 1, which meant that almost 100% of tariff lines of these products were subject to at least one NTM. The NTMs on animal, food, and vegetable products affected almost 100% of imports as shown by an almost 100% coverage ratio (Figure 3.4a, Figure 3.4b). Animal, food, and vegetable products were more regulated than other product groups, which was not surprising as income per capita increased from US\$3,377 in 2015 to US\$3,927 in 2018. Hummels and Lugovskyy (2009) in Ing et al. (2016) observed that the average unit value of a country's imports tends to rise with its level of income. Thus, with or without standards, consumers naturally tend to switch to higher-quality and safer products when their incomes rise. This has been confirmed by the increase in SPS measures from 2015 to 2018.

Mineral products had the lowest frequency index at 8% in 2015, which slightly increased to 10% but affected 21% of imports, which slightly increased to 22% in 2018. Plastic and rubber products had a slightly higher frequency index than mineral products, at 11% in 2015, which increased to 12% in 2018 but affected only 8% of imports.

The indicators also revealed that, by product group, metals and wood showed a significant increase in the frequency index in 2015–2018: metal products increased from 20% in 2015 to 42% in 2018, affecting 23% of imports in 2015 and 48% in 2018. The main reason for the significant increase was the issuance of Ministry of Trade Regulation No. 82/2018 Jo. 22/2018 on imports of iron and steel. Several new regulations on national

standards for metal products issued by the Ministry of Industry and the Ministry of Communication and Information also contributed significantly to the increase of NTM incidence for metal products. The frequency index of wood products increased from 30% to almost 80%, affecting 23% of imports in 2015 and 80% of wood product imports in 2018. The reason was the issuance of Regulation No. 84/M-DAG/PER/2016 Jo. 12/M-DAG/PER/2/2017 on Export Provisions for Forestry Industrial Products, which aimed to protect the environment by introducing certification requirements for the export of forestry products.

The prevalence score measures the average number of NTMs applied to a traded product (Figure 3.4c). The score does not measure stringency but provides some indication of the level of regulatory obligations that trade flows face. In practice, many products are affected by more than one regulatory measure. For example, a product could be subject to a sanitary standard, a technical measure of quality, and some licensing. The greater the number of NTMs applied to the same product, the more regulated the commerce of that product, especially if measures are from different HS chapters (Cadot et al., 2018).

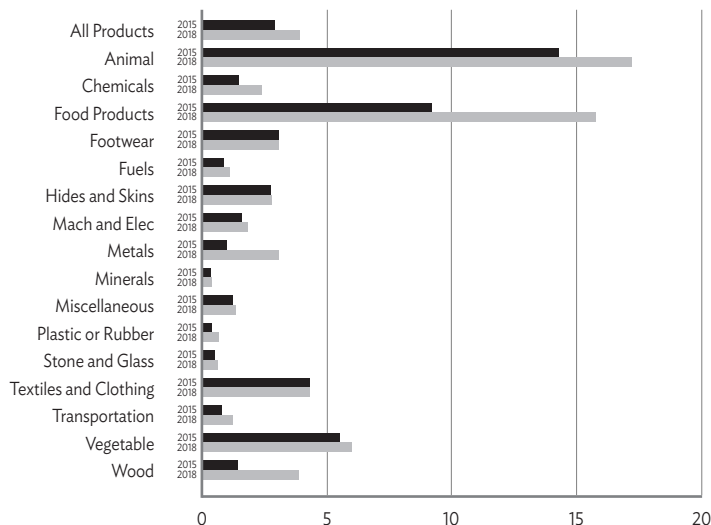
The prevalence score of all imports was 3.5 in 2015 and 4.5 in 2018. The product groups with the higher prevalence score were animal and food products (more than 15). However, the NTMs were mostly SPS measures for consumer protection. This was in line with the previous two indicators, which showed that animal and food products had a high frequency index for imports, affecting almost 100% of imports. The prevalence score index confirmed that the animal and food sector was the most heavily regulated and where sanitary standards were stringently applied. Animal and food products were intensively subject to technical measures of quality and some non-automatic licensing. These products had not only a high prevalence score but also an increasing one. The prevalence score for animal products increased approximately from 15 to 18, and for food products, from 10 to 18 (Figure 3.4c).

### 3.2. Export Non-tariff Measure Indicators

Animal and vegetable products had the highest frequency index: almost 1. This means that almost all export tariff lines of animal and vegetable products were subject to at least one NTM and affected 100% of Indonesian animal and vegetable exports. Figure 3.5a presents the 2015 and 2018 export NTM frequency index by HS 2 product group, while Figure 3.5b presents the 2015 and 2018 export NTM coverage ratio by HS 2 product group. For all products, the export frequency index was relatively lower, about 0.2, than the import frequency index. However, export NTMs affected 50% of exports. The prevalence of export NTMs could result in trade restriction, reducing the government's

export revenue and negatively affecting the state budget. Licensing or permits and registration requirements contributed almost 25% of total export NTMs. Almost 10% of export NTMs on animal and food products were subject to export price control measures.

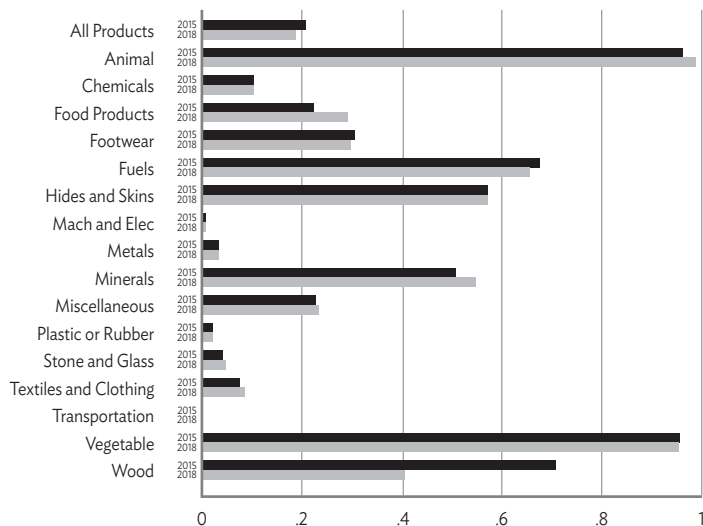
**Figure 3.4c: Prevalence Score of Imports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018**



HS = Harmonised System.

Source: Author, based on ERIA-UNCTAD (2018).

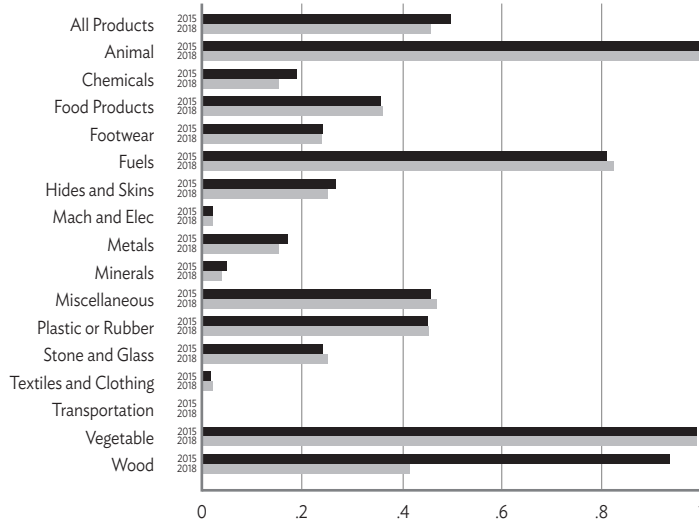
**Figure 3.5a: Frequency Index of Exports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018**



HS = Harmonised System.

Source: Author, based on ERIA-UNCTAD (2018).

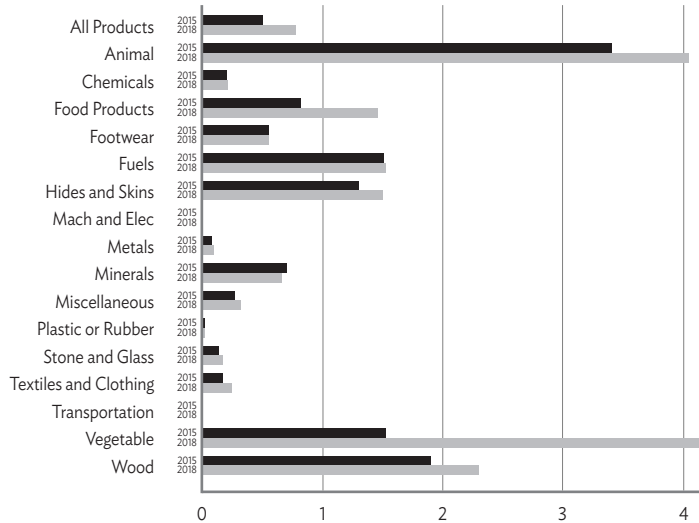
**Figure 3.5b: Coverage Ratio of Exports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018**



HS = Harmonised System.

Source: Author, based on ERIA-UNCTAD (2018).

**Figure 3.5c: Prevalence Score of Exports, Country Total, by HS 2 Product Group, Indonesia, 2015 and 2018**



HS = Harmonised System.

Source: Author, based on ERIA-UNCTAD (2018).

Wood exports saw a decrease from 71% to 40% in frequency index in 2015-2018, from 40% to almost 71%. As a result, the number of affected export tariff lines significantly increased. In 2015, the export NTM regulations on wood affected only 41% of total wood

exports; in 2018, they affected almost 95%. The frequency indices for other exports were relatively stable, partly due to government policy to substitute imports by limiting or halting exports of strategic commodities to ensure adequate local supplies. This policy affected commodities such as rattan, cocoa, and mineral ores; another justification for this provision was to allow better management of the trade balance.

At around 1 in 2018, the export prevalence score was smaller than the import prevalence score. Animal and vegetable products had a relatively high prevalence score (Figure 3.5c).

Animal products had a high and increasing prevalence score, from 3.2 to 4.2. The prevalence score for vegetables increased even more, from 1.5 to 4.4. This implies that the two sectors had become more regulated than other product groups.

## **4. Conclusions and Policy Recommendations**

Indonesia's regulations are changing rapidly, particularly those related to NTMs, a situation aggravated by the fact that the authority to issue NTM regulations is held by 13 agencies, each with its own mandate. This makes monitoring NTMs difficult, especially since there is no dedicated institution supported by a competent workforce to carry out NTM regulatory review and stocktaking.

One would expect that the number of NTMs should have been reduced when the government undertook regulatory reforms as committed by President Joko Widodo. However, the key findings from our updated database show the opposite. The number of NTMs increased significantly. New NTM regulations issued after 2015 contributed to the increasing number of NTMs. Other indicators – the frequency index, coverage ratio, and prevalence score – showed the same trend in 2018. On the surface, this evidence seems inconsistent with the government commitment to create a better business environment, as increasing NTMs could burden businesses.

A deeper examination of the structure of NTMs, however, suggests that the increase is not necessarily a bad sign, and Indonesia is moving in the right direction because (1) the Ministry of Agriculture and the National Agency of Drug and Food Control have reduced the role of the Ministry of Trade, and (2) the increase in SPS measures implies that the purpose of the NTMs is mainly to protect consumers and the environment. It is alarming, however, when NTMs are issued for non-legitimate reasons.

## **References**

- Australia Indonesia Partnership for Economic Governance (AIPEG) (2014), *Report on the Review Trade License Administration*. Jakarta: AIPEG.
- Australia Indonesia Partnership for Economic Governance (AIPEG) (2017), *Factors Affecting Indonesia's Pre-Customs Clearance Process and Dwelling Time*. Jakarta: AIPEG.
- Center for International Development (2016), *Atlas*. <http://atlas.cid.harvard.edu/explore/?country=103&partner=undefined&product=undefined&productClass=HS&startYear=undefined&target=Product&year=2016> (accessed on 7 March 2018).
- Central Bureau of Statistics (BPS) (2017), *Statistical Yearbook of Indonesia 2017*. Jakarta: BPS–Statistics Indonesia.
- Cadot, O., M.J. Ferrantino, J. Gourdon, and J.D. Reyes (2018), *Reforming Non-Tariff Measures: From Evidence to Policy Advice*. Washington, DC: The World Bank Group.
- ERIA-UNCTAD (2018), 2018 raw ERIA-UNCTAD database on Non-Tariff Measures.
- Hertanti, R. (2017), 'Indonesian Trade and Investment Policy in the Trend of Global Protectionism', paper presented at The Eurodad Conference, Den Hague, The Netherlands, 21 June.
- Hoekman, B., F. Ng, and M. Olarreaga (2002), *Eliminating Excessive Tariffs on Exports of Least Developed Countries*. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/17190> License: CC BY-NC-ND 3.0 IGO (accessed 10 March 2018).
- Ing, L.Y., S.F. Cordoba, and O. Cadot (2016), *Non-Tariff Measures in ASEAN*. Book chapter. Jakarta: Economic Research Institute for ASEAN and East Asia and United Nations Conference on Trade and Development.
- Ing, L.Y., M.E. Pangestu, and S. Rahardja (2018), 'Managing Indonesia's Trade Policy: How to Remove the Agenda?' in A. Nasution (ed.), *Macroeconomic Policies in Indonesia: Indonesian Economy Since the Asian Financial Crisis of 1997*. London and New York: Routledge.

Melo, J. and A. Nicita (2018), 'Non-tariff measures: data and analytical tools', in *Non-Tariff Measures: Economic Assessment and Policy Options for Development*. Paris: United Nations Conference on Trade and Development.

Ministry of Trade (Indonesia) (2016), 'Maintaining Momentum, Improving Confidence, Economy Policy Package', paper presented At Coordination meeting of Acceleration Assignment Units and Effectiveness of Economic Policy Implementation, Jakarta, Indonesia, 18 August.

Molnar, M. and M. Leshner (2009), 'Recovery and Beyond: Enhancing Competitiveness to Realise Indonesia's Trade Potential', *OECD Trade Policy Working Paper*, No. 82. Paris: Organisation for Economic Co-operation and Development.

Tijaja, J. and M. Faisal (2014), 'Industrial Policy in Indonesia: A Global Value Chain Perspective', *ADB Economic Working Paper Series*, October.

World Integrated Trade Solution (2019), <http://wits.worldbank.org/WITS/WITS/Default-A.aspx?Page=Default> (accessed 17 February 2019).



# NON-TARIFF MEASURES: LAO PEOPLE'S DEMOCRATIC REPUBLIC

## Phonesavanh Sitthideth<sup>1</sup>

National Institute for Economic Research, Lao People's Democratic Republic

### 1. Introduction

#### 1.1. Trade Structure

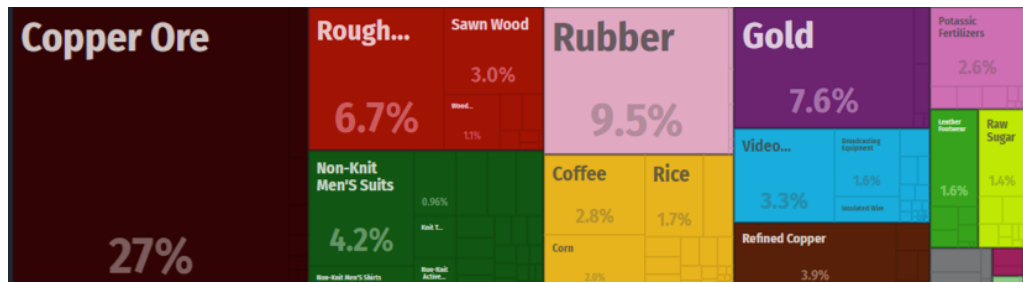
The adoption of the New Economic Mechanism in 1986 signalled a significant shift of the Lao People's Democratic Republic (Lao PDR) economy from a centrally planned to a market system. Economic growth averaged more than 6% per year in 1988–2008; has been amongst the fastest in Asia, averaging more than 7% per year for most of the last decade; and is forecast to reach 7% in 2019. Lao PDR has liberalised its trade through unilateral tariff reduction. Its highest tariff rate is now 40%, down from 150% in 1995, and over half its tariffs are below 5%. As in many other countries, non-tariff measures (NTMs) are gaining importance in controlling and hampering the flow of international trade. Most ministries in the Lao PDR are involved in formulating and implementing such regulations, which are frequently developed with little regard for the negative impact they may have on the trading community.

In 2017, Lao PDR exported US\$2.04 billion, making it the 131st-largest exporter in the world (Figure 4.1). Lao PDR exports decreased at an annualised rate of 1.6%, from US\$2.20 billion in 2012 to US\$2.04 billion in 2017, which is not surprising as most exports are natural resources, such as mining products, and depend on global market prices and demand. The most recent exports are led by copper ore (27.4% of all exports), followed by rubber (9.5%).

---

<sup>1</sup> The researcher would like to thank Ms. Dorkfa Siyotha and Mr. Yang Tour for their assistance in compiling Lao PDR non-tariff measure data.

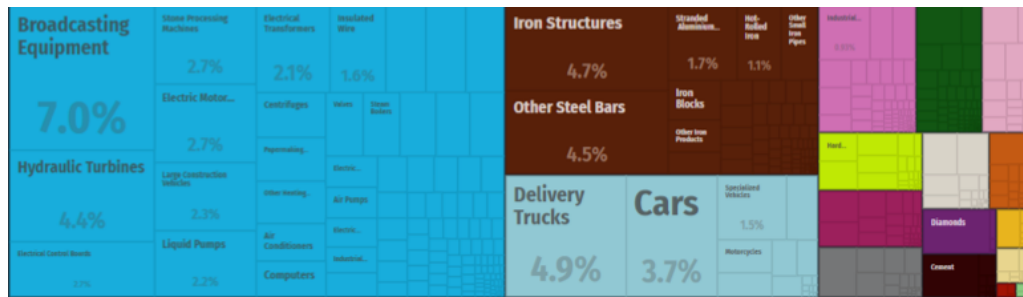
**Figure 4.1: Export Composition, HS 4, Lao PDR, 2017**



Source: WITS (2019).

Lao PDR imports mainly oil, machinery and equipment, vehicles, iron and steel, telecommunication equipment, beverages, and cement. The country imports mainly from Thailand (66% of all imports), followed by China and Viet Nam. In 2017, Lao PDR imported US\$1.94 billion worth of goods, making it the 152nd-largest importer in the world. Imports decreased at an annualised rate of 8.7%, from US\$5.43 billion in 2012 to US\$1.94 billion in 2017. The most recent imports are led by broadcasting equipment (6.96%), followed by delivery trucks (4.88%) (Figure 4.2).

**Figure 4.2: Import Composition, Lao PDR, 2017**

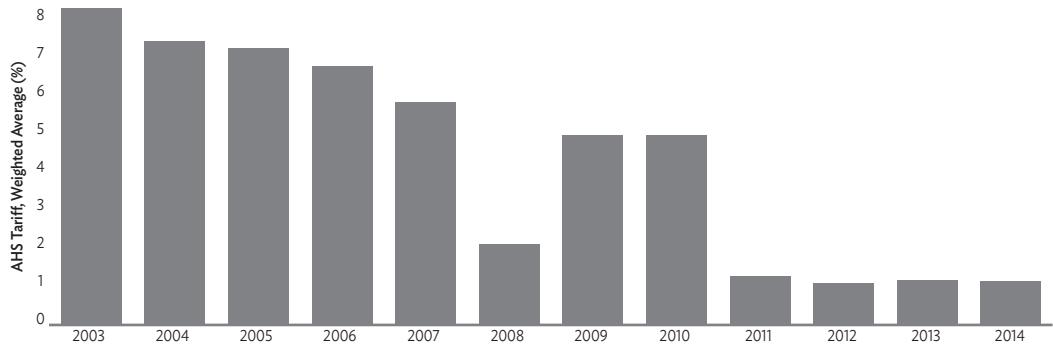


Source: WITS (2019).

Tariff rates have gone down since the economy shifted from a centrally planned to a market system, particularly since Lao PDR joined the Association of Southeast Asian Nations (ASEAN) and the World Trade Organization (WTO). Within the framework of the ASEAN Economic Community and the WTO, the country has made great progress in reducing tariffs and setting up institutions and physical infrastructure to facilitate trade. In 2003, the applied tariffs were 8.17% and declined slightly each year to about 4.80% in 2010. In 2008, the applied tariff rate decreased dramatically because the government had begun to reduce import tariffs on goods, with import tariffs on many products reduced to zero and on vehicles to 5%, down from 40%. In 2011–2014, the applied tariff rate was reduced to about 1%. Reducing tariffs may create competition for domestic producers. If

regulatory capacity and infrastructure are inadequate, the country could see an influx of low-quality and harmful imports.

**Figure 4.3: Effectively Applied Tariffs (AHS), Weighted Average Over Time, Lao PDR, 2003–2014**



Source: WITS (2019).

## 1.2. Hierarchy of Law and Regulations

The government adopted the Legal Sector Master Plan in 2009 to build a transparent, clear, and inclusive legal system. In 2012, the National Assembly adopted the Law on Laws to reform law making. Under the Law on Legislation Making (2012), the hierarchy of legislation is as follows: (1) the Constitution; (2) laws; (3) resolutions of the National Assembly; (4) resolutions of the Standing Committee of the National Assembly; (5) ordinances of the President; (6) decrees of the government; (7) resolutions of the government; (8) orders and decisions of the Prime Minister; (9) orders, decisions, and instructions of ministers, ministers-equivalent, and heads of government authorities; (10) orders, decisions, and instructions of provincial and capital governors; (11) orders and decisions of district and municipality chiefs; and (12) village regulations. International treaties are legislation implemented in accordance with provisions of specific legislation. All legal documents are officially in the Lao language and most can be found in two electronic sources – the Lao Official Gazette and the Lao Trade Portal. The Lao Trade Portal also provides unofficial English translations of a number of laws and regulations.

## 2. Descriptive Non-tariff Measure Statistics

In 2015, 78 NTM-related regulations yielded 342 NTMs, issued by 13 institutions (Table 4.1). In 2018, 106 NTM-related regulations yielded 520 NTMs, issued by 14 institutions. The number of NTMs in 2015 and 2018 was many times higher than the 12 NTMs reported to the WTO. Every tariff line is affected by at least one NTM.

**Table 4.1: Comprehensiveness of Non-tariff Measures, Lao PDR**

Number	Comprehensiveness	Number	
		2015	2018
1	Total number of coded regulations	78	106
2	Total number of coded NTMs reported to the WTO	12	12
3	Total number of coded NTMs	342	520
4	Total affected products (HS lines, national tariff lines)		
	Total number of affected products (a)	6,658	7,350
	Share of the number of affected products to the number of total products (%) (b)	100%	100%
5	Total number of issuing institutions	13	14

HS = Harmonised System, NTM = non-tariff measure, WTO = World Trade Organization.

Source: Authors, based on ERIA-UNCTAD (2018).

NTMs were issued not only by commerce agencies but also line ministries (Table 4.2). The Ministry of Industry and Commerce accounted for 17.84% of all measures in 2015 and for 15.96% in 2018. The largest share of NTMs in 2015 came from the Ministry of Agriculture and Forestry (23.10%) and in 2018 from the Government Office (26.15%). These numbers show that NTM-related regulations are centralised and that the government pays attention to international trade. The Ministry of Health accounted for 18.42% of all NTMs in 2015 and for 10.96% in 2018; the decrease was due to the repeal of some regulations. The Ministry of Finance accounted for 6.73% of all NTMs in 2015 and 4.81% in 2018. Other line ministries accounted for less than 3% of all NTMs.

**Table 4.2: Number of Non-tariff Measures, by Issuing Institution, Lao PDR, 2015 and 2018**

Number	Issuing Institution	2015		2018	
		No. of NTMs	Proportion of NTMs (%)	No. of NTMs	Proportion of NTMs (%)
1	Bank of Lao	9	2.63	9	1.73
2	Government Office	55	16.08	136	26.15
3	Ministry of Agriculture and Forestry	79	23.10	96	18.46
4	Ministry of Energy and Mining	8	2.34	8	1.54
5	Ministry of Finance	23	6.73	25	4.81
6	Ministry of Health	63	18.42	57	10.96
7	Ministry of Industry and Commerce	61	17.84	83	15.96
8	Ministry of Information Culture and Tourism	12	3.51	13	2.50
9	Ministry of National Defence	11	3.22	11	2.12

Number	Issuing Institution	2015		2018	
		No. of NTMs	Proportion of NTMs (%)	No. of NTMs	Proportion of NTMs (%)
10	Ministry of Natural Resource and Environment	8	2.34	8	1.54
11	Ministry of Post and Telecommunication	8	2.34	13	2.50
12	Ministry of Public Security	1	0.29	1	0.19
13	Ministry of Public Work and Transportation	4	1.17	4	0.77
14	Ministry of Science and Technology	0	0	56	10.77
<b>Total</b>		<b>342</b>	<b>100</b>	<b>520</b>	<b>100</b>

NTM = non-tariff measure.

Source: Authors, based on ERIA-UNCTAD (2018).

Export-related measures (chapter P) accounted for the largest share of all NTMs, 29.24% in 2015 and 33.08% in 2018 (Table 4.3). Since 2015, the government has launched many regulations to protect the public, business operators, and consumers. For example, the decree on petroleum business No. 331/Gol of 27 October 2017 contains more than 30 measures. Technical barriers to trade (TBT) (B) accounted for 19.30% in 2015 and 27.12% in 2018, which shows that the government focuses on ensuring people's safety, national security, and environmental protection. Since 2015, almost 20 regulations with non-automatic licensing procedures have been announced. Non-automatic licensing (E) accounted for 17.54% in 2015 and 14.53% in 2018. Price control measures (F) accounted for 15.20% in 2015 and 10.77% in 2018. They support the domestic prices of certain products when import prices are lower. Sanitary and phytosanitary (SPS) measures (A) accounted for 14.33% in 2015 and 10.77% in 2018. Finance measures (G) accounted for the lowest number of NTMs, 0.29% in 2015 and 0.38% in 2018.

**Table 4.3: Non-tariff Measures by Chapter, Lao PDR, 2015 and 2018**

Chapter	2015		2018	
	No. of NTMs	Proportion of NTMs (%)	No. of NTMs	Proportion of NTMs (%)
A Sanitary and phytosanitary (SPS) measures	49	14.33	56	10.77
B Technical barriers to trade (TBT)	66	19.30	141	27.12
C Pre-shipment inspection and other formalities	14	4.09	18	3.46
D Contingent trade protective measures	0	0	0	0
E Non-automatic licensing, quotas, prohibitions, and quantity control measures other than for SPS or TBT reasons	60	17.54	75	14.53
F Price control measures, including additional taxes and charges	52	15.20	56	10.77
G Finance measures	1	0.29	2	0.38
H Measures affecting competition	0	0	0	0

## NON-TARIFF MEASURES IN ASEAN - AN UPDATE

Chapter	2015		2018	
	No. of NTMs	Proportion of NTMs (%)	No. of NTMs	Proportion of NTMs (%)
I Trade-related investment measures	0	0	0	0
J Distribution restrictions	0	0	0	0
K Restriction on post-sales services	0	0	0	0
L Subsidies (excluding export subsidies under P7)	0	0	0	0
M Government procurement restrictions	0	0	0	0
N Intellectual property	0	0	0	0
O Rules of origin	0	0	0	0
P Export-related measures	100	29.24	172	33.08
<b>Total</b>	<b>342</b>	<b>100</b>	<b>520</b>	<b>100</b>

Source: Authors, based on the 2018 NTM database and ASEAN-ERIA-UNCTAD raw data.

Amongst all registered NTMs in 2015 and 2018, export-related measures, TBT, non-automatic licensing, and price-control measures (P, B, E, and F) accounted for the top 10 (Table 4.4). The licensing, permit, or registration requirement to export (P33) had the highest percentage, with 12.28% in 2015 and 8.46% in 2018. The second-ranked were licensing procedure with no specific ex ante criteria (E111) (6.14%) in 2015 and the product quality, safety, or performance requirement (P163) (6.73%) in 2018. Third-ranked were the import license fee (F65) (5.85%) in 2015 and the import certification requirement (B83) (5.96%) in 2018.

**Table 4.4: Top-10 Non-tariff Measures, Lao PDR, 2015 and 2018**

Number	2015			2018		
	NTM Type	Number of NTMs	Proportion of NTMs (%)	NTM Type	Number of NTMs	Proportion of NTMs (%)
1	P33 (Licensing, permit requirement)	42	12.28	P33 (Licensing, permit requirement)	44	8.46
2	E111 (Licensing procedure)	21	6.14	P163 (Product quality)	35	6.73
3	F65 (Import license fee)	20	5.85	B83 (Certificate requirement)	31	5.96
4	F72 (Excise taxes)	17	4.97	B31 (Labelling requirement)	25	4.81
5	P43 (Export charge/fee)	16	4.68	E111 (Licensing procedure)	21	4.04
6	P163 (Product quality)	14	4.09	F65 (Import license fee)	20	3.85
7	B31 (Labelling requirement)	13	3.80	B84 (Inspection requirement)	17	3.27
8	B7 (Product quality, safety requirement)	11	3.22	B9 (TBT measures)	17	3.27

Number	2015			2018		
	NTM Type	Number of NTMs	Proportion of NTMs (%)	NTM Type	Number of NTMs	Proportion of NTMs (%)
9	A14 (Authorisation requirement)	10	2.92	B7 (Product quality, safety requirement)	16	3.08
10	B81 (Product registration)	10	2.92	P162 (Product quality)	16	3.08
11	Others	168	49.12	Others	278	53.46
12	Total	342	100	Total	520	100

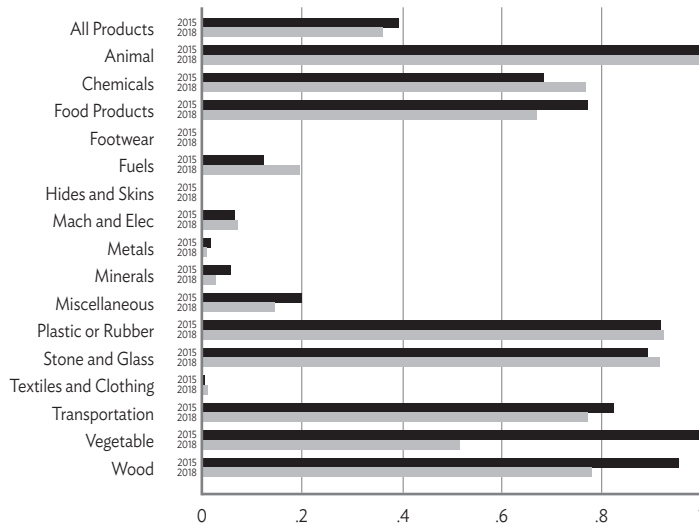
NTM = non-tariff measure, TBT = technical barriers to trade.

Source: Authors, based the 2018 NTM database and ERIA-UNCTAD (2018).

### 3. Non-tariff Measure Indicators

This section discusses the NTM coverage ratio, frequency index, and prevalence score, which are calculated on exports and imports at the aggregate and product-group levels (Figure 4.4).

**Figure 4.4: Coverage Ratio of Exports, Lao PDR, 2015 and 2018**

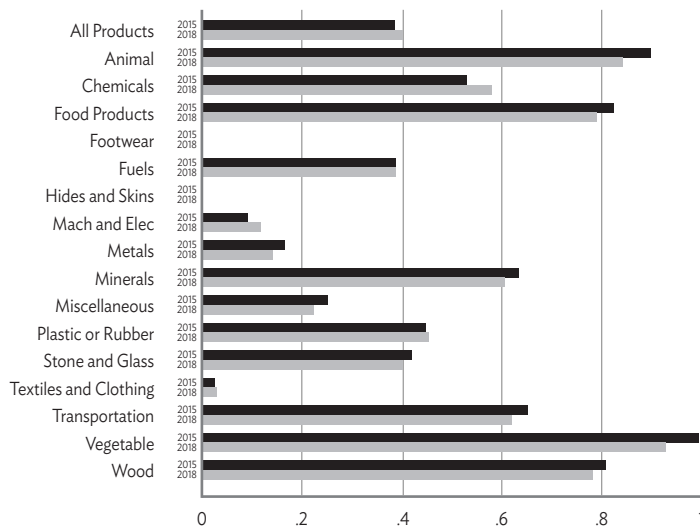


Source: 2018 NTM database; ERIA-UNCTAD (2018).

The coverage ratio of total exports in 2015 was 0.4, implying that 40% of the total export value was subject to at least one NTM (Figure 4.4). The coverage ratio declined only slightly in 2018. In 2015 and 2018, the use of NTMs varied considerably across groups of exports. The 2015 and 2018 coverage ratios of exports of animal products, plastic or rubber, and stone and glass were higher than 0.9, whilst the coverage ratios of exports of footwear, hides and skins, metals, and textiles and clothing were zero or only slightly

more than zero. Fuels, machinery and electronics, minerals, and miscellaneous had NTM coverage ratios of less than 0.2 in both periods; chemicals, food products, and transportation had coverage ratios of 0.7–0.8. The proportion of all exports subjected to at least one NTM declined slightly in 2018, except for exports of vegetables, whose coverage ratio dropped substantially from 1 in 2015 to about 0.5 in 2018, and wood, from 0.9 to less than 0.8.

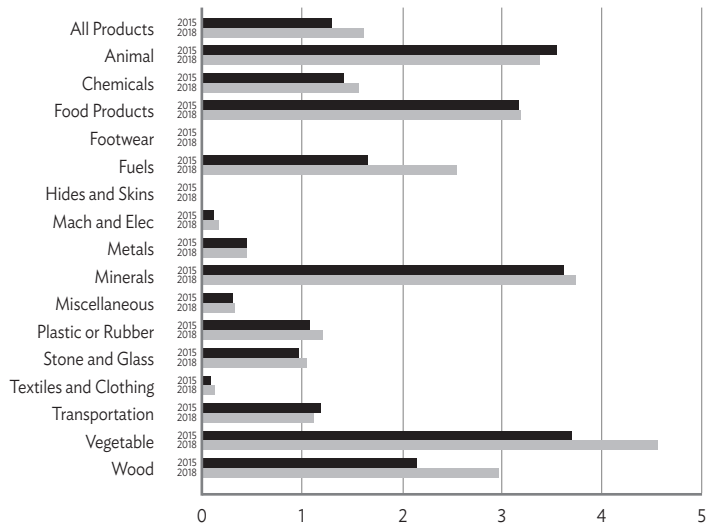
**Figure 4.5: Frequency Index of Exports, Lao PDR, 2015 and 2018**



Source: 2018 NTM database; ERIA-UNCTAD (2018).

The coverage ratio and frequency index depict the extent of exports subject to at least one NTM, but unlike the coverage ratio, the frequency index does not take into account the value of exports (Figure 4.5). In 2015, the frequency index of total exports was 0.4, suggesting that about 40% of all exports were subject to one or more NTMs. The frequency index declined slightly in 2018. Like coverage ratios, the frequency indices were substantially different across product groups in 2015 and 2018. About 80% of vegetables, animals, food products, and wood were subject to one or more NTMs. In contrast, footwear, hides and skins, textiles and clothing, and machinery and electronics had low frequency indices of less 0.20 in 2015 and 2018, and the rest of the exports 0.25–0.65, declining only slightly in 2018. Exports of vegetables saw the largest decline, but it was less than 0.1.



**Figure 4.6: Prevalence Score of Exports, Lao PDR, 2015 and 2018**

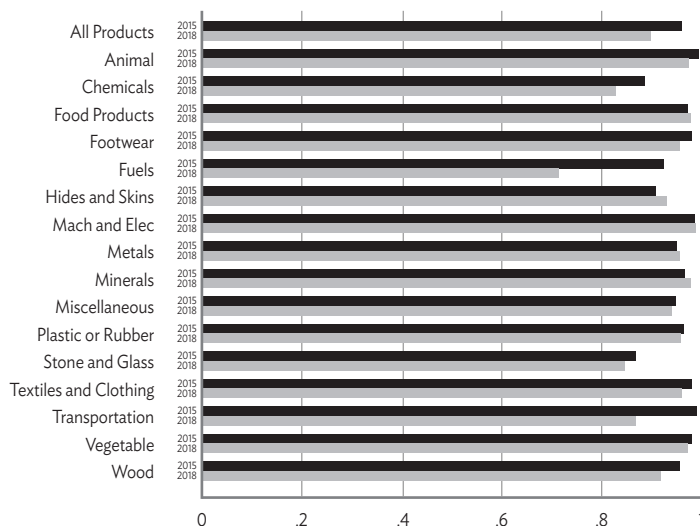
Source: 2018 NTM database; ERIA-UNCTAD (2018).

The coverage ratio and frequency index do not take into account the number of NTMs imposed on each product; whether a product is subject to one or more NTMs, the coverage ratio and frequency index remain unchanged (Figure 4.6). The prevalence score, however, calculates the average number of NTMs imposed on a product. The prevalence score for all export products was about 1.3 in 2015 and increased slightly to about 1.6 in 2018. This means exports were subject to, on average, about 1.6 NTMs in 2018 and 1.3 NTMs in 2015. Exports of footwear and hides and skins were not subject to NTMs in either period. Exports of machinery and electronics, textiles and clothing, metals, and miscellaneous products were subject to, on average, less than one NTM. Exports of vegetables faced the highest number of NTMs in both years, with prevalence scores higher than 4.5 in 2018 and higher than 3.5 in 2015. Other groups of export products subject to high NTMs included animal products, food products, and minerals; their prevalence scores were higher than 3 in 2015 and 2018. Plastic and rubber, stone and glass, and transportation had prevalence scores of slightly more than 1 in 2018. Except for fuel, wood, and vegetables, most export groups saw a small decline in prevalence scores – almost 1 unit less in 2018 than in 2015.

Figures 4.4, 4.5, and 4.6 present indicators illustrating the incidence of NTMs imposed on exports in 2015 and 2018. Figures 4.7, 4.8, and 4.9 do the same for imports in 2015 and 2018. The coverage ratios of total imports and imports of various product groups in 2015 and 2018 are in Figure 4.7. The coverage ratios of imports were considerably higher than those of exports in 2015 and 2018. This is not surprising because NTMs are, in general, more relevant to imports than to exports. Notwithstanding, the figures are high. The coverage ratio of total imports was close to 1 in 2015 and declined only slightly to about

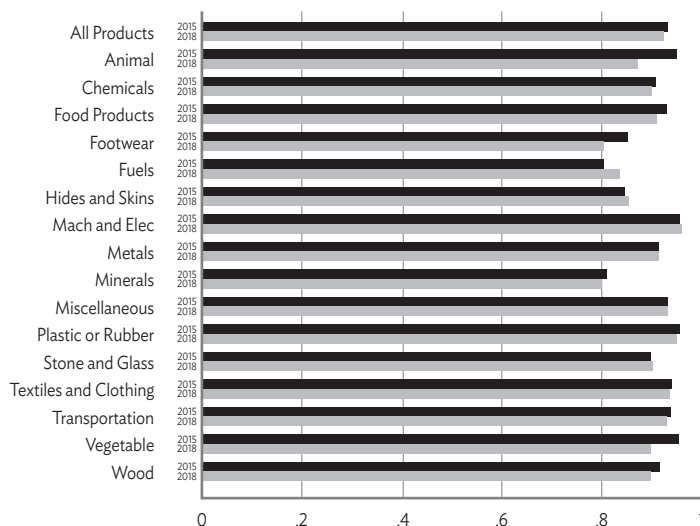
0.9 in 2018. This implies that at least 90% of imports in terms of value were subject to at least one NTM in 2015 and 2018. The coverage ratios of imports across product groups saw small differences, and their values were all higher than 0.8, except for fuel imports in 2018 (0.7). For all product groups, 2018 saw a small drop in coverage ratios, except for fuel imports, which saw a decline of 0.1 units.

**Figure 4.7: Coverage Ratio of Imports, Lao PDR, 2015 and 2018**



Source: 2018 NTM database; ERIA-UNCTAD (2018).

**Figure 4.8: Frequency Index of Imports, Lao PDR, 2015 and 2018**

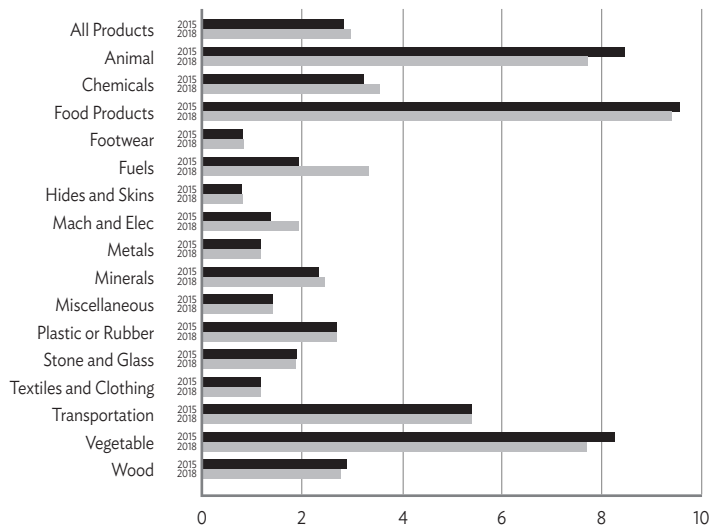


Source: 2018 NTM database; ERIA-UNCTAD (2018).

The frequency ratio of total imports was slightly higher than 0.9 in 2015 and declined minimally in 2018 (Figure 4.8). The frequency indices across product groups were higher than 0.8 in 2015 and 2018, and slightly lower in 2018.

Figure 4.9 shows that, on average, all import products were subject to at least three NTMs in 2015 and 2018, as illustrated by the prevalence scores of total imports. The prevalence scores of imports by product group varied significantly, with the highest value close to 10 and the lowest 1. Food imports had the highest prevalence scores – more than 9 in both periods – implying that, on average, food imports were subject to at least nine NTMs. Imports of animals and vegetables were subject to slightly more than eight NTMs on average in 2015 and slightly fewer than eight in 2018. The prevalence score of imports of transportation was the same in 2015 and 2018 – slightly more than 5. Imports of footwear, hides and skins, metals, and textiles and clothing had prevalence scores of 1 or slightly higher in both periods. The rest of the product groups were subject to two to four NTMs.

**Figure 4.9: Prevalence Score of Imports, Lao PDR, 2015 and 2018**



Source: 2018 NTM database; ERIA-UNCTAD (2018).

## **4. Conclusions and Policy Recommendations**

Most regulations that contain NTMs are ministry-level legislation, which, unlike standard laws, are not readily available or accessible. Even within the ministry, legislation is not centralised but rather kept within the issuing departments, resulting in some redundancy as some agencies issue new regulations without considering existing ones, hindering efforts to collect comprehensive NTM data.

The large number of NTMs issued by line ministries highlights the importance of raising awareness of and increasing knowledge on NTMs. The high incidence of NTMs also reflects a situation where line agencies do not fully realise the impact these regulations could have on trade. NTMs must be streamlined.

As part of its WTO and ASEAN commitments, Lao PDR is already modestly streamlining its NTMs. The Ministry of Industry and Commerce (MIC) has, through the Trade Development Facility (TDF) and with support from development partners, set up a clear agenda to streamline NTMs. The TDF has supported Lao PDR's continued development by facilitating trade, strengthening SPS and TBT frameworks, increasing export competitiveness, building capacity to formulate trade policy, negotiating trade agreements, and taking advantage of global opportunities. The ministry has formed an NTM review working group, with representatives from line ministries, the private sector, and research institutes. The ministry has also collected data on NTMs and made the NTM database available in its trade portal.

Considering the initiatives already taken by the MIC, this chapter recommends the following:

- 1) The MIC needs to keep its momentum in streamlining NTMs. In addition to forming the NTM review working group, it should include NTM issues in the agenda for trade-related meetings amongst high-ranking officials to gain political traction and support for streamlining NTMs. Support from line ministries is necessary because they are the source of most NTMs.
- 2) The MIC could use the ERIA-UNCTAD NTM database to make its own database more comprehensive and up-to-date.
- 3) NTM stakeholders should enhance their knowledge of and capacity to manage NTMs. NTM data collection and analysis, as well as streamlining efforts, should be pursued and enhanced further. To ensure that knowledge and capacity building are sustainable, and that line agencies will always have in-house expertise, trainers should be trained. The participation of local academic and research institutions should be encouraged.
- 4) Line ministries and government agencies need to take stock of their regulation functions and improve the stock keeping of regulations. All regulations should be readily available and accessible. Centralised sources such as the Lao Official Gazette and the Lao Trade Portal should be optimally utilised to improve not only the collection of NTM data but also the country's legal environment.
- 5) As more legislation is expected – driven by the country's membership in the WTO and ASEAN – the NTM database should be regularly updated in the next few years. Updating may be less frequent after that.

## **References**

- Asian Development Bank (ADB) (2018), *Asian Development Outlook 2018: How Technology Affects Jobs*. <https://www.adb.org/sites/default/files/publication/411666/ado2018.pdf> (accessed 2 January 2019).
- Government of the Lao People's Democratic Republic, Ministry of Industry and Commerce (2018), *Lao Trade Portal 2018*. <http://www.laotradeportal.gov.la/> (accessed 5 December 2018).
- Government of the Lao People's Democratic Republic, Ministry of Justice (2015), *Lao Official Gazette*, 2015. <http://laoofficialgazette.gov.la/> (accessed 29 December 2015).
- Government of the Lao People's Democratic Republic, National Assembly (2012), *Law on Legislation Making*. Vientiane: Government of Lao PDR.
- Greater Mekong Subregion (2018), 'Lao PDR Set for Moderate Growth in 2018 and 2019 — ADB'. <https://greatermekong.org/lao-pdr-set-moderate-growth-2018-and-2019-ADB> (accessed 24 March 2019).
- Sayasenh, A. (2016), 'Non-tariff Measures in the Lao People's Democratic Republic', in L.Y. Ing, S. F. de Cordoba, and O. Cadot (eds.), *Non-Tariff Measures in ASEAN*. ERIA Research Project Report 2015-1. Jakarta: ERIA, pp.77–85.
- United Nations Conference on Trade and Development (UNCTAD) (2012), *Non-Tariff Measures to Trade: Economic and Policy Issues for Developing Countries*. Geneva: UNCTAD.
- United Nations Conference on Trade and Development (UNCTAD) (2013), *Classification of Non-tariff Measures, February 2012 Version*. Geneva: UNCTAD.
- World Integrated Trade Solution (WITS) (2019), 'Lao PDR Trade Summary 2016 Data'. <https://wits.worldbank.org/CountryProfile/en/Country/LAO/Year/2016/Summary> (accessed 2 January 2019).

# NON-TARIFF MEASURES IN MALAYSIA

**Evelyn S. Devadason, VGR Chandran Govindaraju,  
and Andrew Kam Jia Yi**

University of Malaya

## **1. Introduction**

This report presents the findings of the project that compiled the 2018 database for non-tariff measures (NTMs) (updated from 2016) for Malaysia. Section 1 describes Malaysia's trade structure in terms of exports and imports and the extent of protectionism in the form of tariffs. It also details the sources of data for constructing the NTM database. Section 2 describes the types of NTMs by chapter and sub-chapter. Section 3 presents some basic indicators of NTMs: the frequency index, coverage ratio, and prevalence score. Section 4 presents conclusions.

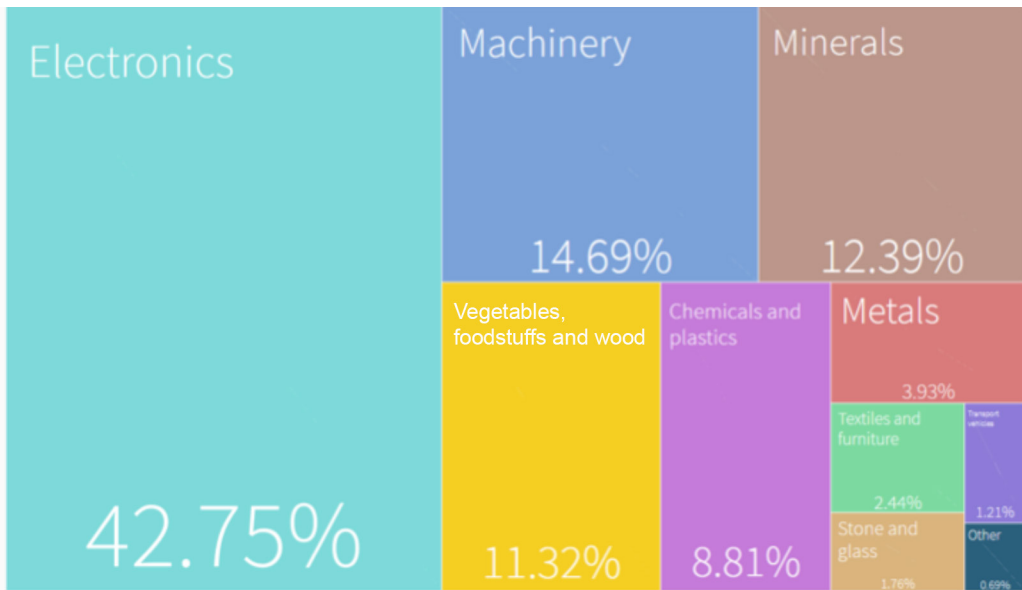
### **1.1 Description of Trade Structure**

#### **1.1.1 Exports**

Malaysia's exports consist mainly of manufactured goods. In 2016, approximately 42.8% of exports were electronics, followed by machinery and minerals (Figure 5.1a). Within electronics, integrated circuits (Figure 5.1b) commanded the largest export share (24%), whilst computers were the largest component of machinery, and petroleum was the largest component of minerals. Palm oil was an important contributor to export earnings.

Table 5.1 compares the top-five exports in 2016 and 2017 at the harmonised system (HS) 6-digit level. In 2016, of the total export value of US\$189.4 billion, 8.6% was contributed by the HS 854231 category. Petrol products (HS 271019 and HS 271111) came in as the second and third most-exported goods, jointly contributing to 8.6% of total exports. The export structure remained the same in 2017.

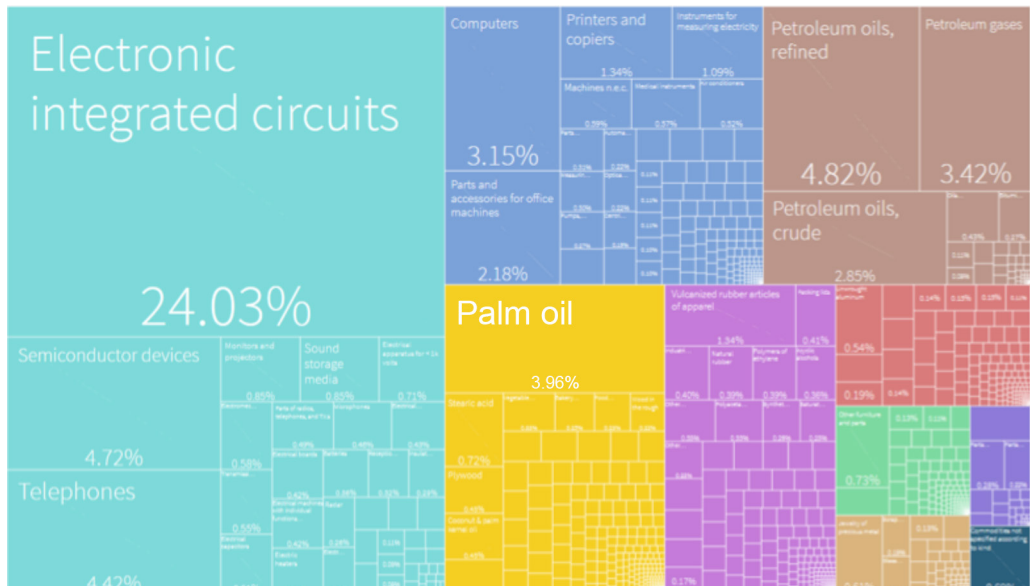
**Figure 5.1a: Broad Composition of Exports, Malaysia, 2016 (%)**



Note: Products are defined at the HS 4-digit level.

Source: Derived from Center for International Development (2019).

**Figure 5.1b: Composition of Exports, by Subsector, Malaysia, 2016 (%)**



Note: Products are defined at the HS 4-digit level.

Source: Derived from Center for International Development (2019).

**Table 5.1: Leading Exports, Malaysia, 2016 and 2017 (US\$ billion)**

Rank	HS 6	2016	Export	Share (%)
	Total	All Products	189.4	100.0
1	854231	Electronic integrated circuits; processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	16.2	8.6
2	271019	Petroleum oils and oils from bituminous minerals, not containing biodiesel, not crude, not waste oils; preparations n.e.c., containing by weight 70% or more of petroleum oils or oils from bituminous minerals; not light oils and preparations	8.5	4.5
3	271111	Petroleum gases and other gaseous hydrocarbons; liquefied natural gas	7.7	4.1
4	151190	Vegetable oils; palm oil and its fractions, other than crude, whether or not refined, but not chemically modified	6.7	3.6
5	854239	Electronic integrated circuits; n.e.c. in heading no. 8542	6.4	3.4
Rank	HS 6	2017	Export	Share (%)
	Total	All Products	216.4	100.0
1	854231	Electronic integrated circuits; processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	18.6	8.6
2	271019	Petroleum oils and oils from bituminous minerals, not containing biodiesel, not crude, not waste oils; preparations n.e.c., containing by weight 70% or more of petroleum oils or oils from bituminous minerals; not light oils and preparations	9.5	4.4
3	271111	Petroleum gases and other gaseous hydrocarbons; liquefied natural gas	9.4	4.3
4	151190	Vegetable oils; palm oil and its fractions, other than crude, whether or not refined, but not chemically modified	7.8	3.6
5	854239	Electronic integrated circuits; n.e.c. in heading no. 8542	7.7	3.6

n.e.c. = not elsewhere classified.

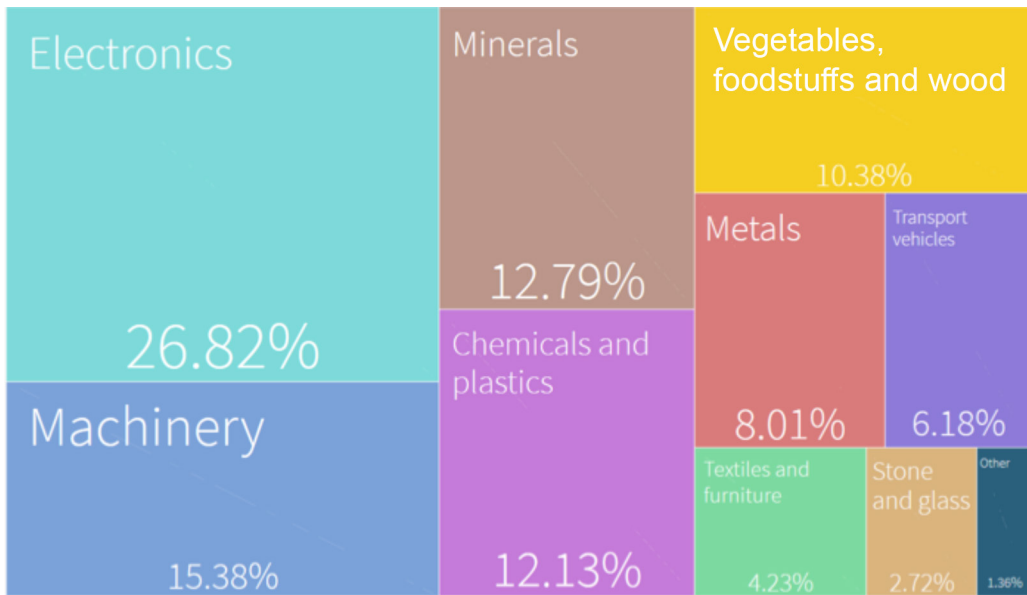
Source: Calculated from UN (2019).

### 1.1.2 Imports

In 2016, Malaysia mainly imported electronics (26.8%), followed by machinery (15.4%), minerals (12.8%), and chemicals and plastics (12.1%) (Figure 5.2a). Imports were less concentrated than exports. However, electronics dominated exports and imports as Malaysia is largely engaged in the trade of parts and components. Electronic integrated circuits contributed over 13.7% of total imports in 2016 (Figure 5.2b). Unlike electronics, the import composition of machinery was more diversified as imports were not dominated by any single category. The largest imported product within machinery was computers, contributing only 1.6% to that category. Conversely, imports of minerals were concentrated in petroleum. The top two leading imports in 2016 and 2017 at the HS 6-digit level were electronics and petroleum (Table 5.2).

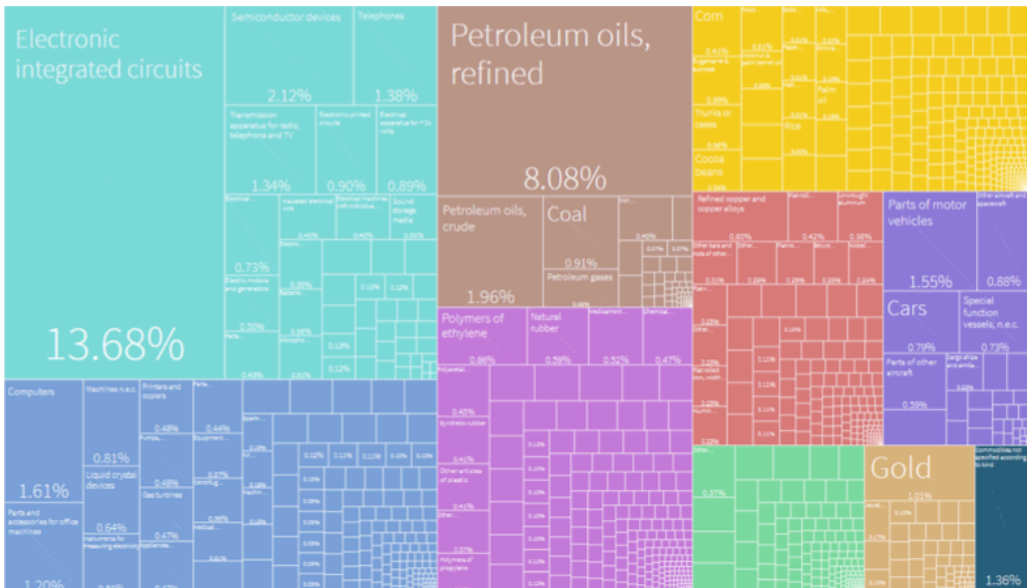


**Figure 5.2a: Broad Composition of Imports, Malaysia, 2016 (%)**



Note: Products are defined at the HS 4-digit level.  
 Source: Derived from Center for International Development (2019).

**Figure 5.2b: Composition of Imports, by Subsector, Malaysia, 2016**



Note: Products are defined at the HS 4-digit level.  
 Source: Derived from Center for International Development (2019).

**Table 5.2: Leading Imports, Malaysia, 2016 and 2017 (US\$ billion, %)**

Rank	HS	2016	Export	Share (%)
	Total	All Products	168.4	100.0
1	854231	Electronic integrated circuits; processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	10.0	5.9
2	854290	Electronic circuits and micro-assemblies; parts of the electrical goods of heading no. 8542	8.8	5.2
3	271019	Petroleum oils and oils from bituminous minerals, not containing biodiesel, not crude, not waste oils; preparations n.e.c., containing by weight 70% or more of petroleum oils or oils from bituminous minerals; not light oils and preparations	7.1	4.2
4	271012	Petroleum oils and oils from bituminous minerals, not containing biodiesel, not crude, not waste oils; preparations n.e.c., containing by weight 70% or more of petroleum oils or oils from bituminous minerals; light oils and preparations	4.8	2.9
5	854239	Electronic integrated circuits; n.e.c. in heading no. 8542	3.9	2.3
Rank	HS	2017	Export	Share (%)
	Total	All Products	193.9	100
1	854231	Electronic integrated circuits; processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	12.3	6.3
2	271019	Petroleum oils and oils from bituminous minerals, not containing biodiesel, not crude, not waste oils; preparations n.e.c., containing by weight 70% or more of petroleum oils or oils from bituminous minerals; not light oils and preparations	9.7	5.0
3	854290	Parts of electronic integrated circuits	8.4	4.4
4	271012	Petroleum oils and oils from bituminous minerals, not containing biodiesel, not crude, not waste oils; preparations n.e.c., containing by weight 70% or more of petroleum oils or oils from bituminous minerals; light oils and preparations	6.9	3.6
5	854239	Electronic integrated circuits; n.e.c. in heading no. 8542	6.6	3.4

n.e.c. = not elsewhere classified.

Source: Calculated from UN (2019).

### 1.1.3 Tariffs

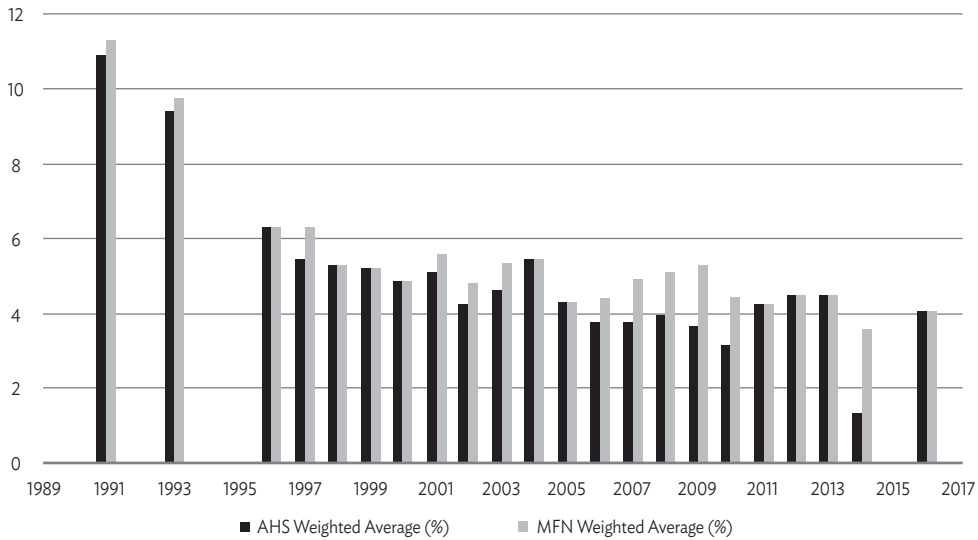
Malaysia has been a member of the General Agreement on Tariffs and Trade (GATT) since 24 October 1957, and of the World Trade Organization (WTO) since 1 January 1995. The effectively applied tariffs<sup>1</sup> for all products for Malaysia decreased substantially in 1996 (Figure 5.3). The weighted mean applied tariffs<sup>2</sup> declined from a high of 10.8% in 1991 to a low of 1.3% in 2014, before increasing to 4.0% in 2016. In 2004, the effectively applied tariffs were further reduced under the Agreement on Trade in Goods of the Framework

<sup>1</sup> An effectively applied tariff is the lowest available tariff. An existing preferential tariff will be used as the effectively applied tariff; otherwise, the most favoured nation (MFN) applied tariff will be used.

<sup>2</sup> Weighted mean applied tariff is the average of effectively applied rates weighted by the product import shares corresponding to each partner country.

Agreement on Comprehensive Economic Co-operation between the Association of Southeast Asian Nations (ASEAN) and China. The reduction in tariffs continued until 2010, when the ASEAN-China free trade agreement (FTA) was realised.

**Figure 5.3: Effectively Applied Tariffs and Most Favoured Nation Weighted Average Tariffs, Malaysia, 1991–2016 (%)**



AHS = effectively applied tariff, MFN = most favoured nation.

Source: Derived from UNCTAD (2019).

The adoption of the then HS 2012<sup>3</sup> nomenclature streamlined Malaysia’s customs tariffs. The most favoured nation (MFN) rates dropped in 2009–2014 (WTO, 2014). Tariff dispersion was reduced, although tariff escalation remained obvious. The effectively applied tariffs were adjusted to address the change in classification. The sharp drop in the effectively applied tariffs in 2014 (Figure 5.3) may be attributed to the final implementation phase of the ASEAN Economic Community (AEC), whereby efforts to implement all outstanding measures were doubled in the run-up to the formation of the AEC at the 26th ASEAN Summit in 2015 (MITI, 2014). For example, the government, under ASEAN and WTO obligations, committed to remove or reduce import duties for automotive products.

<sup>3</sup> Malaysia’s tariff schedule is now based on HS 2017 nomenclature.

## 1.2 Laws and Regulations

### 1.2.1 Regulatory System

The law of Malaysia is mainly based on the common law legal system. The Federal Constitution, the supreme law of the land, provides the legal framework for the laws, legislation, courts, and other administrative aspects of the law. There are three levels of government, and therefore three types of legislation: federal, state, and local government laws.

Federal laws or acts apply throughout the country. However, some acts apply differently to Sabah and Sarawak on matters such as land, wildlife, and forests.<sup>4</sup> State laws are enactments or ordinances, and laws and rules created by local governments or authorities are by-laws. To date, 803 acts are being enforced. This compilation of public (mandatory) NTMs refers to all trade-related acts (Table 5.A1, Appendix). However, if the act comes with a detailed or specific regulation, only the regulation is coded.<sup>5</sup> In some notable exceptions, the act and the corresponding regulation are both coded as the former is more detailed than the latter: Biosafety Act 2007 and Biosafety (Approval and Notification) Regulation 2010, Feed Act 2009 and Feed (Labelling of Feed or Feed Additive) Regulations 2012, Pesticides Act 1974 (Amendments up to 1 January 2006)/Pesticides (Amendment) Order 2010 and Pesticides Regulations (Labelling) 1984, Dangerous Drugs Act 1952 (as of 1 March 2018) and Dangerous Drugs Regulation 1952 (Incorporating latest amendment P.U. (A) 333/2006), and Strategic Trade Act 2010/ Strategic Trade (Amendment) Act 2017 and Strategic Trade (Strategic Items) (Amendment) Order 2017.

### 1.2.2 Sources of Information

To ensure the legal comprehensiveness of the coding exercise, we referred to the following five channels and sources:

- (i) Laws of Malaysia (official portal of the Attorney General's Chambers of Malaysia, [http://www.agc.gov.my/agcportal/index.php?r=portal2/lom&menu\\_id=b21XYmExVUhFOE4wempZdE1vNUVKdz09](http://www.agc.gov.my/agcportal/index.php?r=portal2/lom&menu_id=b21XYmExVUhFOE4wempZdE1vNUVKdz09)). The series is a compilation and reprint of the laws published in volume form pursuant to Section 14A of the Revision of Laws Act 1968. It is the only official and authoritative publication of the laws of Malaysia.

<sup>4</sup> In the Constitution of Malaysia, matters pertaining to land, wildlife, and forests are governed by the Federation and the states of Sabah and Sarawak.

<sup>5</sup> Regulations or 'subsidiary legislation' are more specific as they are guidelines that dictate how the provisions of the act are applied. The reference to regulations will also avoid any redundancy in coding NTMs.

- (ii) Webpages of ministries and government departments (Table 5.A1, Table 5.A2, Appendix).

Sources (i) and (ii) are used to confirm if there have been any updated or amended acts and regulations since 2016. The changes to a specific act or regulation are announced on the webpage of the ministry. For example, the Strategic Trade (Amendment) Act 2017 by the Ministry of International Trade and Industry (MITI) is made available on the ministry's homepage (<http://www.miti.gov.my/index.php/pages/view/4128>). Changes to a specific act or regulation are also made public through briefing sessions. Since 2016, five regulations have been amended or updated: Strategic Trade Act 2010 updated with Strategic Trade (Amendment) Act 2017, Strategic Trade (Strategic Items) (Amendment) Order 2017 (Strategic Trade [Strategic Items] [Amendment] Order 2014 revoked), Electricity Regulation 1994 (Incorporating latest amendments – 431/2003) updated with Electricity Amendment Regulations 2013, Customs (Prohibition of Exports Order) 2017 (Customs [Prohibition of Exports Order] 2012 revoked), Customs (Prohibition of Imports Order) 2017 (Customs [Prohibition of Imports Order] 2012 revoked), and Excise Duties Order 2017 (Excise Duties Order 2012 repealed).

- (iii) Input from the Malaysia Productivity Corporation (MPC), which was reviewing NTMs. To ensure good regulatory practice, the MPC ensures that all regulations are made transparent to stakeholders. The authors of this paper are part of the MPC initiative and have direct access to all the documents referred to, which are used to cross-check any regulations that may have been missed.

- (iv) The Trade Policy Review – Malaysia (WTO, 2017) identifies NTMs such as the following:

- Tariff quotas applied to 27 tariff lines at the HS 10-digit level – live swine and poultry, poultry and pork meat, liquid milk and cream, and round cabbage (NTM Code E6).
- Export duties on live plants, certain seeds, rattan; crude palm oil; palm nuts and kernels suitable for sowing and palm nuts and kernels not suitable for sowing; wood in the rough (108 lines); certain unwrought lead and lead waste and scrap; certain live animals; palm nuts, palm kernel oil (refined, bleached, deodorised); slag, ash, and residues; silver; platinum; refined copper, unwrought; unwrought zinc; palm kernel oil; crude petroleum oil; ferrous waste and scrap; copper waste and scrap;

---

<sup>6</sup> The Customs Prohibition Orders (Exports and Imports) 2017 are covered in the various acts and regulations. These documents are not coded separately in the template to avoid double counting. However, both the Customs (Prohibition of Exports Order) 2017 and Customs (Prohibition of Imports Order) 2017 are used as supplementary documents in case some of the acts or regulations are not covered in the individual documents. For example, Schedule 1 (full prohibition) for both orders does not relate to any individual act or regulation and is therefore taken as an additional measure; likewise for specific items listed in the orders under the Ministry of Defence.

master alloys of copper; nickel mattes; nickel oxide sinters; unalloyed nickel; nickel alloys; aluminium waste and scrap (NTM Code P42). For export duties on crude palm oil, see Malaysian Palm Oil Board, 2018.

- Full prohibition of 15 major product categories (14 from the world and 1 from Indonesia) of Schedule 1, Customs (Prohibition of Imports) Order 2017 (NTM Code E311), on religious, security, health, environmental protection, and safety grounds.
  - A cess (tax or levy) of 0.2% of the export value charged to manufacturers of rubber products.
  - Full prohibition of two major product categories of Schedule 1, Customs (Prohibition of Exports) Order 2017.
  - Import and export licenses required for all goods from and to Israel.
- (v) The Standards of Malaysia Act 1996 (Act 549), amended in 2012, governs matters relating to standardisation and accreditation. It was established under the Department of Standards Malaysia, Ministry of Science, Technology and Innovation. As of February 2017, 510 Malaysia Standards were compulsory. Mandatory standards that are trade related number 493 (Table 5.3). The main categories of products with compulsory standards are electrical products and building and construction materials (WTO, 2017). With the exception of Approval for Electrical Equipment, all other technical standards documents are not available online (for free) and need to be purchased. The content pages of other technical standards are used as a guide to code NTMs, and they are largely confined to B7, B82, and B83

## 2. Descriptive Non-tariff Measure Statistics

This section describes the NTM database in terms of total NTMs and NTM type. It also details the governing institutions of public NTMs. The discussion consistently compares the data on NTMs in 2015 and 2018.

### 2.1 **Comprehensiveness of the Non-tariff Measure Database**

Table 5.3 provides some general statistics on NTMs based on the Economic Research Institute for ASEAN and East Asia (ERIA)–United Nations Conference on Trade and Development (UNCTAD) 2018 database. The NTMs are drawn directly from 79 related acts and regulations (Table 5.A1, Appendix) from 19 issuing institutions (Table 5.A2, Appendix). The number of NTMs increased by 5.5% in 2015–2018. NTMs are expected to increase as measures are put in place in response to public policy objectives (consumer

health and safety, environmental protection, and national security). The number of notifications made to the WTO does not reflect the number of NTMs in the country (Cadot et al., 2013; Malouche et al., 2013).

**Table 5.3: Comprehensiveness of Non-tariff Measures, Malaysia, 2015 and 2018 (number)**

Number	Comprehensiveness	Number	
		2015	2018
1	Total number of coded regulations	79	79
2	Total number of notifications (reported NTMs) made at the WTO	252	320
3	Total number of coded NTMs	876	920
4	Total affected products (HS lines, national tariff lines) (a) Total number of affected products (b) Share of the number of affected products to the number of total products		
5	Total number of issuing institutions	19	19

Note: (a) and (b) refer to the number and share of affected products at the HS 8-digit level. The total number of tariff lines at the HS 8-digit level is 10,635.

Sources: ERIA-UNCTAD (2018); Table 5.A1, Table 5.A2, Appendix; Calculated from WTO (2019).

## 2.2 Non-tariff Measures and Institutions

Of the 19 ministries that administer the acts and regulations with trade-related measures, the Ministry of Health is the most important based on the number of NTMs found in the laws under its portfolio (Table 5.4).

**Table 5.4: Non-tariff Measures by Issuing Institution, Malaysia, 2015 and 2018 (number, %)**

No	Issuing Institution	2015		2018	
		No. of NTMs	Proportion of NTMs (%)	No. of NTMs	Proportion of NTMs (%)
1	Ministry of Health	510	58.2	520	56.5
2	Ministry of Agriculture and Agro-Based Industry	145	16.6	148	16.1
3	Ministry of Natural Resources and Environment	53	6.1	53	5.8
4	Ministry of Plantation Industries and Commodities	41	4.7	41	4.5
5	Royal Malaysian Customs	1	0.1	22	2.4
6	Ministry of Domestic Trade, Co-Operatives and Consumerism	15	1.7	18	2.0
7	Ministry of Finance	15	1.7	15	1.6
8	Ministry of Foreign Affairs	13	1.5	13	1.4
9	Energy Commission	11	1.3	11	1.2

No	Issuing Institution	2015		2018	
		No. of NTMs	Proportion of NTMs (%)	No. of NTMs	Proportion of NTMs (%)
10	Ministry of Human Resources	10	1.1	10	1.0
11	Others	62	7.0	69	7.5
Total		876	100	920	100

Note: The Ministry of Natural Resources and Environment has been renamed Ministry of Water, Land and Natural Resources. The Ministry of Science, Technology and Innovation has been renamed Ministry of Energy, Science, Technology, Environment and Climate Change.

Source: ERIA–UNCTAD (2018).

## 2.3 Types of Non-tariff Measures

The total number of NTMs increased from 876 in 2015 to 920 in 2018 (Table 5.5). Most were from the import side, as export measures (chapter P) constitute only approximately 15% of all NTMs. The NTMs are highly concentrated, distributed across only 6 of the 16 chapters (UNCTAD, 2018). Technical measures<sup>7</sup> dominate the NTM landscape. Technical barriers to trade (TBT) are the most prominent NTM type, followed by sanitary and phytosanitary (SPS) measures, together accounting for 76.8% in 2015 and 75.7% in 2018.

**Table 5.5: Non-tariff Measures by Chapter, Malaysia, 2015 and 2018 (number, %)**

Chapter	2015		2018	
	No. of NTMs	Proportion of NTMs (%)	No. of NTMs	Proportion of NTMs (%)
A Sanitary and phytosanitary (SPS) measures	317	36.19	324	35.22
B Technical barriers to trade (TBT)	356	40.64	372	40.43
C Pre-shipment inspection and other formalities	6	0.68	6	0.65
D Contingent trade protective measures	0	0.0	0	0.0
E Non-automatic licensing, quotas, prohibitions, and quantity control measures for other than SPS or TBT reasons	40	4.57	49	5.33
F Price control measures, including additional taxes and charges	29	3.31	29	3.15
G Finance measures	0	0.0	0	0.0
H Measures affecting competition	0	0.0	0	0.0
I Trade-related investment measures	0	0.0	0	0.0
J Distribution restrictions	0	0.0	0	0.0
K Restriction on post-sales services	0	0.0	0	0.0
L Subsidies (excluding export subsidies under P7)	0	0.0	0	0.0

<sup>7</sup> Technical measures include sanitary and phytosanitary measures, technical barriers to trade, and pre-shipment inspection and other formalities (A, B, and C).



Chapter	2015		2018	
	No. of NTMs	Proportion of NTMs (%)	No. of NTMs	Proportion of NTMs (%)
M Government procurement restrictions	0	0.0	0	0.0
N Intellectual property	0	0.0	0	0.0
O Rules of origin	0	0.0	0	0.0
P Export-related measures	128	14.61	140	15.22
<b>Total</b>	<b>876</b>	<b>100</b>	<b>920</b>	<b>100</b>

NTM = non-tariff measure.

Note: The chapters are based on the UNCTAD (2018) classification.

Source: ERIA–UNCTAD (2018).

Table 5.6 compares the top-10 NTMs based on sub-chapter in 2015 and 2018. The top-10 NTMs were from TBT, SPS, and export measure chapters in both years. The two most prominent sub-chapters were B7 (product quality or performance requirement), followed by A22 (restricted use of certain substances in food and feed and their contact materials).

**Table 5.6: Top-10 Non-tariff Measures, by Sub-chapter, Malaysia, 2015 and 2018 (number, %)**

No	NTM Type	2015		2018	
		No. of NTMs	Proportion of NTMs (%)	No. of NTMs	Proportion of NTMs (%)
1	B7	162	18.49	166	18.04
2	A22	125	14.27	127	13.8
3	B31	86	9.82	90	9.78
4	A31	70	7.99	73	7.93
5	B6	39	4.45	40	4.35
6	E1	35	3.98	40	4.35
7	A83	37	4.22	37	4.02
8	P43	17	1.94	18	1.96
9	A33	16	1.83	16	1.85
10	P11	16	1.83	17	1.74

NTM = non-tariff measure.

Notes: (1) The sub-chapters are based on the UNCTAD (2018) classification. (2) E1 includes E111, E119, and E121.

Source: ERIA–UNCTAD (2018).

### 3. Incidence of Non-tariff Measures

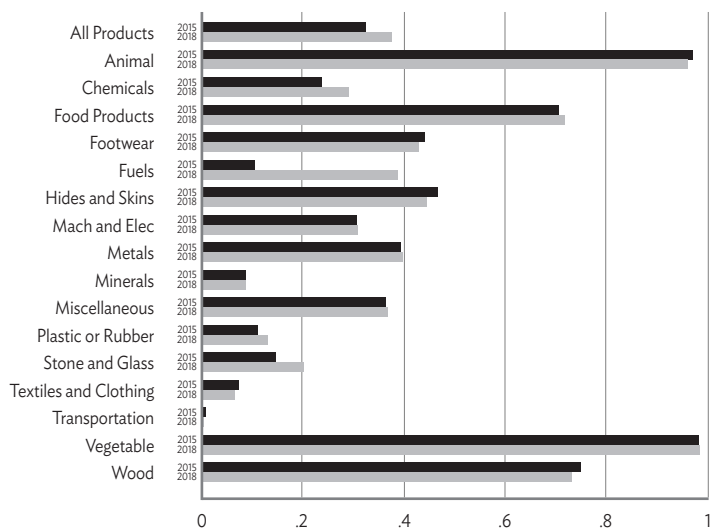
This section discusses NTM coverage ratios, frequency indices, and prevalence scores, which are the foundation of the inventory approach and show the importance of NTMs for

trade and the sectors affected. The coverage ratio is based on the value of trade (exports or imports) subject to NTMs, whilst the frequency index accounts only for the presence of NTMs on the tariff line item without indicating the value of trade (exports or imports) covered. Since the coverage and frequency ratios do not consider whether more than one type of NTM is applied to the same product, the prevalence score is calculated to capture the average number of NTMs that apply to a product.

### 3.1 Export Perspective

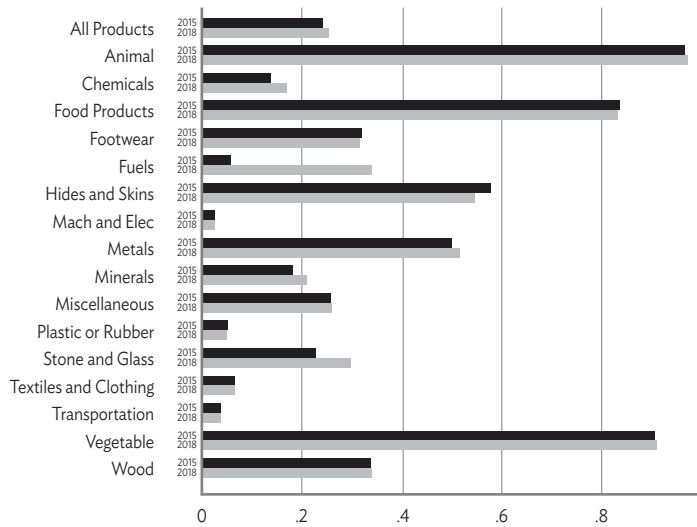
Exports have a relatively low coverage ratio (Figure 5.4) and a frequency ratio of below 0.4 (Figure 5.5). The coverage ratio is higher than the frequency ratio for most sectors, reflecting greater use of NTMs for the more exportable products. More importantly, the use of NTMs varies considerably across sectors. The incidence of NTMs based on the coverage ratio is more than 0.7 for vegetables, followed by animal products, wood, and food, mainly because vegetables and animal products are largely covered by export licensing and permits and food safety standards (Devadason et al., 2018). Vegetables, food, and wood comprise the fourth-largest export category (Figure 5.1a).

**Figure 5.4: Export Coverage Ratio, Malaysia, 2015 and 2018**



Note: Non-tariff measures (NTMs) with partial coverage (measures that cover an HS 6 product only partially in a country) and horizontal NTMs (measures that apply to all products in a country) are not included in the calculation of the coverage ratio.

Source: ERIA-UNCTAD (2018).

**Figure 5.5: Frequency Index of Exports, Malaysia, 2015 and 2018**

Note: Non-tariff measures (NTMs) with partial coverage (measures that cover an HS 6 product only partially in a country) and horizontal NTMs (measures that apply to all products in a country) are not included in the calculation of the coverage ratio.

Source: ERIA-UNCTAD (2018).

The incidence of NTMs increased notably for fuels in 2015–2018 (Figure 5.4, Figure 5.5) because regulatory instruments were strengthened with the passing of the Gas Supply (Amendment) Act 2016. Petroleum products were also further subject to excise duties under the Excise Duties Order 2017.

Figure 5.6 indicates that most products are subject to more than one regulatory measure. An average of six export-related NTMs were applied to animal products in 2018. The large number of export measures in this sector suggests that it is highly regulated.<sup>8</sup>

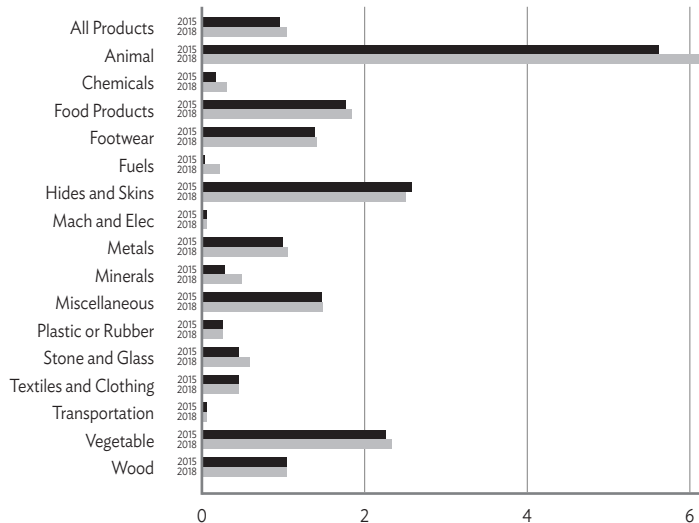
### 3.2 Import Perspective

The coverage ratio shows that imports are much more regulated than exports (Figure 5.4, Figure 5.7). The sectors with a high incidence of NTMs on the import side (Figure 5.7, Figure 5.8) – vegetables, animal products, and food – are also highly regulated on the export side (Figure 5.4, Figure 5.5). For example, a phytosanitary certificate stating that vegetables are free from diseases or pests is required to import them. Vegetables and food are the third-largest import category. Apart from vegetables, animal products, and food,

<sup>8</sup> Conclusive results cannot be drawn on the stringency of the regulatory framework based on the prevalence scores alone, as measures within the same chapter are similar and often impose a lighter burden than measures from other chapters.

machinery and electronics contribute the most export earnings and have more NTMs applied to imports than to exports.

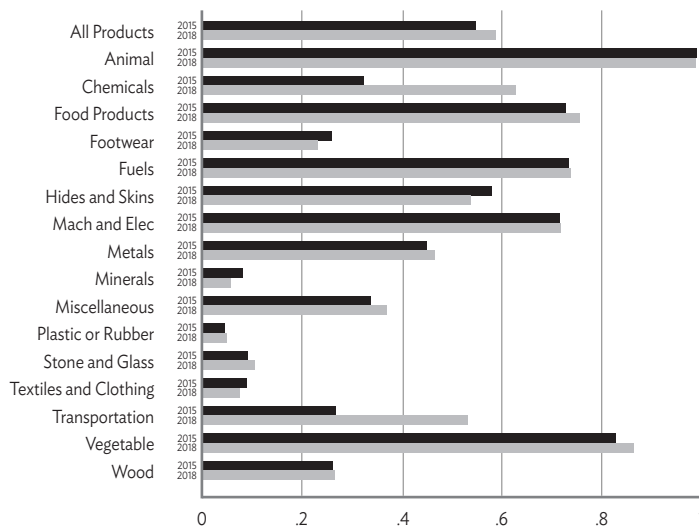
**Figure 5.6: Prevalence Score of Exports, Malaysia, 2015 and 2018**



Note: Non-tariff measures (NTMs) with partial coverage (measures that cover an HS 6 product only partially in a country) and horizontal NTMs (measures that apply to all products in a country) are not included in the calculation of the coverage ratio.

Source: ERIA-UNCTAD (2018).

**Figure 5.7: Import Coverage Ratio, Malaysia, 2015 and 2018**

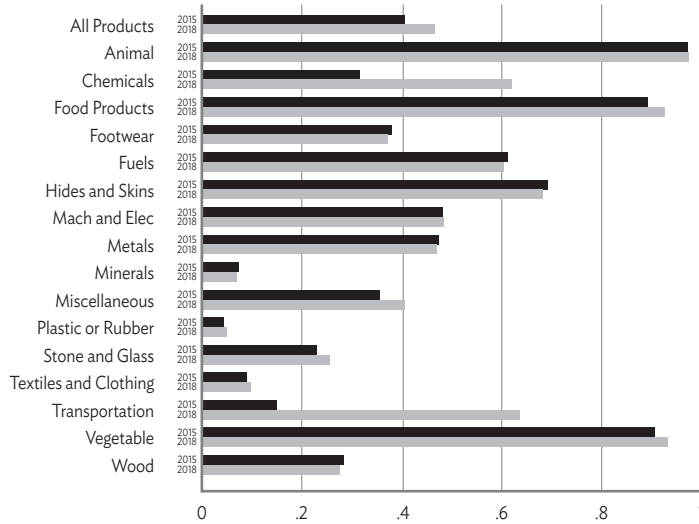


Note: Non-tariff measures (NTMs) with partial coverage (measures that cover an HS 6 product only partially in a country) and horizontal NTMs (measures that apply to all products in a country) are not included in the calculation of the coverage ratio.

Source: ERIA-UNCTAD (2018).

Figure 5.7 and Figure 5.8 also depict a substantial increase in the incidence of NTMs for chemicals and transportation in 2015–2018. Many taxes and duties are imposed on transportation to protect the domestic industry.

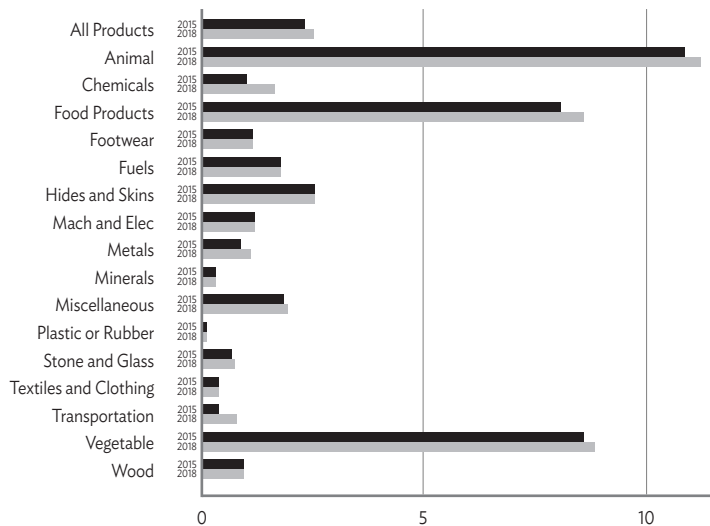
**Figure 5.8: Frequency Index of Imports, Malaysia, 2015 and 2018**



Note: Non-tariff measures (NTMs) with partial coverage (measures that cover an HS 6 product only partially in a country) and horizontal NTMs (measures that apply to all products in a country) are not included in the calculation of the coverage ratio.

Source: ERIA–UNCTAD (2018).

**Figure 5.9: Prevalence Scores of Imports, Malaysia, 2015 and 2018**



Note: Non-tariff measures (NTMs) with partial coverage (measures that cover an HS 6 product only partially in a country) and horizontal NTMs (measures that apply to all products in a country) are not included in the calculation of the coverage ratio.

Source: ERIA–UNCTAD (2018).

The prevalence scores are higher on the import than the export side. For example, the average number of import-related NTMs applied to animal products was 10 in 2018.

## **4. Conclusion**

The new NTM database provides much-needed transparency on the extent to which trade is regulated beyond tariffs, as there is significant underreporting of NTMs to the WTO. The data indicate a higher usage of standard-like NTMs (SPS and TBT) than other measures to regulate trade. The data also reveal that imports are more highly regulated than exports, with significant heterogeneity in the incidence of NTMs across sectors. Multiple stacking of NTMs within sectors is also evident.

The database, however, does not indicate which standard-like NTMs serve a dual purpose of non-trade policy objectives and (hidden or concealed) protectionism. Further engagement with stakeholders (government agencies, businesses) is needed to identify unnecessary (and hidden) barriers and NTMs that burden traders. This should be the next stage – the follow-up initiative – of the NTM project.

Regulatory reform should follow from regulatory identification. National reforms should be undertaken at least once in five years since NTMs do not increase substantially based on the three year interval analysis of this report. Having said that, the decision to remove NTMs should be confined only to measures that favour some economic agents over society, whilst reforms should tackle measures that burden businesses. For the latter, which also constitute legitimate standard-like NTMs, procedural reforms are needed as removal of these measures is not an option. Ultimately, removing hidden barriers in NTMs will lower the costs of doing business.

## **References**

Center for International Development (2019), Atlas of Economic Complexity, Retrieved from: <http://atlas.cid.harvard.edu/> (accessed on 12 February 2019).

Cadot, O., E. Munadi, and L.Y. Ing (2013), 'Streamlining NTMs in ASEAN: The Way Forward', *ERIA Discussion Paper 2013-24*. Jakarta: Economic Research Institute for ASEAN and East Asia.

- Devadason, E.S., V.G.R. Chandra, and K. Kalirajan (2018), 'Harmonization of Food Trade Standards and Regulations in ASEAN: The Case of Malaysia's Food Imports', *Agricultural Economics*, 49, pp.97-109.
- Malaysian Palm Oil Board (2018), 'Export Duties 2018', Economic and Industries Development Division MPOB. <http://bepi.mpob.gov.my/index.php/en/statistics/export-duties/185-export-duties-2018/841-export-duties-2018.html>.
- Malouche, M., J.-D. Reyes, and F. Amir (2013), 'Making Trade Policy More Transparent: A New Database of Non-tariff Measures', *Economic Premise*, No.123. Washington, DC: World Bank.
- United Nations (UN) (2019), UN Comtrade online database, Retrieved from: <https://comtrade.un.org/data/> (accessed on 12 February 2019).
- United Nations Conference on Trade and Development (UNCTAD) (2018), 'International Classification of Non-Tariff Measures' (Interim 2018 Version). Geneva: UNCTAD.
- United Nations Conference on Trade and Development (UNCTAD) (2019), UNCTAD Trains online database, Retrieved from: <https://wits.worldbank.org/CountryProfile/en/Country/MYS/StartYear/1989/EndYear/2017/TradeFlow/Import/Indicator/MFN-WGHTD-AVRG/Partner/WLD/Product/all-groups#> (accessed 12 February 2019).
- World Trade Organization (WTO) (2017), *Trade Policy Review – Malaysia*. [https://www.wto.org/english/tratop\\_e/tpr\\_e/s292\\_e.pdf](https://www.wto.org/english/tratop_e/tpr_e/s292_e.pdf) (accessed on 10 September 2018).
- World Trade Organization (WTO) (2017), I-TIP Goods online database, Retrieved from: <https://i-tip.wto.org/goods/> (accessed 12 February 2019).

## Appendix

Table 5.A1: Trade-related Acts and Regulations in Malaysia

No	Acts and Regulations
1	Animal Importation Order 1962
2	Animal Rules 1962
3	Assignment of Export Duty (Mineral Ores) Act 1964 (Revised 1989)
4	Assignment of Revenue (Export Duty on Iron Ore) Act 1962
5	Arms Licensing Regulations 1961
6	Arms (Fees) Regulations 1977
7	Biosafety Act 2007
8	Biosafety (Approval and Notification) Regulation 2010
9	Chemical Weapons Convention Act 2005 (Incorporating latest amendments – 1 September 2006)
10	Common Gaming Houses Act 1953/ Common Gaming Houses (Amendment) Act 2013
11	Communications and Multimedia (Technical Standards) Regulations 2000 (incorporating latest amendment P.U. (A) 280/2001)
12	Consumer Protection (Certificate of Conformance and Conformity Mark of Safety Standards) (Amendment) Regulations 2016
13	Construction Industry Development Board Act 1994 (Act 520) (Amended 1 June 2015 – Act A1407)
14	Control of Padi and Rice Act 1994
15	Control of Drugs and Cosmetics Regulations 1984
16	Control of Tobacco Product Regulations 2004 (Amended 2013)
17	Corrosive and Explosives Substances and Offensive Weapons Ordinance 1958
18	Control of Supplies Act 1961 (Act 122) (as of 1 December 2011)
19	Customs (Prohibition of Exports) Order 2017
20	Customs (Prohibition of Imports) Order 2017
21	Dangerous Drugs Act 1952 (as at 1 March 2018)
22	Dangerous Drugs Regulations 1952
23	Electricity Regulation 1994 (Incorporating latest amendments – 431/2003) (Electricity Amendment Regulations 2013)
24	Emergency (Prohibition of Uniforms and Dresses) Regulation 1974
25	Environmental Quality (Control of Lead Concentration in Motor Gasoline) Regulations 1985
26	Environmental Quality (Prohibition on the Use of Chlorofluoro-carbons and Other Gases as Propellants and Blowing Agents) Order 1993
27	Environmental Quality (Refrigerant Management) Regulations 1999
28	Environmental Quality (Halon Management) Regulations 1999
29	Environmental Quality (Control of Emissions from Motorcycles) Regulations 2003
30	Environmental Quality (Control of Emission from Diesel Engines) Regulations 1996
31	Environmental Quality (Control of Petrol and Diesel Properties) Regulations 2007
32	Excise Duties Order 2017
33	Explosives Act 1957 (Amendments up to 1 January 2006)



No	Acts and Regulations
34	Factories and Machinery (Steam Boiler and Unfired Pressure Vessel) Regulations 1970
35	Federal Agricultural Marketing Authority (Grading, Packaging and Labelling of Agricultural Produce) Regulations 2008
36	Feed Act 2009
37	Feed (Labelling of Feed or Feed Additive) Regulations 2012
38	Fish Marketing Regulations 2010
39	Fisheries (Control of Endangered Species) Regulation 1999 (Amended 2008)
40	Fisheries (Fish Disease Control, Compliance for Exports and Imports) Regulations 2012
41	Fisheries (Quality Control of Fish for Export to the European Union) Regulation 2009 (Amended 2010)
42	Food Export (Issuance of Health Certificate for Export of Fish and Fish Products to the European Union) Regulation 2009
43	Food Regulations 1985 (Amended 2014)
44	Food Irradiation Regulations 2011
45	Gas Supply Regulations 1997 (Amended 2017)
46	Guidelines to Apply for Import License for Motor Vehicles
47	International Trade in Endangered Species (Permit, Certificate, Registration, and Fees) Regulations 2009
48	Kimberley Process Certification Scheme (KPCS)
49	Malaysian Biofuel Industry (Licensing) Regulations 2008
50	Malaysian Cocoa Board Regulations 2012
51	Malaysian Palm Oil Board (Licensing) Regulations 2005 (Amended 2011)
52	Malaysian Palm Oil Board (Quality) Regulations 2005
53	Malaysian Quarantine and Inspection Services Act 2011
54	Malaysian Rubber Board (Licensing and Permit Regulations) 2014
55	Malaysian Timber Industry Board (Incorporation) Act 1973
56	Medical Device Regulations 2012
57	Motor Vehicles (Safety Seatbelts) Rules 1978
58	Motorcycle (Safety Helmet) Rules 1973 (Amendment 2010)
59	Motor Vehicle (Construction and Use) (Amendment) Rules 2007
60	National Kenaf and Tobacco Board Act 2009
61	National Heritage Act 2005 (Act 645)
62	Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013
63	Occupational Safety and Health (Use of Standards and Exposure of Chemicals Hazardous to Health) Regulations 2000
64	Pesticides Act 1974 – Amendments up to 1 January 2006 / Pesticides (Amendment) Order 2010
65	Pesticides Regulations (Labelling) 1984
66	Petroleum (Safety Measures) Act 1984 (Amended 1991)
67	Pineapple Industry Act 1957 (as of 1 February 2013)
68	Plant Quarantine Regulations 1981
69	Poisons Regulation 1952

## NON-TARIFF MEASURES IN ASEAN - AN UPDATE

No	Acts and Regulations
70	Poisons (Psychotropic Substances) Regulations 1989
71	Prevention and Control of Infectious Disease Act 1988
72	Radiation Protection (Transport) Regulations 1989 (Incorporating latest amendment P.U. (A) 146/91)
73	Radiation Protection (Licensing) Regulations 1986
74	Strategic Trade Act 2010/ Strategic Trade (Amendment) Act 2017
75	Strategic Trade (Strategic Items) (Amendment) Order 2017
76	Tin Control Act 1954 (Revised 1988) (Amended 1 January 2006)
77	Wildlife Conservation Act 2010 (Applies to Peninsular Malaysia only)
	<b>Acts and Regulations (Apply to East Malaysia)*</b>
78	Wildlife Protection Ordinance 1998 (Applies to Sarawak only)
79	Wildlife Conservation Enactment 1997 (Applies to Sabah only)

\*Included because in the Constitution of Malaysia, matters pertaining wildlife are governed by the states of Sabah and Sarawak.

**Table 5.A2: Relevant Ministries and Departments in Malaysia**

No	Ministries and Departments
1	<b>Ministry of Health</b> Pharmaceutical Services Division
2	<b>Ministry of Agriculture and Agro-based Industry</b> Department of Quarantine and Inspection Services Malaysia Department of Veterinary Services Department of Fisheries National Paddy and Rice Board
3	<b>Ministry of Natural Resources and Environment</b> Department of Environment Minerals and Geoscience Department Forestry Department Peninsular Malaysia Department of Biosafety Department of Wildlife and National Parks Peninsular Malaysia
4	<b>Ministry of Plantation Industries and Commodities</b> Malaysian Rubber Board Malaysian Cocoa Board Malaysian Palm Oil Board National Kenaf and Tobacco Board Malaysian Pineapple Industry Board Malaysian Timber Industry Board

No	Ministries and Departments
5	<b>Ministry of Human Resources Malaysia</b> Department of Occupational Safety and Health
6	<b>Ministry of Finance</b>
7	<b>Ministry of Foreign Affairs</b> National Authority for Chemical Weapons Convention
8	<b>Ministry of Home Affairs</b>
9	<b>Energy Commission</b>
10	<b>Malaysian Communications and Multimedia Commission</b>
11	<b>Ministry of Science, Technology and Innovation</b> Atomic Licensing Energy Board Minerals and Geoscience Department
12	<b>Ministry of International Trade and Industry</b>
13	<b>Ministry of Works</b> Construction Industry Development Board
14	<b>Ministry of Tourism and Culture</b> Construction Industry Development Board
15	<b>Ministry of Transport</b> Road Transport Department
16	<b>Ministry of Domestic Trade, Co-Operatives and Consumerism</b>
17	<b>Ministry of Defence</b>
18	<b>Royal Malaysian Police</b>
19	<b>Royal Malaysian Customs</b>

# NON-TARIFF MEASURES IN MYANMAR<sup>1</sup>

**Ha Thi Thanh Doan**

Economic Research Institute for ASEAN and East Asia

## 1. Introduction

This report presents the major findings from the updated Myanmar database of non-tariff measures (NTMs) in the Association of Southeast Asian Nations (ASEAN). A joint effort between the Economic Research Institute for ASEAN and East Asia (ERIA) and the United Nations Conference on Trade and Development (UNCTAD), the database provides the most comprehensive information on trade-related regulations at the NTM-product level for 10 ASEAN countries.

Section 1 introduces key trade reforms and provides an overview of the country's composition of exports and imports. Section 2 illustrates the legal system related to the issuance and management of NTMs. Section 3 explains the status of NTM utilisation, broken down by issuing agency, NTM type, and product. Section 4 recommends policies to further strengthen regulatory reform.

### 1.1. Composition of Trade

#### *Exports*

Figure 6.1a and Figure 6.1b highlight three features of exports. First, resource-based sectors – minerals and agriculture – accounted for the lion's share of exports in 2016, followed by textiles. Within minerals, petroleum remained the most important export, contributing about 30% of the total export value in 2016, leaving dried legumes, the second-largest export, far behind at 9%. Second, textile exports comprised mainly a handful of products,

---

<sup>1</sup> Research assistance by Muhamad Rizqy Anandhika is gratefully acknowledged.

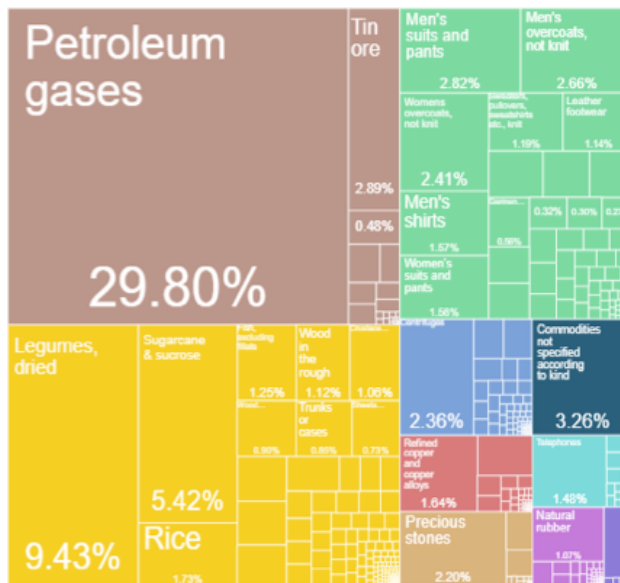
such as suits and pants, shirts, and overcoats. The lack of diversification made the country vulnerable to world price volatility. Finally, key exports created limited value-added. Products in the regional value chain, such as electronics and machinery, generated only around 6% of export earnings.

**Figure 6.1a: Broad Composition of Exports, Myanmar, 2016**



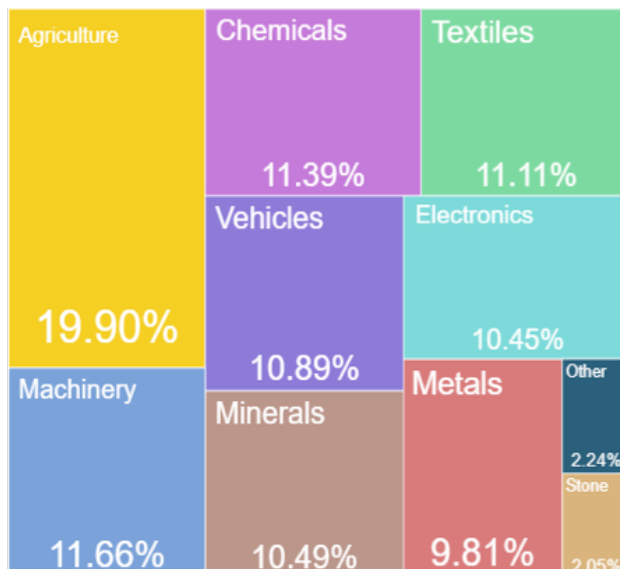
Note: Products are defined at the Harmonised System 1-digit level.  
 Source: CID (2019).

**Figure 6.1b: Composition of Exports, by Subsector, Myanmar, 2016**



Note: Products are defined at the Harmonised System 1-digit level.  
 Source: CID (2019).

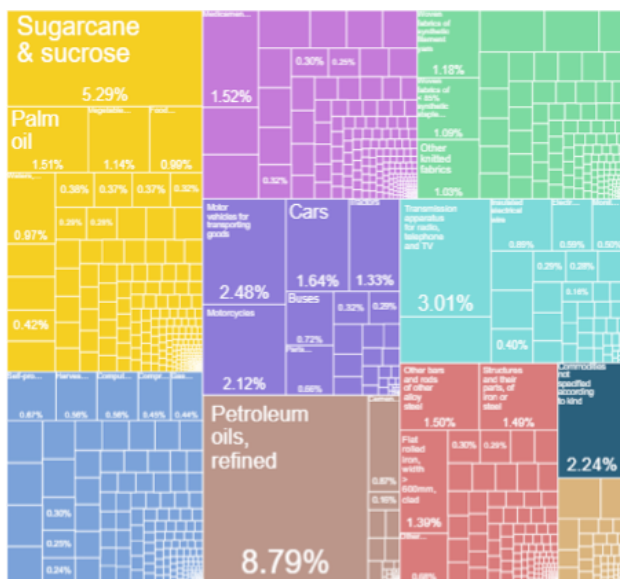
**Figure 6.2a: Broad Composition of Imports, Myanmar, 2016**



Note: Products are defined at the Harmonised System 1-digit level.

Source: CID (2019).

**Figure 6.2b: Composition of Imports, by Subsector, Myanmar, 2016**



Note: Products are defined at the Harmonised System 1-digit level.

Source: CID (2019).

## Imports

Imports are more diverse than exports. Of US\$22 billion of imports in 2016, agricultural products accounted for 20%. Capital goods and intermediate inputs also made up a significant portion of the import basket. Unlike exports, imports were not dominated by a single category: textiles, machinery, electronics, vehicles, minerals, and metals each accounted for approximately 10% of total imports.

### 1.2. Trade Reform

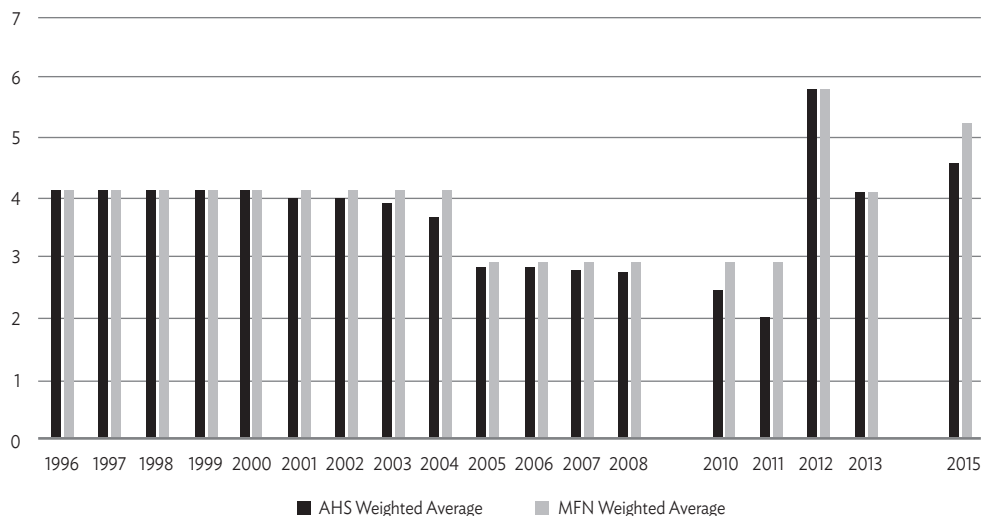
Despite being an original member of the World Trade Organization (WTO),<sup>2</sup> Myanmar was isolated from the world during decades of political turmoil. It was not until 2011, under a new, civilian-led government, that the country started to pursue significant reforms to stimulate structural shifts, improve national competitiveness, and promote economic growth. The comprehensive reforms included efforts to reintegrate the country into the global economy.

Following WTO principles, the government coordinated closely with ministries to facilitate trade by, first, issuing, amending, or revising a number of trade-related regulations in line with international commitments. The Export and Import Law, Foreign Investment Law, and Foreign Exchange and Management Law were all introduced in 2012. In principle, laws must be consistent with WTO agreements. As a WTO member, Myanmar imposed low import tariffs (Figure 6.3), which suggests there is not much room to further liberalise tariffs. Myanmar adopted international standards and technical regulations for sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT), including those from the International Organization for Standardization (ISO), ASEAN standards, CODEX for food, European Union for fishery products, British International Standards for pharmaceutical products, World Organization for Animal Health's standards for animal products, and International Electrotechnical Commission standards for electrical products, to name a few. Under WTO commitments, Myanmar does not apply tariff-rate quotas, quantitative restrictions, subsidies, safeguards, or countervailing measures. The government has relaxed regulations on import and export licensing by narrowing product scope subject to licenses (WTO, 2014).

---

<sup>2</sup> Myanmar became a member of the General Agreement on Tariffs and Trade on 29 July 1948, and of the WTO on 1 January 1995.

**Figure 6.3: Import Tariffs, Myanmar, 1996–2015 (%)**



AHS = effectively applied tariff, MFN = most favoured nation.

Note: AHS is the lowest available tariff. If a preferential tariff exists, it is used as the AHS. Otherwise, the MFN applied tariff is used. Both tariffs are weighted by trade value.

Source: WITS (2019).

Myanmar enters into regional trade arrangements, notably, free trade agreements within ASEAN and ASEAN Plus with China, India, the Republic of Korea, and Japan, amongst others. Under the ASEAN Trade in Goods Agreement, Myanmar grants 0%–5% tariffs on approximately 85% of tariff lines for imports from ASEAN, whilst Myanmar’s exports to ASEAN enjoy similar treatment. ASEAN and East Asian countries account for approximately 90% of Myanmar’s exports and imports, and these agreements are expected to speed up reforms, creating huge market potential and opportunities for the country to participate in expanding regional value chains.

Besides revising sector- and partner-specific regulations, Myanmar improved the trade environment through good regulatory practice. In 2014, the country conducted its first WTO trade policy review to improve outsiders’ understanding of the country’s trade and investment environment. The government ratified the Trade Facilitation Agreement in December 2015 and established the National Trade Facilitation Committee to implement it. To encourage private sector engagement in trade, in 2014, the government established the Private Sector Development Committee, which organises monthly formal consultations between government and business. The National Trade Repository is being developed to improve transparency and is connected to the ASEAN Trade Repository to facilitate regional trade (Papa and Doan, 2018).



## 2. Hierarchy of Laws and Regulations

### 2.1. Regulatory System

The Constitution is the supreme law, followed by, in descending order of importance, laws, rules, regulations, by-laws, notifications, orders, directives, and procedures (WTO, 2014). A lower-level regulation must be consistent with a higher-level one.

Laws are drafted by members of the two houses under Parliament – the House of Nationalities and the House of Representatives – or by ministries. The draft is circulated amongst line ministries for comment. After consulting related agencies, the initiator of the legislative bill revises the draft. The Ministry of Commerce may consult international organisations about NTMs. After consultation and revision, the bill is submitted to Parliament for approval. The bill then goes to the President Office for signing and promulgation as law. The new law is announced through the media and the President Office website (WTO, 2014).

Legal documents are collected from three main sources: (1) ministries' official archives; (2) the Official Gazette, which contains updated information on regulations; and (3) the Office of the Attorney General's extensive list of laws, Cabinet orders, and Cabinet and ministerial ordinances (Thein and Naing, 2017). Myanmar is building a trade portal, which will store all the country's trade-related regulations.

### 2.2. Comprehensiveness of Non-tariff Measures

Table 6.1 summarises the comprehensiveness of the data collection exercise conducted in 2018, which includes the update of regulations from 2016 to 2018 and the revision of earlier regulations in the 2015 database. Since Myanmar has not made any notifications to the WTO, the updated ERIA–UNCTAD (2019) NTM database is an extremely helpful reference for government officials, business, and trade negotiators on trade-related regulations in force.

There were almost twice as many coded regulations in 2018 as in 2015; the 88 coded regulations included new, amended, and revised ones. The use of trade-related regulations is increasing: the number of coded NTMs rose by approximately 40%, from 193 to 267. Three new agencies contributed to this increase: Union Parliament, Myanmar Investment Commission, and Supervision Committee for Motor Vehicle Importing. The last agency is under the Ministry of Commerce. They issued the Special Tax Law, Notification

No.15/2017 (listing restrictive investment activities), and Notification No. 1/2016 (setting the year of production of motor vehicles imported during 2017).

**Table 6.1: Comprehensiveness of Non-tariff Measures, Myanmar, 2015 and 2018 (number, %)**

Number	Comprehensiveness	Number	
		2010	2018
1	Total number of coded regulations	46	88
2	Total number of notifications (NTMs reported to WTO) <sup>3</sup>	N/A	N/A
3	Total number of coded NTMs	193	267
4	(a) Total affected products (HS lines, national tariff lines), total number of affected products	10,813	10,813
	(b) Share of the number of affected products to the number of total products	100%	100%
5	Total number of issuing institutions	10	13

Source: Authors, based on ERIA–UNCTAD (2019).

### 3. Descriptive Statistics of Non-tariff Measures

#### 3.1. By Regulatory Agency

Table 6.2 breaks down NTMs by issuing institution. Three observations are worth noting. First, the Ministry of Agriculture, Livestock and Irrigation was the most important agency dealing with NTMs, even though the share of NTMs it issued declined from 49% to 39%. Under its portfolio were SPS-related regulations specified in the Pesticide Law, Animal Health and Development Law, Marine Fisheries Law, Fish Farming Law, Plant Pest Quarantine Law, Acquaculture Law, National Food Law, and Seed Law.

Second, the share of NTMs under the Ministry of Commerce increased substantially. In 2015, only seven NTMs were in its portfolio. In 2018, remarkably, there were 64, making the ministry the second most important agency for NTM issues, accounting for one-fourth of total NTMs.

The Ministry of Commerce is responsible for drafting trade-related legislation and coordinating and implementing policy across government agencies. The increasing number of NTMs under the ministry may reflect the dynamics of trade reform, as the

<sup>3</sup> Myanmar appointed national enquiry points to the WTO for all concerns related to TBT and SPS measures, but the WTO did not receive any notifications from the country (WTO, 2014).

economy integrates into the world. New ministry regulations include notifications on licensing for products in positive or negative lists; regulations on imports of heavy manufacturing products such as construction machinery and transport vehicles (cars, aircraft, motobikes); removal of import prohibition on certain agricultural products; and relaxation of trading rights for foreign-invested companies. In contrast to the common perception that NTMs restrict trade, some of these regulations liberalise trade by simplifying procedures and expanding the scope of products to be traded. However, other NTMs, such as the controversial policy on car imports, may burden enterprises.

**Table 6.2: Incidence of Non-tariff Measures, by Issuing Institution, Myanmar, 2015 and 2018 (number, %)**

No.	Issuing Institution	2015		2018	
		Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
1	Ministry of Agriculture, Livestock and Irrigation	94	48.7	104	39.0
2	Ministry of Commerce	7	3.6	64	24.0
3	Ministry of Health and Sports	22	11.4	23	8.6
4	Ministry of Natural Resources and Environmental Conservation	21	10.9	21	7.9
5	Ministry of Home Affairs	16	8.3	16	6.0
6	State Peace and Development Council (SPDC)*	17	8.8	17	6.4
7	Ministry of Electricity and Energy	9	4.7	9	3.4
8	Ministry of Industry	4	2.1	6	2.2
9	Ministry of Transport and Communications	2	1.0	2	0.7
10	Ministry of Planning and Finance	1	0.5	2	0.7
11	Others	0	0.0	3	1.1
	<b>Total</b>	<b>193</b>	<b>100.0</b>	<b>267</b>	<b>100.0</b>

\* Previously the State Law and Order Restoration Council (SLORC), renamed by the Adaptation of Expression Law, 1997 (SDPC Law No 1/97).

Source: Authors, based on ERIA-UNCTAD (2019).

Third, the number of NTMs issued by other regulatory agencies remained stable. In 2018, the Ministry of Health and Sports and the Ministry of Natural Resources and Environmental Conservation accounted for about 8% each of total NTMs; 12 regulatory agencies accounted for 20%.

### 3.2. Non-tariff Measures by Type

Table 6.3 shows three major findings. First, technical measures – SPS and TBT – were the most prominent type of NTMs in both years. SPS measures and TBT together accounted

for half of total NTMs in 2018. Most SPS measures are under the Ministry of Agriculture, Livestock and Irrigation through various laws and regulations with clear non-trade objectives.

**Table 6.3: Incidence of Non-tariff Measures by Type, Myanmar, 2015 and 2018 (number, %)**

Category	Issuing Institution	2015		2018	
		Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
A	Sanitary and phytosanitary (SPS) measures	78	40.4	80	30.0
B	Technical barriers to trade (TBT)	33	17.1	51	19.1
C	Pre-shipment inspection and other formalities	2	1.0	6	2.2
E	Non-automatic import licensing, quotas, prohibitions, quantity-control measures, and restrictions other than SPS measures or TBT	21	10.9	36	13.5
F	Price control measures, including additional taxes and charges	14	7.3	20	7.5
G	Finance measures	0	0.0	3	1.1
H	Measures affecting competition	1	0.5	1	0.4
I	Trade-related investment measures	1	0.5	5	1.9
K	Restriction on post-sales services	0	0.0	0	0.0
L	Subsidies (excluding export subsidies under P7)	0	0.0	0	0.0
M	Government procurement restrictions	1	0.5	1	0.4
N	Intellectual property	0	0.0	0	0.0
P	Export related measures	42	21.8	64	24.0
	<b>Total</b>	<b>193</b>	<b>100.0</b>	<b>267</b>	<b>100.0</b>

NTM = non-tariff measure.

Note: NTM classification is based on the United Nations Conference on Trade and Development M4 NTM classification. The database does not cover measures under category D (contingent trade protective measures), J (distribution restrictions), and O (rules of origin).

Source: Authors, based on ERIA-UNCTAD (2019).

Regarding TBT, the top requirements include labelling and packaging, production and post-production, product quality and safety, and conformity assessment. TBT from the Ministry of Commerce focus on transport vehicles, machinery, construction materials, and petroleum products. The Ministry of Health maintains TBT on cosmetics, cigars and tobacco, medicines, and chemicals. Several regulations under the Ministry of Agriculture, Livestock and Irrigation also contain TBT, such as the regulation on new seed variety registration, Pesticide Law, National Food Law, and Fertiliser Law. SPS measures and TBT are legitimate tools to achieve public policy goals and are here to stay. Instead of eliminating them, their trade-restricting effects can be minimised by reducing procedural costs through good design and efficient implementation.

Second, in absolute terms, the number of NTMs either increased or remained unchanged in all sub-categories. The largest increase occurred in TBT (33 to 51), non-automatic import licensing and other quantitative restrictions (21 to 36), price controls (14 to 20), and export-related measures (42 to 64). The utilisation of non-technical measures, including those in categories C, E, and F, may require further justification. Most regulations containing C, E, or F measures are claimed to be used to protect the environment, animal and human health and safety, and security. However, the objectives are not always clear-cut.

For example, agriculture products subject to price controls are governed by the Ministry of Agriculture, Livestock and Irrigation under regulations for importing and exporting animals and animal products. Whilst these regulations cover virtually all meat products, including pork, beef, chicken, mutton, and horse, quarantine fees and health certificate fees apply to only some cases.

Third, export-related measures (P) constitute nearly one-fourth of total NTMs. Amongst export NTMs, licensing (P33) and SPS- and TBT-related export measures (P1) are the most widely used. Licensing affects a wide range of products, including animals, chemicals, food, minerals, machinery and electronics, and transportation. P1 measures do not cover heavy manufacturing goods.

Not all regulations restrict exports. Some facilitate trade by shortening the list of prohibited exports, such as Notification No. 62/2016 (Announcement on Amending Liberalised Commodities for Export), Notification No. 1/2011 (Prohibition for Export), and Notification No. 9/2018 (Export Negative List), all under the Ministry of Commerce.

**Table 6.4: Top-10 Non-tariff Measures, Myanmar, 2015 and 2018 (number, %)**

No.	NTM Type	NTM Description	2015		2018	
			Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
1	E1	Non-automatic import-licensing procedures other than authorisations covered by sanitary and phytosanitary (SPS) and technical barriers to trade chapters	13	6.74	19	7.12
2	P33	Licensing, permit, or registration requirements to export	13	6.74	17	6.37
3	A83	Certification requirement	13	6.74	13	4.87
4	F61	Custom-inspection, -processing and -servicing fees	11	5.70	12	4.49
5	B7	Product-quality, -safety or -performance requirement	4	2.07	11	4.12
6	A64	Storage and transport conditions	10	5.18	10	3.75
7	A82	Testing requirement	8	4.15	8	3.00

No.	NTM Type	NTM Description	2015		2018	
			Number of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
8	A86	Quarantine requirement	7	3.63	7	2.62
9	A14	Authorisation requirement for SPS reasons for importing certain products	4	2.07	6	2.25
10	A31	Labelling requirements	6	3.11	6	2.25

NTM = non-tariff measure, UNCTAD = United Nations Conference on Trade and Development.

Note: NTM classification is based on the UNCTAD M4 NTM classification. The database does not cover measures under categories D (contingent trade-protective measures), J (distribution restrictions), and O (rules of origin).

Source: Authors, based on ERIA-UNCTAD (2019).

Table 6.4 ranks the top-10 NTMs using more detailed classification. Consistent with the pattern in Table 6.3, SPS-related measures concerning conformity assessment (A8) dominate the list. Non-automatic licensing (for imports) and export licensing also make up a not-insignificant portion of all NTMs.

### 3.3. By Product

Since NTMs serve multiple purposes, their application varies across product categories. This section documents the pattern of NTM usage at the 2017 HS two-digit level. The discussion utilises three descriptive indicators of NTM incidence: frequency index, coverage ratio, and prevalence score. The frequency index measures the share of traded products affected by at least one NTM. The frequency index is easy to compute but does not reflect the importance of different products in the export or import basket. For example, if NTMs are applied to a small number of products, the frequency index is small. If trade is highly concentrated in a few key products, as in Myanmar, however, the effect of NTMs on trade can be large. The coverage ratio overcomes this shortage by measuring the share of trade value affected by at least one NTM, instead of counting the number of products. The prevalence score counts the average number of NTMs imposed on one traded product.

#### Exports

Figure 6.4 demonstrates the frequency index and Figure 6.5 the coverage ratio. Overall, exports in Myanmar have a high NTM incidence. In 2018, almost 100% of export products and nearly 90% of the export value were affected by at least one NTM. The coverage ratio was noticeably lower than the frequency index in chemicals, metals, minerals, plastic or rubber, machinery and electronics, transportation, and wood, reflecting less application of NTMs to more export-intensive products. The coverage ratio was equal to or larger than

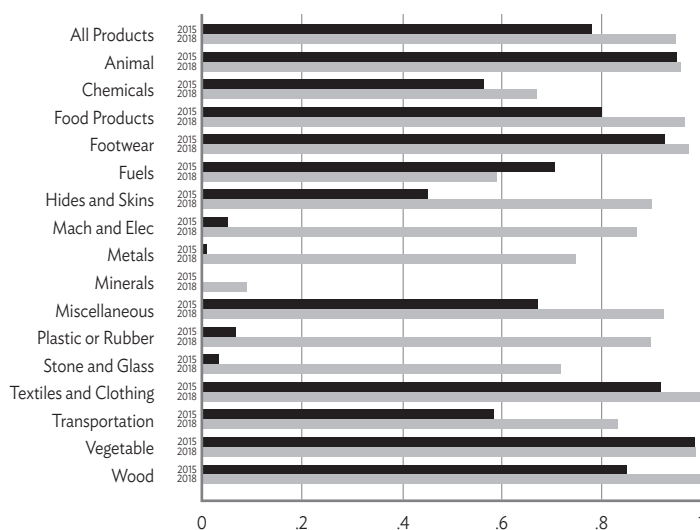
the frequency index in the agricultural sector, footwear and textiles, and fuels, implying greater application of NTMs to more exportable products.

The use of NTMs varied remarkably across sectors, particularly if trade value is considered. Minerals, metals, chemicals, and plastic and rubber were less regulated. The coverage ratio of minerals and metals were lower than 20%, whilst for chemicals, plastic and rubber it was around 30%. Heavy manufacturing products, such as transportation and machinery and electronics, were moderately regulated. Their coverage ratio was approximately 60%. The largest coverage ratios were for agricultural products, textile and footwear, fuels, and hides and skins, affecting over 90% of trade value. Agricultural products, textiles, and minerals were the top exports, which explains the large coverage ratio.

Sectors that saw the largest increase in NTM incidence were hides and skins, machinery and electronics, metals, plastic and rubber, stone and glass, and transportation. This rise corresponded to the strengthening of regulatory instruments with the passing of new regulations. These included, for example, notification on the export and import of gold, notification of the export positive list and liberalised commodities for exports, and the introduction of measures affecting trade in vehicles, including the trading rights of foreign-invested firms.

Figure 6.6 shows that each product was subject, on average, to two NTMs. Consistent with Figure 6.4 and Figure 6.5, agricultural products were subject to the largest number of NTMs, as SPS measures were widely used.

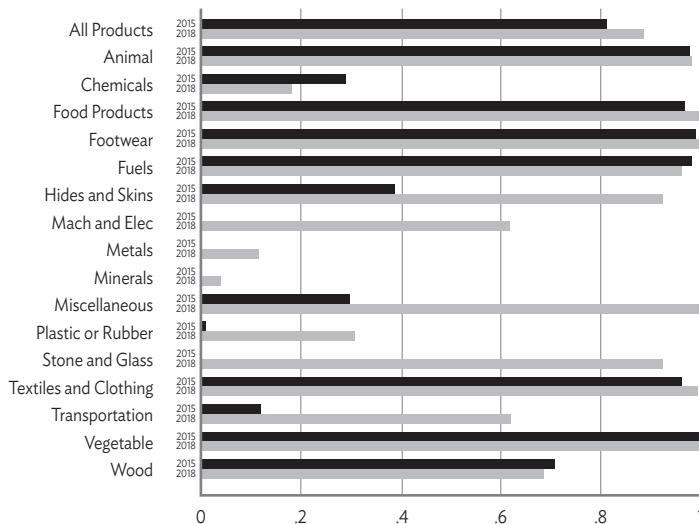
**Figure 6.4: Frequency Index of Exports, Myanmar, 2015 and 2018**



Note: Products with partial coverage are not included.

Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

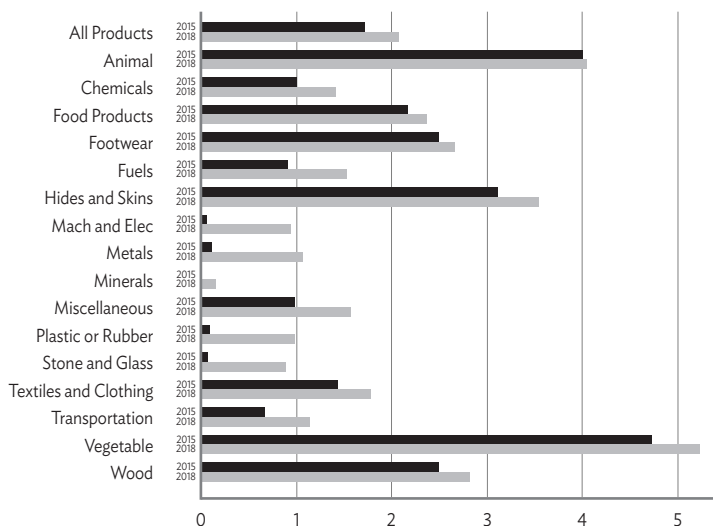
**Figure 6.5: Coverage Ratio of Exports, Myanmar, 2015 and 2018**



Note: The trade year used is based on the latest available import data at the HS 6-digit level from UN-COMTRADE (2019). Products with partial coverage are not included.

Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

**Figure 6.6: Prevalence Score of Exports, Myanmar, 2015 and 2018**



Notes: Products with partial coverage are not included.

Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

### Imports

Figure 6.7 shows the frequency index of imports, and Figure 6.8 the coverage ratio. Imports are subject to high NTM incidence. In 2018, NTMs were imposed on nearly 90% of imports, measured by the number of tariff lines and by trade value. The frequency index and coverage

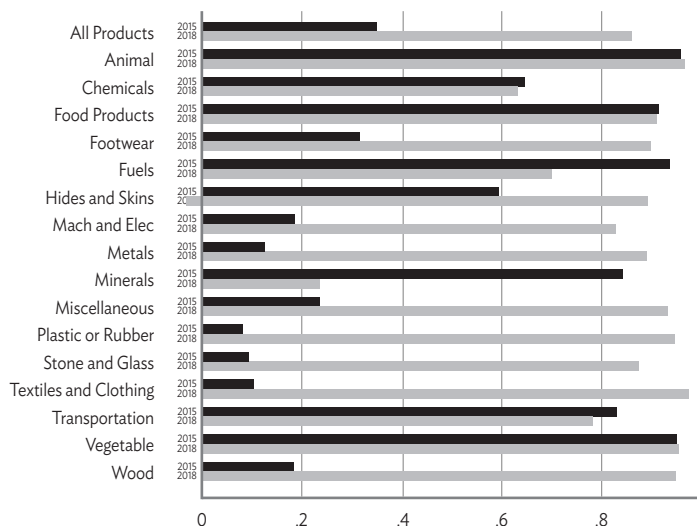


ratio were more or less equal in most sectors. Remarkable deviations from this pattern were in chemicals, fuels, and minerals, which had coverage ratios significantly higher than the frequency indices, which is consistent with the sectors being import-intensive.

As in the case of exports, an increase in NTM incidence amongst imports may be expected as a result of ongoing trade reform. Figure 6.7 shows that the frequency index more than doubled in 2015–2018, from around 40% to nearly 90%. The frequency index accelerated within 3 years in nine out of sixteen sectors. As a result, the coverage ratio rose from over 60% to 90% for almost all products. Animal, chemicals, food products and vegetable, however, experienced minor changes in the NTM prevalence. These sectors were heavily regulated in both years. In addition, for fuels and minerals, the decline in frequency index was not accompanied by a corresponding decrease in coverage ratio, probably because NTM in 2015 already covered more import-intensive fuel and mineral products. Transportation, on the contrary, exhibited a larger decline in coverage ratio compared to that in frequency index. Figure 6.9 implies that, based on the number of NTMs per product, agricultural products were heavily regulated under various SPS-related regulations.

New regulations to accelerate reform issued after 2015 covered a wide range of products, a significant portion of which were from the Ministry of Commerce. Some regulations were import-specific and targeted a narrow range of products, such as cars for showrooms, construction machinery, cosmetics, chemicals, and seeds. Other regulations applied to imports and exports, such as regulations on trade in petroleum and in gold. As with exports, a not-insignificant fraction of regulations aims to facilitate trade by permitting foreign firms to trade certain products or by shortening the import negative list.

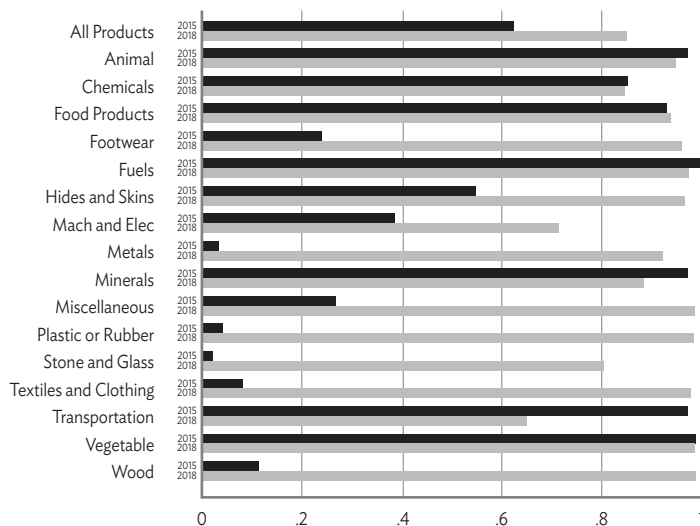
**Figure 6.7: Frequency Index of Imports, Myanmar, 2015 and 2018**



Notes: Products with partial coverage are not included.

Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

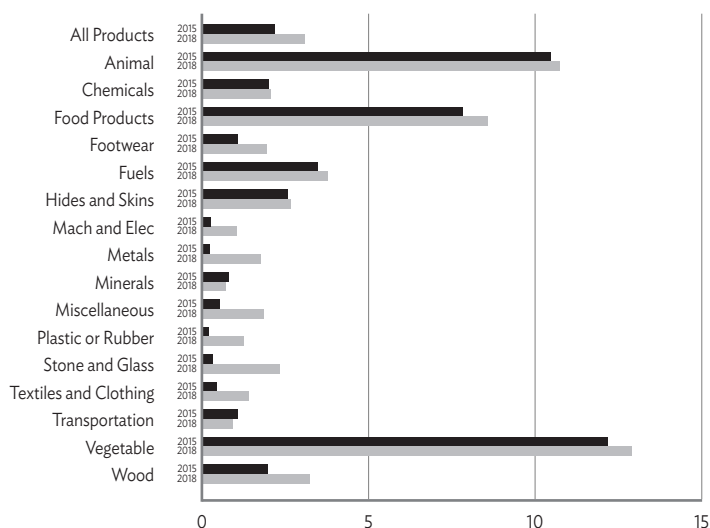
**Figure 6.8: Coverage Ratio of Imports, Myanmar, 2015 and 2018**



Notes: The trade year used is based on the latest available import data at the HS 6-digit level from UN-COMTRADE (2019). Products with partial coverage are not included.

Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

**Figure 6.9: Prevalence Score of Imports, Myanmar, 2015 and 2018**



Notes: Products with partial coverage are not included.

Source: United Nations Conference on Trade and Development calculations, based on UNCTAD-ERIA (2019).

## 4. Conclusion and Policy Recommendations

The study found the following. First, the number of NTMs increased significantly by type and product in 2015–2018: from 163 to 297, corresponding to an increase in number of trade-related regulations from 46 to 88. Contrary to the common perception that NTMs

restrict trade, some new regulations facilitate trade, reflecting the country's efforts to reintegrate into the global market after long political turmoil. The Ministry of Commerce is the focal point in drafting regulations and coordinating across line ministries.

Second, as in many countries, technical measures accounted for a large share of NTMs. SPS measures and TBT applied to imports together accounted for 50% of total NTMs in 2018. Most SPS-related measures are managed by the Ministry of Agriculture, Livestock and Irrigation. Agencies involved in TBT are the Ministry of Commerce; Ministry of Agriculture, Livestock and Irrigation; and Ministry of Health. SPS measures and TBT are legitimate tools to achieve public policy goals. Instead of eliminating them, the government should reduce procedural costs through good design and efficient implementation to minimise their trade-restricting effects.

Third, non-technical measures that are not encouraged under the WTO, such as price controls and non-automatic licensing, constitute a not-insignificant share of total NTMs. Non-automatic licensing is the most popular NTM. Whilst some measures aim to protect consumer and animal welfare, others do not have clear-cut objectives.

Fourth, exports and imports are highly regulated by NTMs. NTM incidence is particularly high for resource-based products, including agricultural products, fuels, and chemicals. As trade gradually expands, manufacturing sectors such as machinery and electronics, footwear, and textiles are subject to rising NTM incidence.

The increasing use of NTMs should be interpreted with a caveat. Neither the number of NTMs nor the indicators (section 3) reflect the measures' stringency. Two countries may apply the same NTM to the same product, but stringency depends on the standards they adopt. Regulatory agencies should apply international standards to their NTMs, particularly technical ones.

The database does not indicate whether a regulation or a measure is issued with protectionist intent. This report does not aim to distinguish between NTMs and non-tariff barriers, as it is impossible to do so. Such assessment requires comprehensive review and consultation with stakeholders, including the issuing agencies and the private sector.

Given the country's ongoing efforts to stimulate trade through regulatory reforms, the increasing use of NTMs is not necessarily alarming. As poor design and implementation could incur significant costs, however, good regulatory practice should be taken seriously. A good starting point for streamlining NTMs is to make them more transparent. A comprehensive NTM database must be used and maintained. Myanmar should complete the NTM section of the National Trade Repository and link it to the ASEAN Trade

Repository platform. Coordination amongst line ministries through the NTM focal points will help smoothen the work flow by ensuring coherent and consistent policymaking. Finally, consultation with the private sector on design and impact assessment would help identify bottlenecks and make policies more effective.

## **References**

Center for International Development at Harvard University (CID) (2019), 'Atlas of Economic Complexity'. <http://atlas.cid.harvard.edu> (accessed 27 February 2019).

Economic Research Institute for ASEAN and East Asia and United Nations Conference on Trade and Development (2019), *ERIA-UNCTAD NTM database, 2018*. Geneva: United Nations Conference on Trade and Development (raw data).

Papa and H.T.T. Doan (2018), 'Trade Facilitation in Myanmar and Results of the ASTFI Baseline Study', in ERIA ASTFI Team, 'Towards Seamless Trade Facilitation in ASEAN – Trade Facilitation in ASEAN and Results from ASTFI Baseline Study'. The Economic Research Institute for ASEAN and East Asia. Unpublished.

Thein, C.C. and Z.Z. Naing (2016), 'Report on Non-tariff Measures in Myanmar', in L.Y. Ing, S. Cordoba, and O. Cadot (eds.) *Non-Tariff Measures in ASEAN*. Jakarta: The Economic Research Institute for ASEAN and East Asia, pp.103–12.

United Nations (2019), 'UN Comtrade Database'. <https://comtrade.un.org> (accessed 18 February 2019).

World Bank (2019), 'World Integrated Trade Solutions (WITS) database'. <https://wits.worldbank.org> (accessed 15 March 2019).

World Trade Organization (2014), 'Trade Policy Review: Myanmar', Document No. WT/TPR/S/293. [https://www.wto.org/english/tratop\\_e/tpr\\_e/tp393\\_e.htm](https://www.wto.org/english/tratop_e/tpr_e/tp393_e.htm) (accessed 30 April 2019).

# PHILIPPINE NON-TARIFF MEASURE PROJECT

**Cecilia V. Reyes**

## **1. Introduction**

### **1.1. The Economy**

The Philippines is one of the most dynamic economies in Asia and the Pacific thanks to increasing urbanisation, a growing middle-income class, and a large young population. The country's economic dynamism is rooted in strong consumer demand supported by a vibrant labour market and robust remittances. Business activities are buoyant, especially in services, including business process outsourcing, real estate, and finance and insurance (World Bank, 2018). The Philippines' primary exports include electronics, other manufactured products, machinery and transport equipment, metal components, and chemicals, sold mainly to Japan, the United States, China, the Republic of Korea (henceforth, Korea), and Hong Kong.

The economy is the world's 37th largest by current US\$ gross domestic product (GDP). It is also the 14th-largest economy in Asia and the 7th-largest in the Association of Southeast Asian Nations (ASEAN) (World Bank, 2017).

The economy is transitioning from agriculture to services and manufacturing. Although it is one of Asia's fastest-growing economies, however, the Philippines has major problems related to alleviating the wide income and growth disparities between regions and socioeconomic classes, reducing corruption, and investing in infrastructure to ensure growth.

**Table 7.1: Economic Indicators, Philippines, 2005, 2010, 2018**

	2005	2010	2018
GDP (million current US\$)	103,072	199,591	304,906
GDP growth rate (annual %, constant 2010 prices)	4.8	7.6	6.9
GDP per capita (current US\$)	1,195.0	2,130.0	2,951.0
Economy: Agriculture (% of gross value added)	12.7	12.3	9.7
Economy: Industry (% of gross value added)	33.9	32.6	30.9
Economy: Services and other activities (% of gross value added)	53.5	55.1	59.5
Employment in agriculture (% of employed)	36	33.2	25.3
Employment in industry (% of employed)	15.6	15	17.8
Employment in services (% employed)	48.5	51.8	56.8
Unemployment rate (% of labour force)	7.8	3.6	5.9
Labour force participation rate (female/male population %)	47.7 / 76.6	48.6 / 76.1	49.8 / 75.1
Consumer price index (2010=100)	...	...	112
Agricultural production index (2004–2006=100)	99	112	113
International trade: Exports (million current US\$)	41,255	51,498	68,713
International trade: Imports (million current US\$)	49,487	58,468	101,889
International trade: Balance (million current US\$)	- 8,233	- 6,970	- 33,177
Balance of payments, current account (million US\$)	1,990	7,179	- 2,518

Source: United Nations (2018).

## 1.2. Trade Structure

Total external trade in goods in 2017 was US\$164.806 billion (Department of Trade and Industry, 2019), with total import receipts of US\$96.093 billion against total export receipts of US\$68.713 billion, or a balance of trade in goods of negative US\$27.380 billion (Table 7.2).

**Table 7.2: Exports and Imports, Philippines, 2017 (US\$ million)**

	Amount
Exports	68,713
Imports	96,093
Total	164,806
Balance of trade	-27,380

Source: Department of Trade and Industry (2019).

### 1.3.1. Export Composition, 2017

Export sales of the top-10 commodities totalled US\$50.235 billion, accounting for 73.11% of total export revenue in 2017. Primary exports included semiconductors and electronic products, transport equipment, copper products, chemicals, and various mineral products (Table 7.3). Major trading partners included Japan, China, the United States, Singapore, Korea, the Netherlands, Hong Kong, Germany, Taiwan, and Thailand (Table 7.4).

In 2017, cathodes, bananas, and electronic equipment and parts entered the top-10 list, replacing woodcraft, coconut oil, and apparel and clothing accessories.

**Table 7.3: Top Commodity Exports, Philippines, 2017 (US\$ million)**

Commodity	Amount	Share
Electronic products	32,704	47.60%
Other manufactured goods	4,092	5.96%
Machinery and transport equipment	3,795	5.52%
Ignition wiring sets and other wiring sets used in vehicles, aircrafts, and ships	2,030	2.95%
Metal components	1,496	2.18%
Chemicals	1,370	1.99%
Cathodes and sections of cathodes, of refined copper	1,270	1.85%
Other mineral products	1,191	1.73%
Electronic equipment and parts	1,158	1.69%
Bananas (fresh)	1,129	1.64%
Other commodities	18,478	26.89%
<b>Total exports</b>	<b>68,713</b>	

Source: Department of Trade and Industry (2019).

The top-10 export markets had combined trade worth US\$56.248 billion or 81.8% of the total exports in 2017. Germany and the Netherlands entered the top-10 export partners in 2017, replacing Malaysia and Indonesia.

**Table 7.4: Top Export Markets, Philippines, 2017**

Country	Amount	Share (%)
Japan	10,853	15.79%
United States	9,661	14.06%
Hong Kong	9,024	13.13%
China	8,017	11.67%

Country	Amount	Share (%)
Korea, Republic of	4,334	6.31%
Singapore	3,973	5.78%
Thailand	2,741	3.99%
Germany	2,676	3.89%
Netherlands	2,518	3.66%
Taiwan	2,451	3.57%
Other countries	12,465	18.14%
<b>Total exports</b>	<b>68,713</b>	

Source: Department of Trade and Industry (2019).

### 1.3.2. Import Composition, 2017

In 2017, the total payment for the country's top-10 import commodities was US\$66.314 billion, or 69.01% of total import payments. The top-10 commodities imported remained unchanged from the previous year.

**Table 7.5: Top Commodity Imports, Philippines, 2017 (US\$ million)**

Commodity	Amount	% Share
Electronic products	23,331	24.28%
Mineral fuels, lubricants, and related materials	10,594	11.02%
Transport equipment	10,025	10.43%
Industrial machinery and equipment	5,904	6.14%
Iron and steel	4,073	4.24%
Other food and live animals	3,074	3.20%
Miscellaneous manufactured articles	2,785	2.90%
Telecommunication equipment and electrical machinery	2,561	2.67%
Plastic in primary and non-primary forms	2,231	2.32%
Cereals and cereal preparations	1,736	1.81%
Other commodities	29,780	30.99%
<b>Total exports</b>	<b>96,093</b>	

Source: Department of Trade and Industry (2019).

In 2017, the top-10 import supplier countries had a total bill of US\$74.925 billion or about 77.9% of overall imports for the year. The top-10 countries remained the same from the previous year.



**Table 7.6: Top Import Suppliers, Philippines, 2017 (US\$ million)**

Country	Amount	Share
China	17,464	18.17%
Japan	10,912	11.36%
Korea, Republic of	8,465	8.81%
United States	7,784	8.10%
Thailand	6,759	7.03%
Indonesia	6,352	6.61%
Singapore	5,599	5.83%
Taiwan	5,090	5.30%
Malaysia	3,785	3.94%
Hong Kong	2,715	2.83%
Other countries	21,168	22.03%
<b>Total</b>	<b>96,093</b>	

Source: Department of Trade and Industry (2019).

### 1.3.3. *Tariff Reductions under Most Favoured Nation and Free Trade Agreements*

#### **Most Favoured Nation**

The most favoured nation (MFN) tariff structure is composed of 15 tariff levels, 0%–65%, covering 2017–2020. More than half the tariff lines (54%) have MFN duty rates of 0%–5%, whilst lines with duties of 10% and up account for more than a fifth (22%) of total tariff lines. By 2019, at least 14.3% of all tariff lines, up from 12.8% in 2018, will have a 0% tariff rate (Tariff Commission, 2019).

In 2000, the simple average tariff rate (SATR) for all products under MFN was 7.60%. The MFN SATR decreased slightly to 6.31% in 2015 and remained almost the same in 2016 and 2017 (World Bank, 2019). In the same benchmark year, the percentage of duty-free lines (PDFL) for all MFN products was 3.09%, increasing to 4.64% in 2015, dipping slightly to 4.58% in 2016, and increasing to 5.09% in 2017 (World Integrated Trade Solution, 2019) (Table 7.A2, Appendix).

The SATR for MFNs in 2000 was slightly higher than SATRs across all products (or overall), which was 7.19% (World Integrated Trade Solution, 2017). In that year, the Philippines had already enforced one free trade agreement (FTA) (ASEAN Free Trade Area) and it had likely improved the SATR across all products vis-à-vis MFNs. The SATRs across all products for 2015–2017 were substantially lower than for MFNs (4.06% in 2015, 5.12%

in 2016, and 3.70% in 2017) because the Philippines was already enforcing seven FTAs and would have significantly reduced tariff rates for lines covered under these FTAs.

The PDFL across all products was expectedly higher than the PDFL for MFNs in the benchmark year 2000 and in 2015–2017. This difference in PDFLs for MFNs and across all products was particularly significant – 37.34% in 2015, 21.49% in 2016, and 37.55% in 2017 – as the enforced FTAs had reduced duties to 0% for a substantial number of lines.

### ***Free Trade Agreements***

The Philippines is party to FTAs largely as a member of ASEAN (ASEAN Free Trade Area or AFTA, and later the ASEAN Trade in Goods Agreement or ATIGA) and through ASEAN+1 agreements. AFTA was established in 1999, under which ASEAN members committed to reduce intra-regional tariffs to 0%–5% within 15 years. ATIGA enhances AFTA and seeks to establish a single market and production base with free flow of goods in the ASEAN region, a major component of the ASEAN Economic Community (AEC).

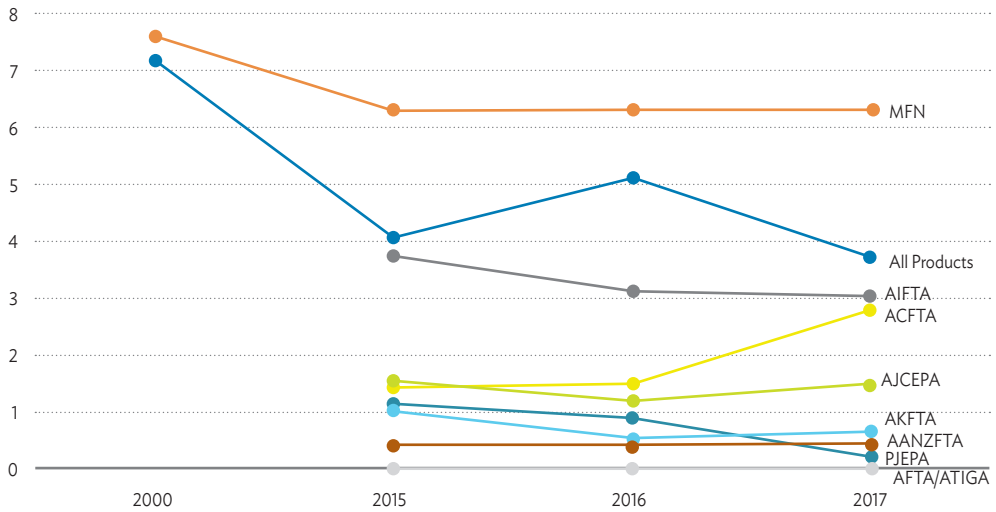
In 2005–2010, ASEAN signed and enforced five FTAs: with China (ASEAN–China Free Trade Area or ACFTA) in 2005, Korea (ASEAN–Korea Free Trade Area or AKFTA) and Japan (ASEAN–Japan Comprehensive Economic Partnership Agreement or AJCEPA) in 2008, and Australia and New Zealand (ASEAN Australia–New Zealand Free Trade Area or AANZFTA) and India (ASEAN–India Free Trade Area or AIFTA) in 2010 (Department of Trade and Industry, 2019).

The Philippines entered into bilateral FTAs with Japan (Philippines–Japan Economic Partnership Agreement or PJEPA) in 2008 and the European Free Trade Association (EFTA) (PH-EFTA FTA) in 2018. On 10 December 2018, the Philippines confirmed that internal procedures had been concluded, and the PH-EFTA FTA has been fully implemented since 24 October 2018 (European Free Trade Association, 2019).

Under these FTAs, preferential tariffs are to be progressively reduced or eliminated on almost all goods by the agreed end dates. In 2018, the Philippines offered duty-free access to more than 90% of the tariff lines in two out of seven FTAs in force.

In 2015–2017, SATRs for all products covered by AFTA and ATIGA bottomed to 0%, whilst the corresponding PDFL reached the targeted 100% by 2017 (Asia-Pacific Economic Cooperation, 2018). In those years, SATRs went down to less than 2% across all the other FTAs except AIFTA. PDFLs under ACFTA, AKFTA, AJCEPA, AANZFTA, and PJEPA were 70%–95% in 2015–2017.

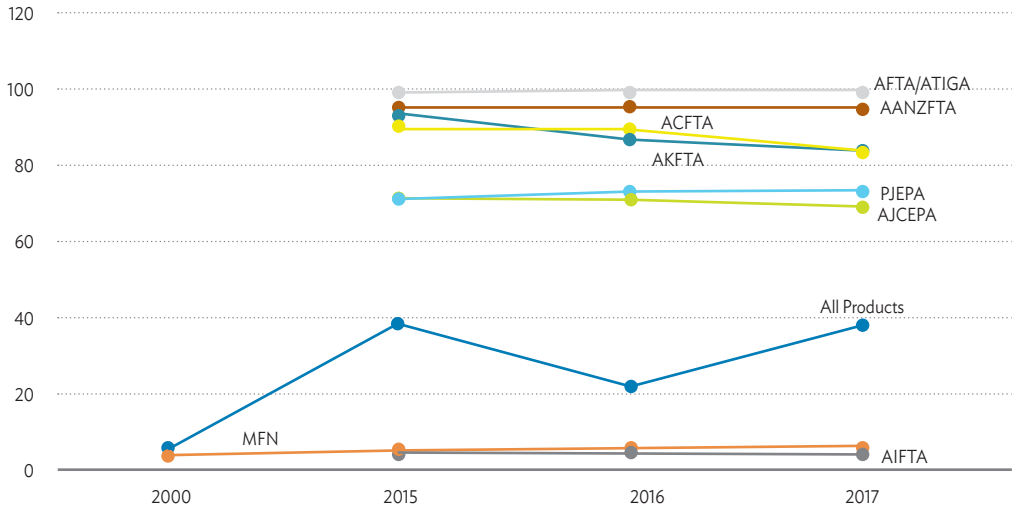
**Figure 7.1: Simple Average Tariff Rates for Most Favoured Nation and Free Trade Agreements (%)**



AANZFTA = ASEAN Australia–New Zealand Free Trade Area, AFTA = ASEAN Free Trade Area, AIFTA = ASEAN–India Free Trade Area, AJCEPA = ASEAN–Japan Comprehensive Economic Partnership Agreement, ATIGA = ASEAN Trade in Goods Agreement, MFN = most favoured nation, PJEPA = Philippines–Japan Economic Partnership Agreement.

Sources: World Bank (2019), Asia-Pacific Economic Cooperation (2019).

**Figure 7.2: Percentage Duty-free Lines for Most Favoured Nation and Free Trade Agreements (%)**



AANZFTA = ASEAN Australia–New Zealand Free Trade Area, AFTA = ASEAN Free Trade Area, AIFTA = ASEAN–India Free Trade Area, AJCEPA = ASEAN–Japan Comprehensive Economic Partnership Agreement, ATIGA = ASEAN Trade in Goods Agreement, PJEPA = Philippines–Japan Economic Partnership Agreement.

Source: World Integrated Solutions (2019); Asia-Pacific Economic Cooperation (2019).

### ***Potential Effects of Free Trade Agreements on Tariffs and Non-tariff Barriers***

An Institute of Developing Economies (IDE) study (Hayakawa and Kimura, 2014) showed how much FTAs lower tariff rates and non-tariff barriers (NTBs) for manufacturing. The IDE study is the first to investigate the direct relationship of tariff rates and NTBs with FTAs.

The study noted that whilst eliminating tariffs is one of their major purposes, new FTAs contain provisions for policy modes that include government procurement, competition policy, intellectual property rights protection, e-commerce, dispute settlement, labour standards, environmental policy, technical cooperation, and institutional mechanisms. Several are present in some of the FTAs the Philippines is party to. For instance, PJEPA includes provisions for further actions addressing intellectual property, government procurement, competition policy, and dispute settlement; AKFTA seeks common standards for production technology, product regulations, distribution, and after-sales service; whilst ATIGA includes elements addressing rules of origin, trade facilitation, customs, standards and conformance, sanitary and phyto-sanitary (SPS) measures, and the removal of NTBs. It is undetermined whether these affect NTMs in the Philippines.

The IDE study showed that, in general, tariff rates and NTBs between FTA member countries are lower than those between countries not linked by FTAs. Tariff rates are 9% between FTA members and 10% between countries not linked by FTAs, whilst the NTBs are 155% between FTA members and 231% between countries not linked by FTAs. The study also noted that FTAs are unlikely to completely eliminate NTBs amongst the member countries.

### ***Response of Philippine Firms to Free Trade Agreements***

A Philippine Institute of Development Studies (PIDS) study measured how Philippine firms respond to FTAs (Aldaba, 2015). It determined that whilst the government is expected to progressively reduce preferential tariffs to 0%, Philippine firms have historically been slow to take advantage of FTAs. The government is identified as the main source of FTA-related information and needs to increase the efficiency, scope, and reach of its promotional and technical training programmes.

Efforts to enhance FTA utilisation are directly linked with the easing of rules of origin compliance and administration. National efforts include reforms to use electronic certificates of origin and self-certification and link to a national single window. Efforts to harmonise rules of origin (ROO) can increase FTA utilisation across ASEAN member

countries and pave the way for the forthcoming Regional Comprehensive Economic Partnership (RCEP).

### 1.3.4. *Philippine Hierarchy of Laws and Regulations*

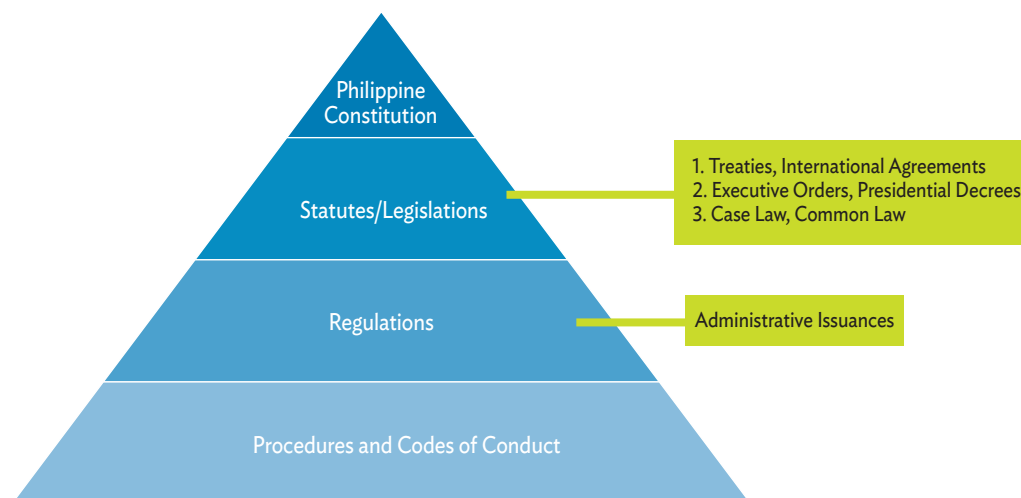
The legal system blends civil law (Roman), common law (Anglo-American), Muslim (Islamic) law, and indigenous law. The two main sources of law are statutes (statutory law) and jurisprudence (case law). Statutory law includes the constitution, treaties, statutes proper or legislative enactments, municipal charters, municipal legislation, court rules, administrative rules and orders, legislative rules, and presidential issuances. Case law consists of decided or written opinion by courts and by persons performing judicial functions, and includes all rulings in administrative and legislative tribunals, such as decisions made by the Presidential or Senate or House electoral tribunals (Santos-Ong, 2015).

The legislature promulgates statutes – acts, commonwealth acts, republic acts, and *batas pambansa* (national laws). The executive promulgates presidential issuances (presidential decrees, executive orders, memorandum circulars, administrative orders, proclamations, etc.), rules, and regulations through its various departments, bureaus, and agencies. The judiciary promulgates judicial doctrines embodied in decisions.

- **The constitution** states the grounding legal and democratic principles that the government is obligated to uphold; the supreme law to which all other laws must adhere (Clegg, Ellena, Ennis, and Vickery, 2016).
- **National laws and international treaties and agreements**
  - o *National laws*: republic acts, commonwealth acts, *batas pambansa* (national laws), presidential decrees, executive orders by the President.
  - o *International agreements*: treaties with other states, having the same force of authority as legislative enactments (ASEAN Law Association, 2005).
- **Administrative issuances to implement national laws (national government and regulatory agencies)** include implementing rules and regulations, letters of instruction, administrative orders, memorandum orders, administrative circulars, memorandum circulars.
- **Local government ordinances**

The legal comprehensiveness of this study is based on research on Philippine laws, in coordination with trade-related agencies and their provision of documentation, including official online sources and databases.

**Figure 7.3: Hierarchy of Laws in the Philippines**



Source: Clegg, Ellena, Ennis, and Vickery (2016).

## 2. Non-tariff Measure Statistics

### 2.1. Comprehensiveness of NTMs, 2015 and 2018

Our 2018 study involved 29 lead government agencies, the same number of agencies covered by the 2015 study. During the period between the studies, an additional 110 regulations (30% more than in 2015) were reviewed. An additional 256 NTMs (26% more than in 2015) were identified. For the complete list of government agencies referred to in this study, see Table 7.A1, Appendix.

**Table 7.7: Non-tariff Measure Comprehensiveness, Philippines, 2015 and 2018**

	2015	2018
Number of regulatory agencies	29	29
Total number of regulations	330	398
Total number of non-tariff measures	1,076	1,220
Total number of regulations reported to the World Trade Organization	772	1,040
Total number of affected HS8 products	10,937	11,347

Source: Authors.

The study (2015 and 2018) involved 42 agencies, including bureaus, and those attached to lead government departments. NTMs from the Department of Agriculture and its attached agencies (Bureau of Animal Industry, Bureau of Fisheries and Aquatic

Resources, Bureau of Plant Industry, Fertilizer and Pesticide Authority, National Tobacco Administration, National Meat Inspection Service, Philippine Coconut Authority, Philippine Fiber Industry Development Authority, Sugar Regulatory Administration) constituted half of the total NTMs covered in both periods.

The agency with the highest number of NTMs, in both periods, was the Bureau of Animal Industry, with 144 NTMs (14% of the total) in 2015 and 166 (13%) in 2018.

**Table 7.8: Non-tariff Measures by Issuing Institution, Philippines, 2015 and 2018 (absolute and percentage)**

Issuing Agency	2015	%	2018	%
Bangko Sentral ng Pilipinas	3	0.28	3	0.25
Board of Investments	4	0.37	4	0.33
Bureau of Agriculture and Fisheries Standards	9	0.84	9	0.74
Bureau of Animal Industry	162	15.06	198	16.23
Bureau of Customs	15	1.39	16	1.31
Bureau of Fisheries and Aquatic Resources	108	10.04	108	8.85
Bureau of Internal Revenue	10	0.93	10	0.82
Bureau of Philippine Standards	18	1.67	33	2.70
Bureau of Plant Industry	95	8.83	105	8.61
Civil Aviation Authority of the Philippines	4	0.37	4	0.33
Congress of the Philippines	3	0.28	3	0.25
Dangerous Drugs Board	24	2.23	31	2.54
Department of Agriculture	4	0.37	4	0.33
Department of Agriculture - SPS and Related Legal Issuances	42	3.90	42	3.44
Department of Energy	38	3.53	45	3.69
Department of Environment and Natural Resources	43	4.00	43	3.52
Department of Finance	1	0.09	1	0.08
Department of Social Welfare and Development	1	0.09	1	0.08
Department of Trade and Industry	20	1.86	20	1.64
Environmental Management Bureau	35	3.25	35	2.87
Fertilizer and Pesticide Authority	28	2.60	34	2.79
Food and Drug Administration	51	4.74	58	4.75
Forest Management Bureau	14	1.30	14	1.15
International Coffee Organization Certifying Agency	1	0.09	1	0.08
Maritime Industry Authority (MARINA)	25	2.32	30	2.46
Mines and Geosciences Bureau	2	0.19	2	0.16

## NON-TARIFF MEASURES IN ASEAN - AN UPDATE

Issuing Agency	2015	%	2018	%
National Book Development Board	2	0.19	2	0.16
National Food Authority	29	2.70	37	3.03
National Meat Inspection Service	53	4.93	53	4.34
National Museum	1	0.09	1	0.08
National Telecommunications Commission	39	3.62	49	4.02
National Tobacco Administration	12	1.12	12	0.98
Official Gazette	6	0.56	6	0.49
Optical Media Board	13	1.21	13	1.07
Philippine Amusement and Gaming Corporation	12	1.12	12	0.98
Philippine Coconut Authority	12	1.12	12	0.98
Philippine Drug Enforcement Agency	3	0.28	3	0.25
Philippine Fiber Industry Development Authority	8	0.74	8	0.66
Philippine International Trading Corporation	1	0.09	1	0.08
Philippine National Police- Firearms and Explosives Division	55	5.11	62	5.08
Philippine Nuclear Research Institute	56	5.20	59	4.84
Sugar Regulatory Administration	14	1.30	36	2.95
<b>Total</b>	<b>1,076</b>	<b>100.00</b>	<b>1,220</b>	<b>100.00</b>

The study (2015 and 2018) involved 42 agencies, including bureaus, and those attached to lead government departments. NTMs from the Department of Agriculture and its attached agencies (Bureau of Animal Industry, Bureau of Fisheries and Aquatic Resources).

**Table 7.9: Non-tariff Measures by Chapter, 2015 and 2018 (absolute and percentage)**

	Chapter	2015		2018	
		Number of NTMs	Proportion of NTMs (%)	Number of NTMs	Proportion of NTMs (%)
A	Sanitary and phyto-sanitary (SPS) measures	316	29.37	363	29.75
B	Technical barriers to trade (TBT)	299	27.79	357	29.26
C	Pre-shipment inspection and other formalities (PSI)	24	2.23	26	2.13
D	Contingent trade protective measures	0	0.00	0	0.00
E	Non-automatic licensing, quotas, prohibitions, and quantity control measures for other than SPS or TBT reasons	189	17.57	209	17.13
F	Price control measures, including additional taxes and charges	34	3.16	40	3.28
G	Finance measures	10	0.93	11	0.90
H	Measures affecting competition	1	0.09	3	0.25
I	Trade-related investment measures	0	0.00	1	0.08



	Chapter	2015		2018	
		Number of NTMs	Proportion of NTMs (%)	Number of NTMs	Proportion of NTMs (%)
J	Distribution restrictions	3	0.28	3	0.25
K	Restriction on post-sales services*	0	0.00	0	0.00
L	Subsidies (excluding export subsidies under P7)*	0	0.00	0	0.00
M	Government procurement restrictions*	0	0.00	0	0.00
N	Intellectual property*	0	0.00	0	0.00
O	Rules of origin*	0	0.00	0	0.00
P	Export-related measures	200	18.59	207	16.97
<b>Total non-tariff measures</b>		<b>1,076</b>	<b>100.00</b>	<b>1,220</b>	<b>100.00</b>

\* Not included in this study.

The top-eight NTM codes in 2015 and 2018 were largely the same. In 2018, codes B42 and B7 entered the top-10 list, replacing P69 and B2.

**Table 7.10: Top-10 Non-tariff Measure Codes, Philippines, 2015**

Rank	Code	Description	Count	Proportion (%)
1	E1	Non-automatic import-licensing procedures other than authorisations for SPS or TBT reasons	154	14.33
		E1	121	
		E11	1	
		E111	1	
		E112	9	
		E113	16	
		E119	5	
		E129	1	
2	A11	Temporary geographic prohibitions for SPS reasons	63	5.86
3	P11	Export prohibition	51	4.74
4	B31	Labelling requirement	50	4.65
5	B83	Certification requirement	38	3.53
6	A83	Certification requirement	34	3.16
7	B84	Inspection requirement	31	2.88
8	A84	Inspection requirement	29	2.70
9	B7	Product-quality or -performance requirement	29	2.70
10	B42	TBT regulations on transport and storage	27	2.51
		All others	569	52.93

SPS = sanitary and phytosanitary, TBT = technical barriers to trade.

**Table 7.11: Top-10 Non-tariff Measure Codes, Philippines, 2018**

Rank	Code	Description	Count	Proportion (%)
1	E1	Non-automatic import-licensing procedures other than authorisations for SPS or TBT reasons	171	14.02
		E1	138	
		E11	1	
		E111	1	
		E112	9	
		E113	16	
		E119	5	
		E129	1	
2	A11	Temporary geographic prohibitions for SPS reasons	92	7.54
3	B31	Labelling requirements	59	4.84
4	P11	Export prohibition	53	4.34
5	B83	Certification requirement	44	3.61
6	B7	Product-quality or -performance requirement	37	3.03
7	A83	Certification requirement	35	2.87
8	B42	TBT regulations on transport and storage	33	2.70
9	B84	Inspection requirement	33	2.70
10	A84	Inspection requirement	32	2.62
		All others	631	51.72

SPS = sanitary and phytosanitary, TBT = technical barriers to trade.

## 2.2. Non-tariff Measure Indicators

The Philippines has been implementing its Tariff Reform Program since the 1980s. Whilst the country has significantly reduced tariffs on many commodities, several still carry high tariffs. The average applied MFN tariff exceeded 7.6% in 2018, up from 6.4% in 2011. The increase in the average tariff is mainly due to transposition to HS 2017 and the splitting of lines carrying high tariffs. Tariff rate quotas apply to 77 tariff lines, and 65% of tariff lines (including all agricultural lines) are bound (WTO, 2018).

Tariff quotas cover 80 tariff lines, equivalent to 0.7% of all lines and including live swine, goats, and poultry and meat thereof; potatoes; coffee; maize; rice; sugar; and coffee. Products subject to tariff quotas are also subject to import licenses and, in most cases, NTMs. The number of NTMs implemented by the government notably increased since 2015.

In general, the imposition of NTMs could be justified for different reasons, such as health, security, environment, and consumer protection. However, NTMs could also adversely affect global and regional production chains by unnecessarily increasing the cost of business of companies (Medalla and Mantaring, 2017). Several studies reveal that NTMs can restrict trade and be as trade-restrictive as tariffs, even more so in the case of certain high- and middle-income countries (WTO, 2012).

The following sections illustrate the extent of restrictiveness of NTMs on imports and exports as reflected in the computed NTM indicators across commodities.

### **2.2.1. Exports**

#### ***Export Frequency Index, 2015 and 2018***

The frequency index is the percentage of all commodity classifications – total (e.g., HS 4-digit) product categories with non-zero exports – linked to or subject to at least one measure in one WTO notification. The frequency index does not take into account the value of trade in the affected products.

In 2015–2018, the computed frequency index for total exports was around 0.42–0.44, indicating that 42%–44% of total export product categories received at least one notification or required an NTM. Overall, frequency indices for exports remained relatively stable, except for chemical products.

Exports of agricultural goods (animal, food, and vegetable products) consistently have higher export frequency indices than other export goods because most countries, including the Philippines, have significantly higher NTMs for product groups derived from agriculture and natural resources.

The higher frequency index for animal products denotes the stringent export requirements for meat and poultry products.

NTMs that may affect the export of animals and meat include the following:

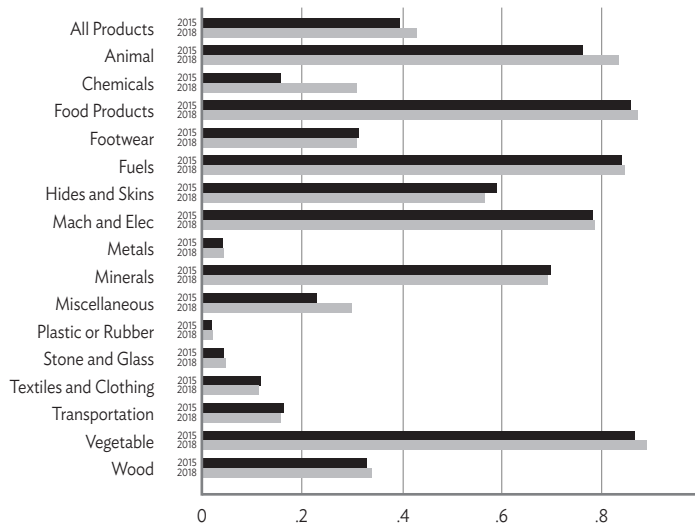
## NON-TARIFF MEASURES IN ASEAN - AN UPDATE

1. Bureau of Animal Industry (BAI) inspection requirement
2. BAI sworn statement by veterinarian
3. BAI export permit (Convention on International Trade in Endangered Species of Wild Fauna and Flora [CITES] permit from the Protected Areas and Wildlife Bureau, Department of Environment and Natural Resources (PAWB-DENR) for exotic animals and monkeys)
4. BAI inspection requirement
5. National Meat Inspection Service (NMIS) veterinary quarantine clearance
6. NMIS official certificates of the condition of the animals
7. NMIS registration and accreditation
8. NMIS export licensing
9. NMIS Hazard Analysis Critical Control Point (HACCP) Program certification and accreditation
10. NMIS certificate of wholesomeness
11. NMIS registration of meat exporters
12. NMIS inspection requirement

NTMs that may affect the export of poultry and poultry products include the following:

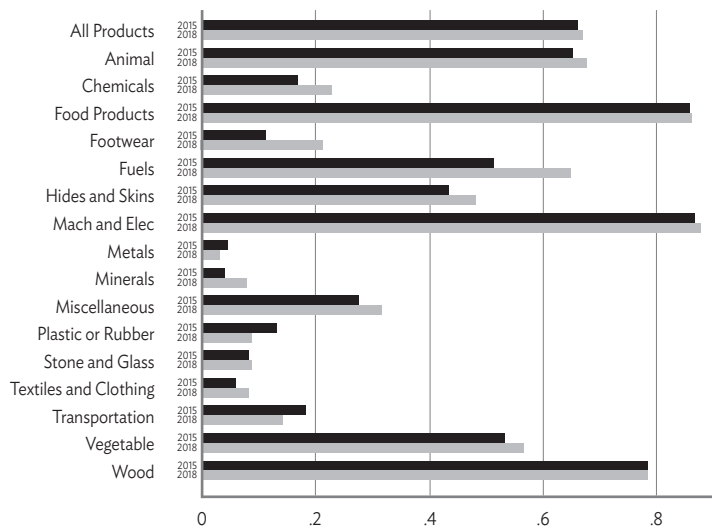
1. BAI international veterinary certificate
2. BAI certificate of no clinical evidence of infectious poultry diseases
3. BAI certification issued by the farm veterinarian
4. BAI sworn statement by veterinarian
5. BAI export permit (CITES permit from the PAWB-DENR for wild fauna and import permit from the country of destination for game fowl)
6. BAI inspection requirement
7. BAI National Meat Inspection Service certification requirement
8. BAI slaughter requirements
9. NMIS veterinary quarantine clearance
10. NMIS official certificates of the condition of the animals
11. NMIS registration and accreditation
12. NMIS export licensing
13. NMIS HACCP certification and accreditation
14. NMIS certificate of wholesomeness
15. NMIS registration of meat exporters
16. NMIS inspection requirement

**Figure 7.4: Frequency Index of Philippine Exports, 2015 and 2018**



Source: UNCTAD (2019).

**Figure 7.5: Coverage Ratio of Philippine Exports, 2015 and 2018**



Source: UNCTAD (2019).

**Export Coverage Ratio, 2015 and 2018**

The coverage ratio is the percentage of the total trade value – exports and imports – linked to at least one WTO member’s notification at a certain HS commodity (e.g., HS 4-digit) level.

For 2015 and 2018, the coverage ratio for the total value of Philippine exports was about 0.7 (or 70%). Export goods with high coverage ratios (0.55–0.9) were agricultural products

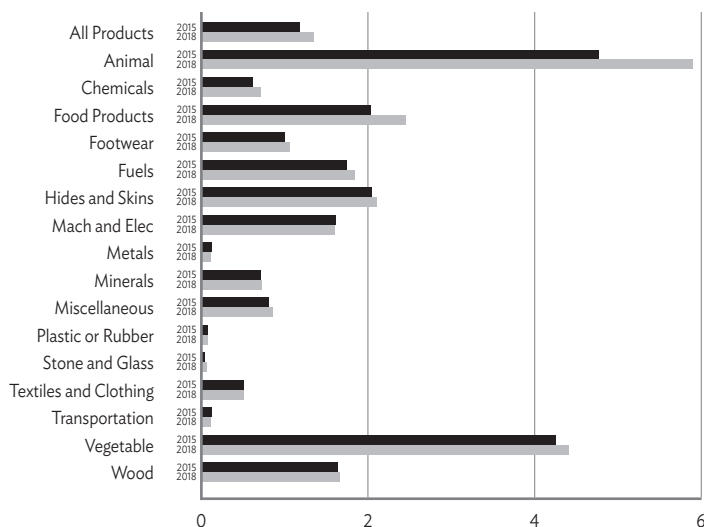
(animal, food, and vegetable products), machinery and electronics, and wood. Higher coverage ratios mean that export values of the mentioned goods are mostly covered by NTMs. Machinery and electronic products have a high coverage ratio because they are high-value commodities and most exports are covered by NTMs. Semiconductors comprise the biggest share of electronic products.

Exports of agricultural products are mostly regulated and subjected to the greatest number of NTMs, resulting in high coverage ratios for these commodities.

**Export Prevalence Score, 2015 and 2018**

The prevalence score is the average number of NTMs applied to each product by each economy. For total Philippine exports, about one NTM per product was required by the importing country in 2015 and 2018. The export of animal products recorded the highest prevalence score, close to 5 in 2015 and about 6 in 2018. Exports of agricultural products (animal and vegetable products) recorded the highest prevalence score for 2015 and 2018.

**Figure 7.6: Prevalence Score of Philippine Exports, 2015 and 2018**



Source: UNCTAD (2019).

## 2.2.2. Imports

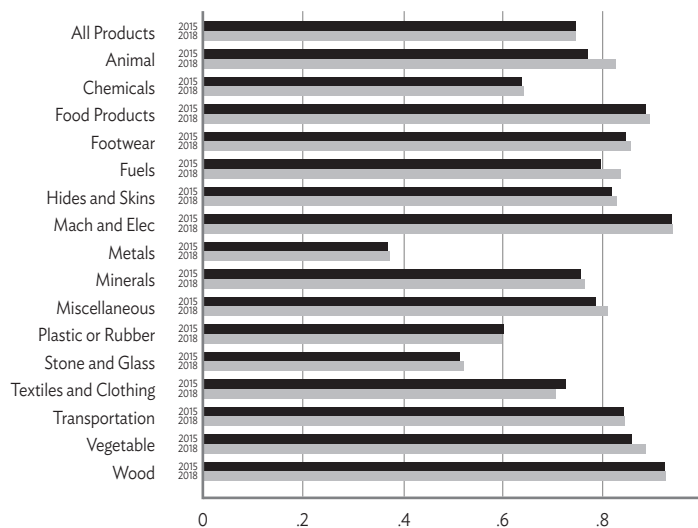
### Import Frequency Index, 2015 and 2018

The frequency index for all imported products was at least 0.80, indicating that at least 80% of imports were subject to NTMs. The index for all product groups in 2015–2018 was almost unchanged.

The frequency index for all product groups, except metal, was more than 0.50, meaning more than 50% of imports were subject to NTMs. Agricultural products had the highest import frequency indices for 2015 and 2018. This was expected since Department of Agriculture agencies implement the most number of NTMs (Table 7.8).

In 2016, the Anti-Agricultural Smuggling Act (Republic Act No. 10845) was passed into law and the Bureau of Customs issued Customs Administrative Order No. 02-2017 to implement it. The law covers agricultural products, specifically rice, sugar, pork, garlic, onion, carrots, fish, and cruciferous vegetables. Additional regulations were issued by regulatory agencies to ascertain that the value and volume of imports would not result in large-scale smuggling. The law is one indicator that agriculture is highly regulated.

**Figure 7.7: Frequency Index of Philippine Imports, 2015 and 2018**



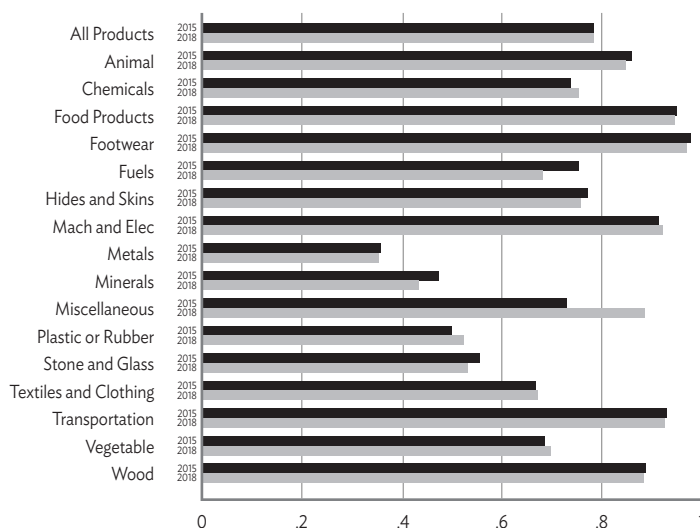
Source: UNCTAD (2019).

The computed coverage ratios for imports ranged from 0.35 (metal goods) to almost 1.0 (footwear) (35%–100%). The coverage ratio for total imports for 2015 and 2018 was 0.80, indicating that about 80% of the total value of imports was covered by NTMs imposed by the importing countries.

Only imports of miscellaneous goods, including furniture, beddings, mattresses, and lamps and lighting fittings, had significantly different coverage ratios in 2015 and 2018. The higher coverage ratio in 2018 may be attributed to additional regulations issued for lamps and lighting fittings. The Department of Trade and Industry (DTI) issued Department Administrative Order 18-02 declaring mandatory the Philippine National Standard for Self-Ballasted LED Lamps for General Lighting Services. Self-ballasted LED lamps were added to the list of products that the DTI regulates prior to their distribution to the market.

Lamps and related products, LED and incandescent, are amongst the products that require a certificate under Memorandum Circular 28-11 issued by DTI’s Bureau of Product Standards in September 2018. Over the years, the use of LED lights has been increasing because they are energy efficient and long lasting.

**Figure 7.8: Coverage Ratio of Philippine Imports, 2015 and 2018**



Source: UNCTAD (2019).

**Import Prevalence Scores, 2015 and 2018**

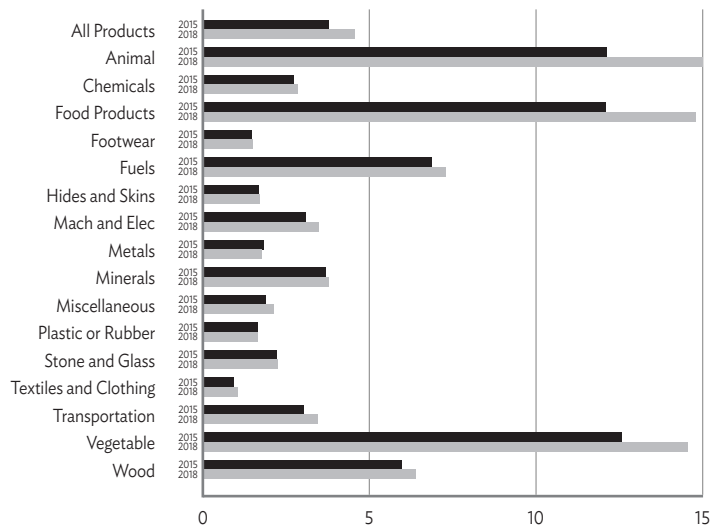
The prevalence scores for total imports were 4 in 2015 and 5 in 2018. The country imposes more measures on its imports. The most NTMs were imposed on agricultural imports (animal, food, and vegetable products). The prevalence scores for agricultural products were higher in 2018 (15) than in 2015 (13).

NTMs for animal imports increased because the Department of Agriculture imposed stricter measures on meat and poultry imports due to the prevalence of avian virus and African swine fever, which can harm not only animals but also humans. In 2018, the



Department of Agriculture issued several memorandum orders (MOs) (Nos. 18, 23, 30, and 31) that temporarily banned the import of domestic and wild pigs and their products, including pork meat, from the Russian Federation, Poland, China, Belgium, South Africa, and Hungary. MO Nos. 02, 03, 04, 05, 06, 07, 25, and 37 temporarily banned the import of domestic and wild birds and their products, including poultry meat, day-old chicks, eggs, and semen, from Bulgaria, Sabah, Malaysia, the Netherlands, Saudi Arabia, the Russian Federation, and Belgium.

**Figure 7.9: Prevalence Scores of Philippine Imports, 2015 and 2018**



Source: UNCTAD (2019).

## 3. Conclusions and Policy Recommendations

### 3.1. Issues Encountered by the Non-tariff Measure Project Team

The following is a review of the issues and challenges encountered by the team, to give context to the conclusions and policy recommendations.

#### 3.1.1. Agencies Unprepared to Handle Non-tariff Measure Issues

A. For many agencies, the task of identifying, documenting, and monitoring NTMs is not a priority. The government does not have a policy to make it a priority and lacks programmes to promote awareness and expertise. Most initiatives to raise NTM awareness are from development assistance projects sponsored by the United Nations, for example, and the Economic Research Institute for ASEAN and East Asia (ERIA).

- B. Most agencies do not have properly trained technical personnel who can effectively identify and document NTMs. It is common for agencies to have only temporarily assigned personnel who can work on NTM matters as the need arises. This contributes to inefficiency in implementing NTMs, which causes delays in the processing of imports and exports.
- C. Agencies that regularly monitor their NTMs are familiar primarily with those related to trade licenses, permits, certificates, or authorisations (code E items), perhaps because the agencies collect fees to issue licenses, permits, and certificates, which are a significant source of income. In some cases, the issuance of permits and licenses has become an opportunity for corruption. There are anecdotal accounts of unscrupulous personnel who solicit un-receipted payments to facilitate the issuance of permits and licenses.

### **3.1.2. Regulations Not Always Available or Accessible**

- A. Many regulations are still not digitised, and only print copies are available. Whilst agencies have started digitising their regulations (producing a PDF file or at least an image), often only old print copies are available. Team members digitised the print copies themselves to complete internal documentation.
- B. The team requested agencies for copies only of trade regulations that include potential NTMs, but sometimes agencies would provide copies of all their issuances, whether or not they included NTMs. The team did the initial culling of regulations.
- C. Many agencies maintain online libraries of regulations on their official websites. Some include only the more recent regulations whilst others attempt to include all of them. Many websites were either down or had dead links. Down time was particularly severe during the study period (second and third quarters of 2018), when up to 132 government agency websites experienced hardware failure in the Government Web Hosting Service.

## **3.2. Recommendations**

The following are (1) immediate recommendations to be implemented within 1 year to solve the most urgent problems, focusing on fast-tracking agency expertise in NTMs and improving the access and availability of regulations; and (2) long-term recommendations

to provide guidelines to develop new or refine existing policies and strategies to improve the quality of trade regulations.

### 3.2.1. *Immediate Recommendations*

A. **Technical training on NTMs.** The need for technical training amongst agency personnel on NTM topics was emphasised during a World Bank–sponsored workshop in April 2018 in Manila. The director of the host agency, the Bureau of Import Services, mentioned that agencies have difficulty classifying NTMs within their regulations. As local expertise on NTMs is inadequate, it was strongly suggested that technical assistance from international donor agencies be pursued to provide much-needed training for agency personnel.

In a 25 June 2018 email, UNCTAD expressed interest in providing technical support to government agencies on NTM issues. The government should accept the offer.

- B. **Properly designated personnel.** Agencies must designate permanent technical personnel who will focus on NTM matters. These technical personnel will undergo training and become in-house NTM experts.
- C. **Online accessibility of regulations and NTM listings.** Agencies must be mandated to publish all trade policies, regulations, and NTMs – especially on the web – to ensure that they are available and accessible. Existing infrastructure can provide primary and secondary host sites, including websites of the Philippine National Trade Repository (PNTR), managed by DTI, and other private or independent trade websites. Agencies must immediately publish new regulations, especially if they revise, update, or otherwise affect existing ones.
- D. **Agency with NTM-monitoring authority.** NTMs must be effectively and efficiently managed by a permanent government unit established to coordinate and monitor agency activities pertaining to NTMs. The new unit can be subsumed by a government department (e.g., DTI or the National Economic and Development Authority) with members from various agencies. The unit should have the authority to recommend measures and establish guidelines and procedures to maintain, update, and disseminate NTMs.

### 3.2.2. Long-term Recommendations

The success or failure of programmes and policies to promote transparency and procedural efficiency depends on how practical they are and how strong the political will is to implement and sustain them. Programmes and policies must emphasise not only the importance of reviewing and streamlining NTMs but also define infrastructure, organisation, and sustainability measures.

Since 2015, the government has taken steps to make its policies, information, and procedures transparent and accessible. More recently, the government appears serious about driving the bureaucracy to operate more efficiently.

Although not specifically targeting NTM issues, the following initiatives are making trade regulations more transparent:

**A. Customs Regulated Imports List (CRIL).** In 2015, the Bureau of Customs released the CRIL online, a comprehensive listing of about 7,500 regulated products, with their corresponding import regulations and required permits. The bureau, with technical assistance from USAID, developed the CRIL to correct the lack of a single official reference for requirements for regulated imports. The list inventories all laws, regulations, and processes relevant to imports to guide the bureau's frontline officers.

The CRIL maps the rules relevant to imports and identifies overlapping and conflicting regulations. During data collection, the agencies were able to study and understand the legal mandates of their regulations from the perspective of trade facilitation, and started to distinguish NTMs from NTBs. The customs commissioner mandated that customs assessors as well as traders refer to the CRIL as the official guide on import requirements.

The CRIL's value and usefulness depends on how current it is. The Bureau of Customs must ensure that the list is always updated by establishing an efficient coordinating procedure with agencies on new regulations and policies.

**B. Philippine National Trade Repository.** In 2016, the PNTR went online after more than a year of development. The PNTR ([pntr.gov.ph](http://pntr.gov.ph)), spearheaded by DTI and assisted by USAID and the World Bank, is intended to be a comprehensive, one-stop online reference on all tariff and non-tariff measures applied to goods entering, exiting, and transiting the Philippines.

The repository also includes all documentary requirements for specific commodities (the CRIL is a significant source of PNTR information). If it is accurate and up to date, the PNTR will significantly reduce the cost, time, and effort spent on searching for trade-related information. The repository also helps agencies disseminate updated regulatory information to the trading community. The PNTR is intended to provide greater transparency and increase the likelihood of voluntary compliance by traders and help them make sound business decisions.

The PNTR will eventually be integrated into the ASEAN Trade Repository, which will give exporters accurate and up-to-date information, including a regulatory requirement road map of the movement of goods to and between ASEAN member states.

- C. **Freedom of Information Program (FOI).** In July 2016, the government issued the landmark FOI (Executive Order No. 02) (Government of the Philippines, 2016), covering all executive government offices. They are required to disclose public records (e.g., contracts, transactions) and any information produced (e.g., procedures and policies) requested by the public, except for matters affecting national security and other information falling under the inventory of exceptions. The FOI directs all government agencies to be transparent in their policies, procedures, and transactions, and designates a specific period to reply to a request for or release requested information. The FOI imposes administrative and disciplinary sanctions on agency officials for failure to comply.
- D. **Ease of Doing Business Act.** In May 2018, the government enacted the Ease of Doing Business Act (Republic Act No. 11032) (Government of the Philippines, 2018), which directs government offices (including trade regulatory agencies) to streamline requirements, remove complicated and redundant procedures, and shorten processing times for government services. Government agencies must act on applications within 3 days for simple transactions, 7 days for complex ones, and 20 days for highly technical ones.

### 3.3. Conclusion

Government agencies are beginning to appreciate the value of identifying and documenting NTMs and to understand that NTMs must be monitored and moderated so that the Philippines will benefit fully from a free trade environment.

NTMs, however, still lack transparency, and information on them is scarce, which is why their implications for international trade are not well understood (UNCTAD, 2013).

NTM notification mechanisms are largely incomplete. NTM information is often buried in legal and regulatory documents, which makes gathering data difficult and costly. Scarce information on the implications of NTMs for international trade is especially a cause for concern for traders, trade negotiators, policy makers, and development agencies.

Government efforts in the past 2 or 3 years to promote transparency and efficiency are a step in the right direction. A PIDS study (*The Philippine Star*, 2017) stated that Philippine NTM rules are in the mid-range of clarity or transparency, while Singapore and Thailand are the most transparent, and Cambodia, the Lao People's Democratic Republic, and Myanmar are the least transparent. The study also mentions increasing and legitimate concerns that some NTMs are used mainly for protectionist reasons. In such cases, NTMs are NTBs to trade and investments.

The PIDS study considered the added costs of doing business resulting from NTMs as moderate. The Philippines should strive to attain complete clarity or transparency of regulations and their NTMs, as well as have the lowest additional costs. The study urged the promotion of transparency through the creation of an updated database of NTMs in the region to complement regular notifications to the ASEAN Secretariat and the WTO. The ERIA–UNCTAD project on NTMs in ASEAN is a response to this need.

## **References**

Aldaba, R.M. et al. (2015), 'How Are Firms Responding to Philippine FTAs?' *Discussion Paper Series*, No. 2015-22, Manila: Philippine Institute for Development Studies. <https://dirp4.pids.gov.ph/webportal/CDN/PUBLICATIONS/pidsdps1522.pdf> (accessed 11 January 2019).

ASEAN Law Association (2005), *Legal Systems in ASEAN*. <http://www.aseanlawassociation.org/legal-phil.html><http://www.aseanlawassociation.org/legal-phil.html> (accessed 6 March 2019).

Asia-Pacific Economic Cooperation (2018), *Assessment of Achievements of the Bogor Goals in 2018 for Philippines*. Singapore: Asia-Pacific Economic Cooperation. <https://www.apec.org/About-Us/About-APEC/Achievements-and-Benefits/2018-Bogor-Goals> (Philippines\_IAP\_Bogor Progress Report 2018.docx) (accessed 11 January 2019)

- Clegg, M., K. Ellena, D. Ennis, and C. Vickery (2016), *The Hierarchy of Laws, Understanding and Implementing Legal Frameworks*. Arlington, VA: International Foundation for Electoral Systems. <https://www.ifes.org/publications/hierarchy-laws-understanding-and-implementing-legal-frameworks-govern-elections> (accessed 6 March 2019)
- Department of Trade and Industry (Philippines) (DTI) (2019), *Free Trade Agreements, 2019*. Manila: DTI. <https://www.dti.gov.ph/15-main-content/dummy-article/682-free-trade-agreements> (accessed 11 January 2019)
- Department of Trade and Industry (Philippines) (DTI) (2019), *Trade Data 2017-2018*. Manila: DTI. [www.dti.gov.ph/resources/statistics/trade-data](http://www.dti.gov.ph/resources/statistics/trade-data) ([drive.google.com/file/d/1st8IH43GEEsdapwGU5r09u2H3-O-O0L/view](https://drive.google.com/file/d/1st8IH43GEEsdapwGU5r09u2H3-O-O0L/view)) (accessed 11 January 2019).
- European Free Trade Association, The (EFTA) (2019). *Philippines, 2019*. Geneva: EFTA. <https://www.efta.int/free-trade/free-trade-agreements/philippines> (accessed 22 April 2019)
- Government of the Philippines (2016), *Operationalizing in the Executive Branch the People's Constitutional Right to Information and the State Policies to Full Public Disclosure and Transparency in the Public Service and Providing Guidelines Therefor*, Executive Order No. 02 Series of 2016. [www.pdic.gov.ph/files/foi/Annex\\_A-EO\\_2\\_FOI.pdf](http://www.pdic.gov.ph/files/foi/Annex_A-EO_2_FOI.pdf)  
[www.pdic.gov.ph/files/foi/Annex\\_A-EO\\_2\\_FOI.pdf](http://www.pdic.gov.ph/files/foi/Annex_A-EO_2_FOI.pdf) (accessed 6 March 2019)
- Government of the Philippines (2018), *An Act Promoting Ease of Doing Business and Efficient Delivery of Government Services, Amending for the Purpose Republic Act No. 9485, Otherwise Known as the Anti-Red Tape Act of 2007, and for Other Purposes*, Republic Act No. 11032. [www.officialgazette.gov.ph/2018/05/28/republic-act-no-11032/](http://www.officialgazette.gov.ph/2018/05/28/republic-act-no-11032/) (accessed 6 March 2019)
- Hayakawa, K. and F. Kimura (2014), 'How Do Free Trade Agreements Reduce Tariff Rates and Non-tariff Barriers?' *IDE Discussion Paper*, No. 446, Tokyo: Institute of Developing Economies.
- Medalla, E. and M. Mantaring (2017), 'Review of Intra-ASEAN Nontariff Measures on Trade in Goods', *Discussion Paper*, 2017-18, Manila: Philippine Institute for Development Studies. <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1718.pdf> (accessed 1 January 2019).

Philippine Star, The (2017), 'Non-Tariff Barriers Clip ASEAN Integration – PIDS', 2 July. [www.philstar.com/business/2017/07/02/1715711/non-tariff-barriers-clip-asean-integration-pids](http://www.philstar.com/business/2017/07/02/1715711/non-tariff-barriers-clip-asean-integration-pids) (accessed 6 March 2019).

Santos-Ong, M. (2015), *Philippine Legal Research*. <http://www.nyulawglobal.org/globalex/Philippines1> (accessed 6 March 2019).

Tariff Commission (Philippines) (2019), *Most Favoured Nation Tariff Schedule, 2019*. Manila: Tariff Commission. <http://finder.tariffcommission.gov.ph/index.php?page=mfn> (accessed 11 January 2019).

United Nations (2018), *UN Data – Philippines, 2018*. [data.un.org/en/iso/ph.html](http://data.un.org/en/iso/ph.html) (accessed 1 February 2019).

United Nations Conference on Trade and Development (UNCTAD) (2013), *Non-tariff Measures to Trade: Economic and Policy Issues for Developing Countries, 2013*. Geneva: UNCTAD. [unctad.org/en/PublicationsLibrary/ditctab20121\\_en.pdf](http://unctad.org/en/PublicationsLibrary/ditctab20121_en.pdf) (accessed 11 February 2019 and 6 March 2019).

World Bank (2018), *The World Bank in the Philippines, 2018*. Washington, DC: World Bank. [www.worldbank.org/en/country/philippines/overview#1](http://www.worldbank.org/en/country/philippines/overview#1) (accessed 1 February 2019).

World Bank (2019), *GDP (Current US\$) All Countries and Economies, 2017*. Washington, DC: World Bank. [https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?year\\_high\\_desc=true](https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?year_high_desc=true) (accessed 4 March 2019).

World Bank (2019), 'Tariff Rate, Most Favored Nation, Simple Mean, All Products (%)'. <https://data.worldbank.org/indicator/TM.TAX.MRCH.SM.FN.ZS?locations=PH> (accessed 11 January 2019).

World Integrated Trade Solution (2019), 'MFN Duty-free Tariff Lines Share by Country All Products for Philippines, 2017'. <https://wits.worldbank.org/CountryProfile/en/country/by-country/startyear/LTST/endyear/LTST/tradeFlow/Import/indicator/MFN-DTY-FR-TRFF-LNS-SHR/partner/WLD/product/Total> (accessed 11 January 2019).



World Integrated Trade Solution (2019), 'Philippine Trade Summary' for 2000, 2015, 2016, and 2017. <https://wits.worldbank.org/CountryProfile/en/Country/PHL/Year/LTST/SummaryText> (accessed 11 January 2019).

World Trade Organization (WTO) (2012), *World Trade Report 2012*. Geneva: WTO. [www.wto.org/english/res\\_e/booksp\\_e/anrep\\_e/wtr12-2d\\_e.pdf](http://www.wto.org/english/res_e/booksp_e/anrep_e/wtr12-2d_e.pdf)[www.wto.org/english/res\\_e/booksp\\_e/anrep\\_e/wtr12-2d\\_e.pdf](http://www.wto.org/english/res_e/booksp_e/anrep_e/wtr12-2d_e.pdf) (accessed 6 March 2019).

World Trade Organization (2018), 'WTO Trade Policy Review: Philippines'. [www.wto.org/english/tratop\\_e/tpr\\_e/tp468\\_e.htm](http://www.wto.org/english/tratop_e/tpr_e/tp468_e.htm) (accessed 6 March 2019).

**Appendix**  
**Table 7.A1: Non-tariff Measure Reference List of**  
**Government Institutions, Philippines**

Ministry (Executive Department)	Department/Bureaus (Implementing Agencies)	Subsidiary Agency (Departments/Divisions/Offices)
<b>1. Department of Agriculture (DA)</b>	Bureau of Animal Industry (BAI)	National Veterinary Quarantine Services
	Bureau of Animal Industry (BAI)	Animal Feeds Standard Division
	Bureau of Fisheries and Aquatic Resources (BFAR)	Fisheries Regulatory and Quarantine Division
	Bureau of Plant Industry (BPI)	Plant Quarantine Service (PQS)
	National Meat Inspection Services (NMIS)	Meat Export Import Division
	National Tobacco Authority (NTA)	National Tobacco Authority (NTA)
	Philippine Coconut Authority (PCA)	Philippine Coconut Authority (PCA)
	Philippine Fiber Industry Development Authority (PhilFIDA)	Philippine Fiber Industry Development Authority (PhilFIDA)
	Sugar Regulatory Administration (SRA)	Sugar Regulatory Administration (SRA)
<b>2. Department of Energy (DOE)</b>	Energy Industry Administration Bureau (EIAB)	Energy Industry Administration Bureau (EIAB)
	Energy Resource Development Bureau (ERDB)	Petroleum Resources Development Division
	Energy Resource Development Bureau (ERDB)	Coal and Nuclear Minerals Division
	Oil Industry Management Bureau (OIMB)	Oil Industry Competition and Monitoring Division (OICMD)
	Oil Industry Management Bureau (OIMB)	Oil Industry Standard and Monitoring Division (OISMD)
<b>3. Department of Environment and Natural Resources (DENR)</b>	Environment Management Bureau (EMB)	Environmental Quality Division
	Environment Management Bureau (EMB)	Chemicals Division
	Environment Management Bureau (EMB)	Hazardous Division
	Forest Management Bureau (FMB)	Forest Management Bureau (FMB)
	Biodiversity Management Bureau (BMB)	Biodiversity Management Bureau (BMB)
	Mines and GeoSciences Bureau (MGB)	Mines and GeoSciences Bureau
	Philippine Ozone Desk (POD)	Philippine Ozone Desk (POD)
<b>4. Department of Finance (DOF)</b>	Bureau of Internal Revenue (BIR)	Large Taxpayers Collection and Enforcement
	Bureau of Internal Revenue (BIR)	Excise Taxpayers Regulatory Division
	Cooperative Development Authority (CDA)	Cooperative Development Authority (CDA)
	One Stop Shop (OSS)	One Stop Shop (OSS)
	Revenue Office	Revenue Office
	Banko Sentral ng Pilipinas (BSP)	Banko Sentral ng Pilipinas (BSP)

Ministry (Executive Department)	Department/Bureaus (Implementing Agencies)	Subsidiary Agency (Departments/Divisions/Offices)
<b>5. Department of Interior and Local Government (DILG)</b>	Philippine National Police (PNP)	Dangerous Drugs Board (DDB)
	Philippine National Police (PNP)	Firearms and Explosives Office (FEO)
	Philippine National Police (PNP)	Philippine Drug Enforcement Agency (PDEA)
<b>6. Department of Health (DOH)</b>	Food and Drug Administration (FDA)	Center for Cosmetics Research and Regulation
	Food and Drug Administration (FDA)	Center for Device Research and Regulation
	Food and Drug Administration (FDA)	Center for Drugs Research and Regulation
	Food and Drug Administration (FDA)	Center for Food Research and Regulation
<b>7. Department of Justice (DOJ)</b>	National Bureau of Investigation (NBI)	National Bureau of Investigation (NBI)
<b>8. Department of Social Welfare and Development (DSWD)</b>	Department of Social Welfare and Development (DSWD)	Disaster Risk Reduction and Response Operations Office
	Department of Social Welfare and Development (DSWD)	Standards Bureau
<b>9. Department of Science and Technology (DOST)</b>	Philippine Nuclear Research Institute (PNRI)	Philippine Nuclear Research Institute (PNRI)
<b>10. Department of Transportation and Communication (DOTC)</b>	Civil Aviation Authority of the Philippines (CAAP)	Airworthiness Authority
	Land Transportation Office (LTO)	Motor Vehicle Inspection System
	National Telecommunication Commission (NTC)	Special Licensing Branch
	National Telecommunication Commission (NTC)	Regulation Branch
	National Telecommunication Commission (NTC)	National Capital Region Regional Office
	National Telecommunication Commission (NTC)	Equipment Standard Division
	National Telecommunication Commission (NTC)	Broadcast Services Division
	Maritime Industry Authority (MARINA)	Overseas Shipping Services
<b>11. Department of Trade Industry (DTI)</b>	Bureau of Import Services (BIS)	Import Action Division
	Bureau of Investments (BOI)	Motor Vehicle Development Program Manufacturing Industry Department Project Evaluation Division
	Bureau of Investments (BOI)	Incentives Department
	Bureau of Product Standards (BPS)	Bureau of Product Standards (BPS)
	Fair Trade Enforcement Bureau (FTEB)	Fair Trade Enforcement Bureau (FTEB)
	Intellectual Property Office (IPO)	Intellectual Property Office (IPO)
	Exports Management Bureau (EMB)	Exports Management Bureau (EMB)
	Philippine International Trading Corporation (PITC)	Philippine International Trading Corporation (PITC)

**NON-TARIFF MEASURES IN ASEAN - AN UPDATE**

Ministry (Executive Department)	Department/Bureaus (Implementing Agencies)	Subsidiary Agency (Departments/Divisions/Offices)
<b>12. Office of the President</b>	Fertilizers and Pesticide Authority (FPA)	Fertilizers and Pesticide Authority (FPA)
	National Food Authority (NFA)	Grains Marketing Operations Department
	Optical Media Board (OMB)	Registration and Licensing Division
	Philippine Economic Zone Authority (PEZA)	Philippine Economic Zone Authority (PEZA)
	Philippine Gaming Corporation (PAGCOR)	Philippine Gaming Corporation (PAGCOR)
<b>13. Department of Education (DepEd)</b>	National Commission for Culture and Arts (NCCA)	National Museum (NM)

**Table 7.A2: Simple Average Tariff Rates and Percentage of Duty-Free Lines under Most Favoured Nation and Free Trade Agreements**

Rank	Year Enforced	Year Fully Implemented	Simple Average Tariff for All Products (%)				Percentage of Duty-Free Lines to All Products (%)				Objective/ Highlights
			2000	2015	2016	2017	2000	2015	2016	2017	
<b>Across all products</b>			7.19	4.06	5.12	3.70	5.43	37.34	21.49	37.55	
<b>MFN</b>			7.60	6.31	6.30	6.31	3.09	4.64	4.58	5.09	
<b>AFTA / ATIGA</b>	1999/2010	2015	-	0.00	0.00	0.00	-	98.89	98.89	100.00	Establish a single market and production base; eliminate intra-ASEAN import duties
<b>ASEAN-China FTA</b>	2005	2018	-	1.48	1.48	2.82	-	89.96	88.36	83.41	Reduce tariffs on 90% of imported goods to zero
<b>ASEAN-Korea FTA</b>	2008	2016	-	1.12	0.48	0.66	-	91.52	86.36	83.41	Progressive reduction and elimination of tariffs on almost all products
<b>ASEAN-Japan CEPA</b>	2008	2018	-	1.52	1.24	1.47	-	70.47	70.46	68.56	Adopted 13 categories with schedules to reduce/ eliminate tariffs
<b>Philippines-Japan EPA</b>	2008	2018	-	1.13	0.88	0.27	-	71.08	72.67	71.9	Duty-free access to 80% of Philippine exports to Japan (7,476 products)
<b>ASEAN-Australia and New Zealand FTA</b>	2010	2020	-	0.43	0.4	0.48	-	93.85	95.04	94.37	Eliminate at least 90% of all tariff lines within specified timelines
<b>ASEAN-India FTA</b>	2010	2022	-	3.76	3.14	3.04	-	4.10	4.10	4.02	Tariff liberalisation of over 90% of products traded between ASEAN and India

Rank	Year Enforced	Year Fully Implemented	Simple Average Tariff for All Products (%)				Percentage of Duty-Free Lines to All Products (%)				Objective/ Highlights
			2000	2015	2016	2017	2000	2015	2016	2017	
<b>Philippines-European Free Trade Association (EFTA) FTA</b>	2018	2027	-	-	-	-	-	-	-	-	Duty-free access for all Philippine industrial and fisheries exports to EFTA

AFTA = ASEAN Free Trade Area, ASEAN = Association of Southeast Asian Nations, ATIGA = ASEAN Trade in Goods Agreement, EPA = economic partnership agreement, FTA = free trade agreement, MFN = most favoured nation.

# NON-TARIFF MEASURES UPDATE <sup>1</sup> SINGAPORE

## **Anika Widiana and Steven Leonardo**

Center for Inclusive and Sustainable Development, Universitas Prasetiya Mulya,  
Jakarta, Indonesia

### **1. Introduction**

#### **1.1. Trade Structure**

A unique, small, free-port country, Singapore heavily depends on international trade and transparent regulations. Despite the global economic slowdown in 2016–2018, Singapore maintained a positive trade balance in 2016 (Figure 8.1, Figure 8.2).

Singapore has built partnerships with all countries, particularly Association of Southeast Asian Nation (ASEAN) members, other developing countries, and developed countries such as the United States, European Union, Australia, and Japan.

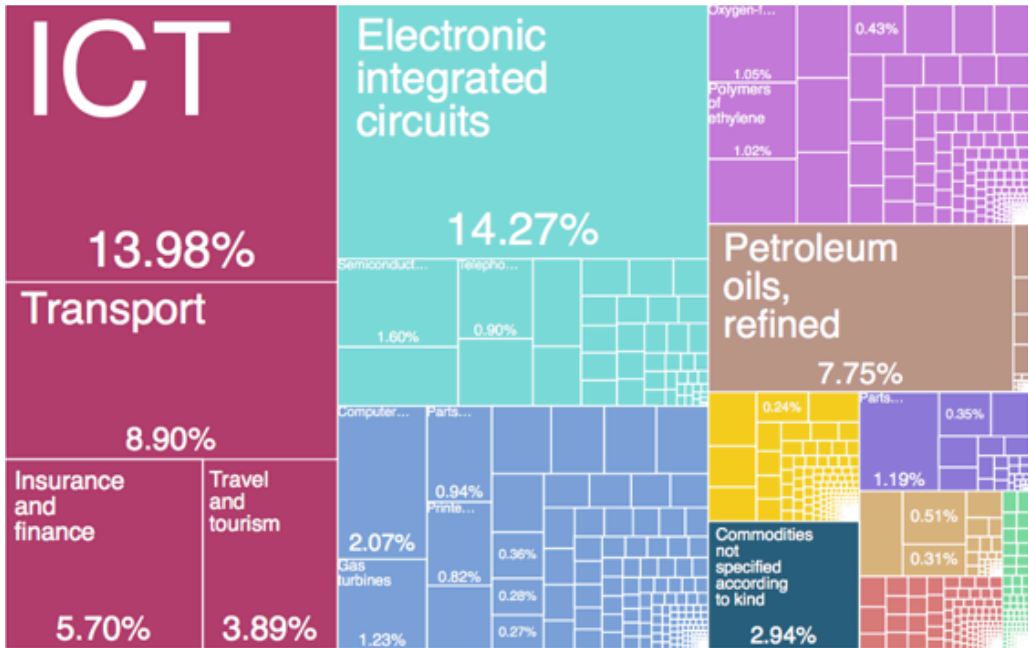
Singapore's non-tariff measure (NTM) data released in 2016 indicated that the government has eased exporting and importing. Over 99% of all imports are duty-free but high excise taxes are imposed on alcohol and tobacco products, motor vehicles, and petroleum products because of their social and environmental impacts. Singapore also maintains one of the most liberal trading systems in the world (Lim, Widiana, and Aw, 2016). Therefore, the government always updates its export and import regulations following the dynamics of world trade.

Singapore's export value was US\$486 billion in 2016. Electronics were the main contributor to trade, specifically electronic integrated circuits (ICs) (14.27% of all exports) and information and communication technology (ICT)-related products (13.98%) (Figure 8.1). The second-largest contributor to exports were transportation-related products (8.90%), followed by petroleum oils (7.75%).

---

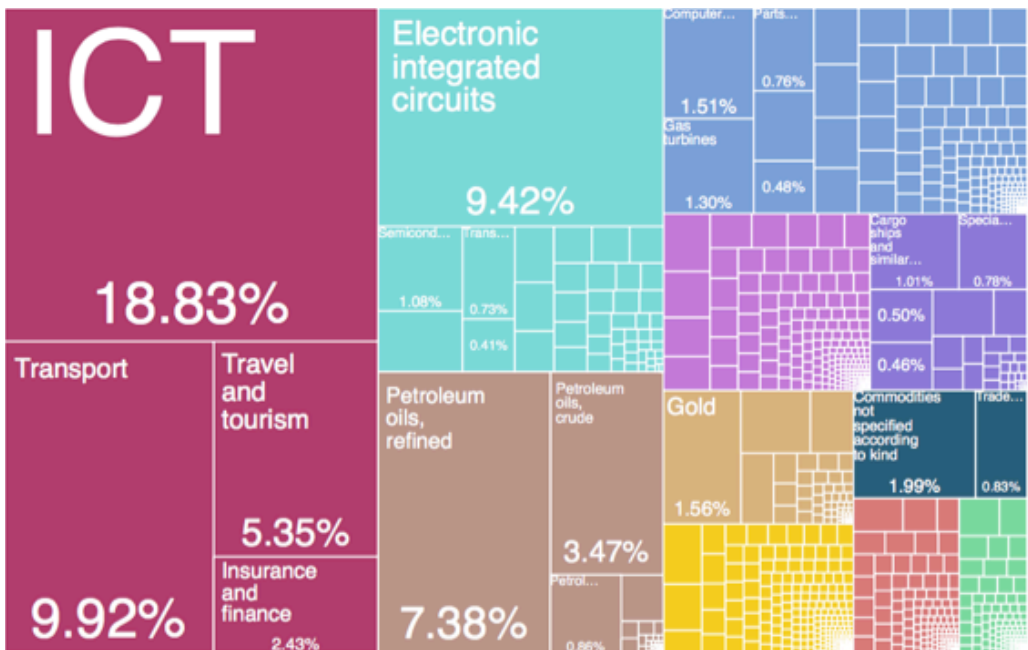
<sup>1</sup> The authors would like to thank Dr. Hank Lim and Prof. Simon Tay, both of the Singapore Institute for International Affairs, for their very useful inputs and comments, and Stefany Tanius for her great assistance in processing data.

Figure 8.1: Export Composition, Singapore, 2016



Source: CID (2019).

Figure 8.2: Import Composition, Singapore, 2016



Source: CID (2019).

Import values in 2016 totalled US\$445 billion, dominated by ICT-related products (18.83% of all imports). The next-largest contributors were transportation-related products (9.92%) and electronic ICs (9.42%). Demand for electronic products and software rose exponentially from 2013 to 2018.

In 2018, through the ASEAN Trade in Goods Agreement (ATIGA), Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, and Thailand eliminated intra-ASEAN import duties on 99.65% of their tariff lines. Cambodia, the Lao People’s Democratic Republic, Myanmar, and Viet Nam reduced their import duties to 0%–5% on 98.86% of their tariff lines. The focus is now on NTMs that could potentially have non-tariff barrier effects on trade and business (Gunawardane, 2018).

**Figure 8.3: Most Favoured Nation Tariffs, Singapore, 2000–2015**



Source: World Bank (2018).

Singapore has eliminated most import tariffs and signed 21 free trade agreements (FTAs) with 32 trading partners (KPMG, 2018). More than 99% of all imports enter duty-free. For social and/or environmental reasons, Singapore imposes high excise taxes on distilled spirits and wine, tobacco products, motor vehicles, and petroleum products.

Singapore imposes a 7% goods and services tax (GST). For dutiable goods, the taxable value for GST is calculated based on cost, insurance, and freight (CIF) value, all duties, and other charges. For non-dutiable goods, GST is based on the CIF value, any commission, and other incidental charges, whether or not printed on the invoice. If the goods are



dutiable, the GST is collected at the same time as duties. However, special provisions are made for goods stored in licensed warehouses and free trade zones.

## 1.2 Hierarchy of Laws and Regulations

A primary concern for NTM collection and classification is the comprehensiveness of the country's laws. An accurate, comprehensive, and readily accessible depository of laws is critical, whether print or digital or both. A searchable online database, however, is preferable.

Legal documents and other subsidiary legislation are accessible online through Singapore Statutes Online (SSO) (<https://sso.agc.gov.sg>) (Attorney-General's Chambers, 2018), an official website and single repository for all legislation managed by the Legislation Division of the Attorney-General's Chambers.

The following describes the hierarchy of legal documents:

Priority	English Title	Description	Example
1	Constitution	The Constitution is the supreme law of Singapore.	Constitution of the Republic of Singapore 9th August 1965
2	Acts of Parliament	These are laws called statutes (or sometimes legislation) made by the Singapore Parliament. They are second hierarchy after the Constitution. They cannot be inconsistent with the Constitution. Section 2(1) of the Interpretation Act defines "Act" or "Act of Parliament" to mean:  'an Act of the Parliament of Singapore and includes any Ordinance or Act of Singapore or Malaysia having the force of law in Singapore'.	Carriage of Goods by Sea Act (now re-enacted as the Bills of Lading Act) Chapter 33, 16th January 1978
3	Ordinances	Ordinances are counterparts of Acts of Parliament. The difference is that they were enacted before Singapore became an Independent Nation in 1965. "Ordinance" is defined in section 2(1) of the Interpretation Act to mean:  'any Ordinance of Singapore, and includes any Ordinance of the Colony of the Straits Settlements, any Ordinance of the Colony of Singapore or of the State of Singapore and any Proclamation having that the force of law in Singapore'.	Daughters of Charity of the Canossian Institute Incorporation Ordinance Chapter 359, 23rd November 1949
4	Subsidiary legislation	Subsidiary legislation can take many forms. Section 2(1) of the Interpretation Acts Defines "Subsidiary Legislation" to mean:  'any order in council, proclamation, rule, regulation, order, notification, by-law or other instrument made under any Act, Ordinance or other lawful authority and having legislative effect'.  Different types of subsidiary legislation: Regulations, Rules, Orders, Notifications, By-laws, Proclamations, Order in Council.	Carriage of Goods by Sea (Singapore Currency Equivalents) Order Chapter 33 Section 3(2); 25th June 1982

Source: Attorney-General's Chamber (2018).

Although the SSO is comprehensive, up to date, and reliable, updates and information should be confirmed from the official website of the issuing institutions to better understand the underlying context of the regulations.

## 2. Descriptive Statistics of Non-tariff Measures

Singapore actively supports and participates in ASEAN free trade and the implementation of NTMs. The government focuses on streamlining trade-related regulations without compromising domestic consumer protection or product performance and safety standards.

**Table 8.1: Comprehensiveness of Non-tariff Measures, Singapore**

No.	Comprehensiveness Indicator	Number in 2015	Number in 2018
1	Total NTM-related regulations	90	88
2	Total NTMs reported to the WTO	To be determined	22
3	Total number of coded NTMs	587	610
4	Total affected products (HS lines, national tariff lines)		
	a. Total number of affected products	10,635	10,635
	b. Affected products' share of total products	100%	100%
5	Total issuing institutions	23	23

No.	Summary of 2018 Updates	Total Updates	Subject to Amendment	New in 2018
1	Regulations	49	45	4
2	Measures	81	65	16

HS = Harmonized Commodity Description and Coding System, NTM = non-tariff measure, WTO = World Trade Organization.

Source: Authors' calculation based on updated 2018 NTM Database ASEAN-ERIA-UNCTAD (2018).

Table 8.1 summarises the descriptive statistics of NTMs in 2015–2018. The comprehensiveness of NTMs was updated by revisiting all regulations, focusing on trade-related ones, and identifying those that potentially contained NTMs. The number of NTM-related regulations was streamlined to 88, of which 22 were reported to the World Trade Organization.

However, the number of coded NTMs increased by 3.92% in 2018 to 610 measures from 587 in 2015. Some trade-related regulations have also been amended to include more specific protections or standards, leading to more NTMs but without changes in the number of issuing institutions.

In 2018, 10,635 products – that is, all products traded in Singapore – were affected by at least one NTM. The summary of updated trade-related regulations shows that after 2015,

four regulations were issued, including 16 new measures; 45 regulations were amended, affecting 65 measures.

While the authorities encouraged policymakers and business leaders to increase economic cooperation and trade openness with ASEAN, the chief executive of the Singapore Business Federation told the ASEAN Business and Investment Summit (12 November 2018) that the increase in NTMs was a consequence of the trend of lowering tariffs in the region. A significant increase is expected in non-tariff barriers in agri-food sectors such as nutritional labelling, halal certification, pre-market product registration, and import and export certification (Au-Yong, 2018).

**Table 8.2: Non-Tariff Measures by Issuing Institution, Singapore (number, %)**

No.	Issuing Institution	2015		2018	
		Number of NTMs	Proportion of NTMs (%)	Number of NTMs	Proportion of NTMs (%)
1	Agri-Food & Veterinary Authority	359	61.16	364	59.67
2	Ministry of the Environment, National Environment Agency	47	8.01	47	7.70
3	Ministry of Health	29	4.94	41	6.72
4	Ministry of Trade and Industry, Customs Authority	22	3.75	36	5.90
5	Health Science Authority	34	5.79	23	3.77
6	Singapore Customs Authority	17	2.90	17	2.79
7	Singapore Armed Forces, Singapore Police Force	12	2.04	13	2.13
8	Singapore Productivity and Standards Board	10	1.70	10	1.64
9	Health Sciences Authority, Central Narcotics Bureau	8	1.36	8	1.31
10	Info-communications Development Authority of Singapore	8	1.36	8	1.31
11	All other institutions	41	6.98	43	7.05
	<b>Total</b>	<b>587</b>	<b>100.00</b>	<b>610</b>	<b>100.00</b>

Source: Authors, based on ERIA-UNCTAD (2018).

NTMs were dominated by the Agri-Food & Veterinary Authority (AVA), which issued mostly sanitary and phytosanitary (SPS) and technical barriers to trade (TBT) measures (Table 8.2). The number of NTMs issued by AVA increased from 359 in 2015 to 364 in 2018, although their proportion decreased in 2018 from 61.16% to 59.67%.

AVA tightened food safety and requirement standards and issued all the new SPS measures to protect consumers. The Ministry of the Environment's National Environment Agency (NEA) remained in second place, with steady numbers of NTMs, followed by the Ministry of Health (41 in 2018 from 29 in 2015). Through the NEA, the government issued

regulations to conserve energy and tighten environment standards (e.g., for vehicular emissions).

During 2016–2018, the Ministry of Health issued regulations to control and limit oral dental gums, therapeutic products, and tobacco. The government issued regulations on the advertisement, distribution, and sale of tobacco products, revoking previous regulations, to discourage tobacco consumption by young people.

The significant increase in NTMs issued by the Ministry of Trade and Industry was for national security. Import regulations were amended to restrict the import of arms, weapons, and military equipment and its related materials from some countries.

Using the Pareto Analysis on information in Table 8.2, only five institutions were responsible for most NTMs (83.76%).

**Table 8.3: Non-tariff Measures by Chapter, Singapore, 2015 and 2018**

Chapter		2015		2018	
		Number of NTMs	Proportion of NTMs (%)	Number of NTMs	Proportion of NTMs (%)
A	Sanitary and phytosanitary (SPS) measures	131	22.32	136	22.30
B	Technical barriers to trade (TBT)	302	51.45	301	49.34
C	Pre-shipment inspection and other formalities	0	-	0	-
D	Contingent trade protective measures	0	-	0	-
E	Non-automatic licensing, quotas, prohibitions, and quantity control measures for other than SPS or TBT reasons	55	9.37	63	10.33
F	Price control measures, including additional taxes and charges	45	7.67	44	7.21
G	Finance measures	0	-	0	-
H	Measures affecting competition	0	-	0	-
I	Trade-related investment measures	0	-	0	-
J	Distribution restrictions	0	-	1	0.16
K	Restriction on post-sales services	0	-	0	-
L	Subsidies (excluding export subsidies under P7)	0	-	0	-
M	Government procurement restrictions	0	-	0	-
N	Intellectual property	0	-	0	-
O	Rules of origin	0	-	0	-
P	Export-related measures	54	9.20	65	10.66
<b>Total</b>		<b>587</b>	<b>100.0</b>	<b>610</b>	<b>100.0</b>

NTM = non-tariff measure.

Source: Authors, based on ERIA–UNCTAD (2018).

Table 8.3 shows the proportion of NTMs categorised by type according to classification by the Economic Research Institute for ASEAN and East Asia (ERIA) and the United Nations Conference on Trade and Development (UNCTAD). In 2015 and 2018, more than 70% of trade measures were SPS and TBT measures. In both years, the measures were dominated by TBT, which decreased from 302 in 2015 to 301 in 2018.

The government issued the Energy Conservation Regulation (Regulated Goods and Registered Suppliers) 2017, which contributed the most to TBT measures, followed by changes in safety requirements for consumer protection due to new specifications of certain products and new regulations affecting specific products (e.g., oral dental gums). SPS-related measures increased slightly; all additional A-coded measures were introduced by the amendment to the Food Regulations, such as external triggers (e.g., food-related diseases from other countries) and any update on affected product lists and raised food standards by AVA.

In 2018, the government quietly turned its attention to protection related to quotas and quality control, with a significant increase from 55 chapter-E NTMs in 2015 to 63 in 2018. Export-related policy was treated the same way, with export-related measures rising from 54 in 2015 to 65 in 2018. Almost all new export-related measures were the result of the amendment of the Regulation of Imports and Exports Regulations. In 2017, the government significantly amended the regulation by restricting the trade of goods, specifically arms, weapons, and military equipment to some countries (such as the Democratic People's Republic of Korea, Syria, and Iraq) to protect national security and help resolve global conflict.

**Table 8.4: Top-10 Non-tariff Measures, Singapore, 2015 and 2018 (number, %)**

No	NTM Type	Description	2015		2018	
			Number of NTMs	Proportion of NTMs (%)	Number of NTMs	Proportion of NTMs (%)
1	B6	Product identity requirements	116	19.76	116	19.02
2	B31	Labelling requirements	72	12.27	70	11.48
3	E1	Non-auto import-licensing procedures (non-SPS and non-TBT)	48	8.01	51	8.03
4	A31	Labelling requirements	42	7.16	42	6.89
5	A22	Restricted use of certain substances in food	35	5.96	39	6.39
6	B7	Product quality, safety, or performance requirement	25	4.26	23	3.77
7	F65	Import license fee	18	3.07	19	3.11
8	F69	Additional charge, n.e.s.	21	3.58	19	3.11
9	B82	Testing requirement	18	3.07	18	2.95

No	NTM Type	Description	2015		2018	
			Number of NTMs	Proportion of NTMs (%)	Number of NTMs	Proportion of NTMs (%)
10	P11	Export prohibition for technical reasons	16	2.73	17	2.79
	Others		176	30.15	196	32.46

n.e.s. = not elsewhere specified, SPS = sanitary and phytosanitary, TBT = technical barriers to trade.

Source: Authors, based on ERIA–UNCTAD (2018).

Table 8.4 shows the top-10 NTMs by type. Table 8.3 shows that they mostly contain SPS and TBT measures. Measures on product identity requirements (B6) were highest ranked in 2015 and 2018, with a steady number, followed by labelling requirements (B31).

E-related measures were ranked third, with 49 NTMs in 2018, specifically non-automatic import-licensing procedures other than authorisations for SPS or TBT reasons.

SPS measures – labelling requirements (A31) and the restriction of use of certain substances in foods (A22) – are ranked below TBT such as B6, B31, and E1. The number of A31 measures was the same from 2015 to 2018, while there were few additional A22 measures (35 to 39).

Price-control measures (F69 and F65) were also on the list, with slightly different numbers in 2015 and 2018. Export-related measures, particularly export prohibition for technical reasons (P11), increased from 16 in 2015 to 17 in 2018.

### 3. Non-tariff Measure Indicators

#### 3.1 Non-tariff Measure Indicators for Imports in 2018

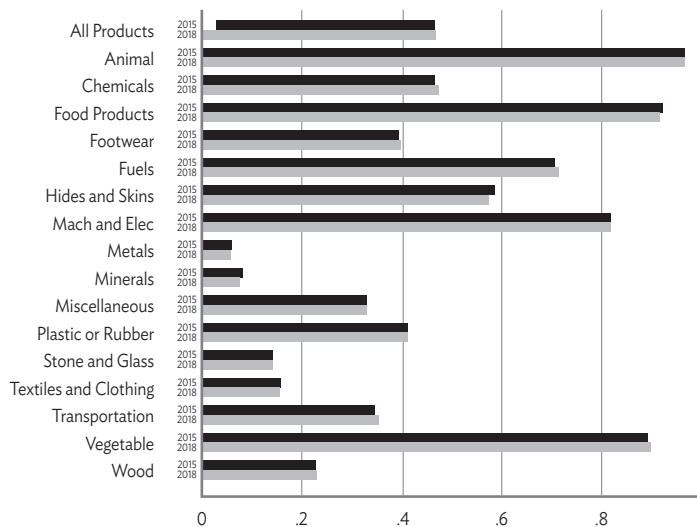
The NTM indicators are the frequency index, coverage ratio, and prevalence score. The frequency index shows the percentage of products affected by NTMs. It captures a country’s share of traded product lines subject to at least one NTM. The figures below show the frequency index categorised by HS2 product groups for imports and exports.

First, the frequency index is well below 100%, even though all coded NTMs within 88 regulations (Table 8.1) cover 100% of products in national tariff lines. This discrepancy arises from the exclusion of partial coverage measures, that is, measures affecting only a fraction of HS 6-digit products, in computing the indicator.

In 2018, partial coverage measures accounted for 40.33% of all measures (246 out of 610), with 17.86% unique HS codes with partial coverage indication (1,899 out of 10,635 products) subject to at least one NTM. For example, the Fisheries (Piranha) Rules from the Fisheries Act (Chapter 111) forbid the import or export of piranha. There is no specific HS code for piranha, so it is considered as other freshwater fish (HS Code 03019949), with partial coverage indication.

There were no significant changes in the frequency index for all products imported by Singapore in 2015 and 2018. In 2015 and 2018, the highest frequency index for imports were animal products, food products and vegetables, and machinery equipment.

**Figure 8.4: Frequency Index of Imports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018**



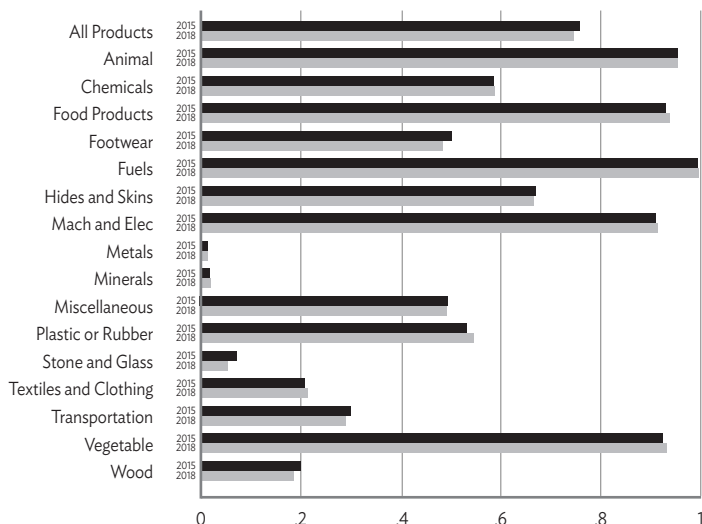
Source: UNCTAD, based on ERIA-UNCTAD (2018).

The coverage ratio for imported products saw a small decrease from 2015 to 2018, For both years the coverage ratios were slightly lower than 50%.

The prevalence score indicates a country's average number of distinct NTMs applied to regulated products. It measures the diversity of NTM types applied and provides some indication of the intensity of regulation.

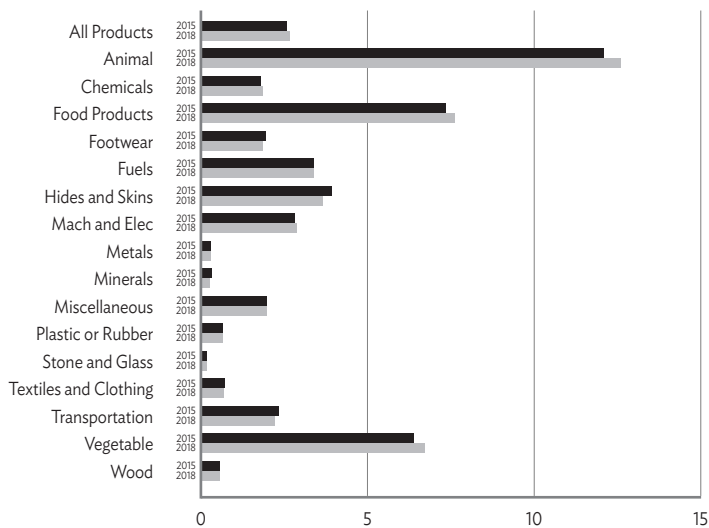
The prevalence score for imports saw a small increase from 2015 to 2018 because of animal products, food products, vegetables, and hides and skins.

**Figure 8.5: Coverage Ratio of Imports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018**



Source: UNCTAD, based on ERIA-UNCTAD (2018).

**Figure 8.6: Prevalence Score of Imports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018**

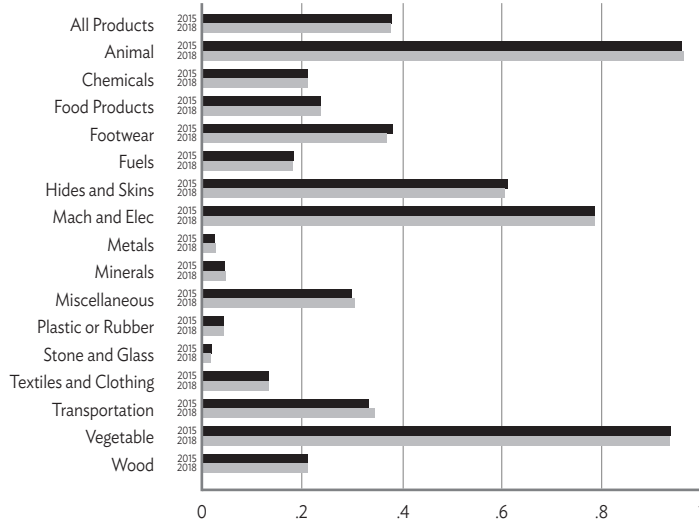


Source: UNCTAD, based on ERIA-UNCTAD (2018).



### 3.2 Non-tariff Measure Indicators for Exports in 2018

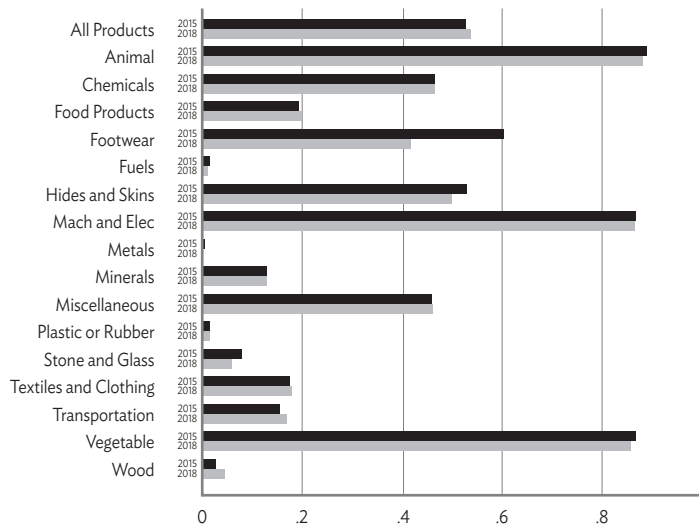
**Figure 8.7: Frequency Index of Exports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018**



Source: UNCTAD, based on ERIA-UNCTAD (2018).

Like imports, exports saw no significant changes in the frequency index from 2015 to 2018. The highest frequency index for exports was for animal products, vegetables, and machinery and electronics.

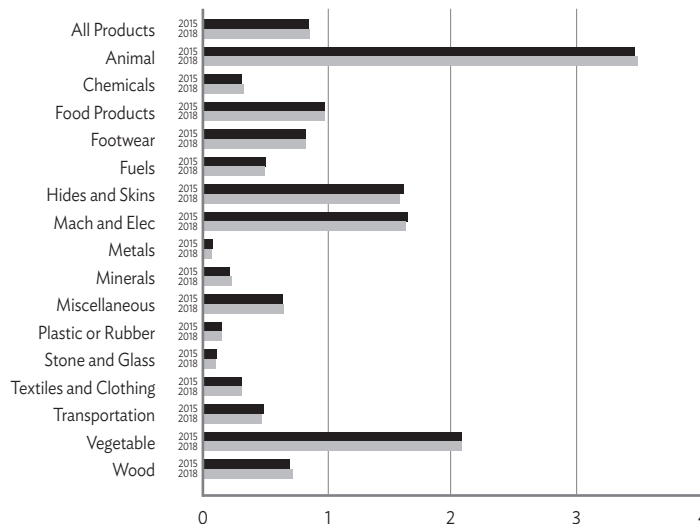
**Figure 8.8: Coverage Ratio of Exports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018**



Source: UNCTAD, based on ERIA-UNCTAD (2018).

The export coverage ratio remained constant across the years. For most products, the changes remained minor. The only exception is footwear, which coverage ratio shrank from 60% to around 40% without a significant change in frequency index.

**Figure 8.9: Prevalence Score of Exports, Country Total and by HS2 Product Group, Singapore, 2015 and 2018**



Source: UNCTAD, based on ERIA-UNCTAD (2018).

The prevalence score for exports remained stable for all products. Animal products had the highest prevalence score in 2015 and 2018.

## 4. Conclusion and Policy Recommendations

Ensuring legal comprehensiveness is essential to ensure full coverage of NTM-related regulations. Singapore continues to produce transparent and relevant policies. These consistent steps will improve the ease of doing business.

Singapore will also continue to update and ensure the reliability of its online single repository for regulations in the SSO. While the SSO is a central reference, the context and nature of each regulation can be obtained from the official website of the issuing institutions.

During the 2018 update, NTMs were dominated by SPS and TBT measures. Streamlining and harmonisation to make NTMs more effective can be done in the top five institutions, which contribute more than 80% of all NTMs (Table 8.2).

Singapore could boost export-related measures to ensure excellent export quality and competitiveness. The finance minister of Singapore said on 30 August 2018, during a public dialogue on NTMs and regional trade, that certain areas could benefit from reciprocity amongst member states, especially if policymakers begin where there is greater interest (Leow, 2018).

In conclusion, Singapore has a good regulatory framework to support its trade activities. By keeping regulations transparent, updated, and available in a single repository, and by ensuring that there is no overlap amongst regulations and policymakers, Singapore may be a good role model for pro-trade policy. Singapore has been actively developing transparent export–import regulations and related NTMs and encouraging ASEAN members to do the same. Transparency of NTMs is important to encourage trade, especially between ASEAN members.

## **References**

- Attorney-General's Chambers (2018), *Singapore Statutes Online*. Singapore: Government of Singapore. <https://sso.agc.gov.sg> (accessed January–October 2018).
- Au-Yong, R. (2018), 'Businesses should do their part for economic cooperation: PM Lee, 2018', *The Strait Times*. <https://www.straitstimes.com/singapore/businesses-should-do-their-part-for-economic-cooperation-pm-lee> (accessed November 2018).
- Center for International Development at Harvard University (CID) (2019), 'Atlas of Economic Complexity'. <http://atlas.cid.harvard.edu> (accessed September–October 2018).
- Gunawardane, K. (2018), 'Common Sense of Sri Lanka-Singapore FTA, 2018', *Daily Financial Times*. <http://www.ft.lk/columns/Common-sense-of-Sri-Lanka-Singapore-FTA/4-662780> (accessed September 2018).
- Leow, A. (2018), 'Make full use of global trade system, see regional blocs as building blocks: Heng Swee Keat', *The Strait Times*. <https://www.straitstimes.com/business/economy/take-care-of-global-trade-system-use-regional-blocs-as-building-blocks-heng-swee> (accessed November 2018).
- Lim, H., A. Widiana, and B. Aw (2016), 'Non-tariff Measures in Singapore', *Non-tariff Measures in ASEAN*. Jakarta: ERIA.

Singapore Customs (2018), *Singapore Trade Classification, Customs and Excise Duties 2018*. <https://www.customs.gov.sg/-/media/cus/files/business/harmonized-system-classification-of-goods/resources/stcced/stcced-2018-21-may.pdf> (accessed September–November 2018).

Thye, O.P. (2018), 'ASEAN Business Guide: Country Report Singapore', *ASEAN Business Guide: The Economies of ASEAN and the Opportunity They Present*. Singapore: KPMG.

World Integrated Trade Solution (WITS) (2018), 'Data on Export, Import, Tariff, NTM'. <https://wits.worldbank.org> (accessed August–November 2018).

# NON-TARIFF MEASURES IN THAILAND

**Nuttawut Laksanapanyakul,  
Papatsara Rattanasimanon, Sunthorn Tunmuntong,  
Pattharapon Yutthasaknukun, and  
Chedtha Intaravitak**

Thailand Development Research Institute, Thailand

## **1. Introduction**

Using the United Nations Conference on Trade and Development (UNCTAD) methodology and 2018 non-tariff measure (NTM) classifications, this chapter analyses Thailand's database of NTMs implemented during 2015–2018. Beginning with an overview of the trade structure, we recap the comprehensiveness of the database and, in section 2, summarise the types of NTMs imposed and regulatory institutions involved. Section 3 discusses the incidence of NTMs by product group. Section 4 draws conclusions and recommends policies.

### **1.1. Overview of Thailand's Trade Structure**

During the past 50 years of continuous economic growth, the structure of Thailand's economy and international trade has evolved dramatically. Once a primitive agricultural economy, Thailand developed light industry, then increasingly sophisticated heavy industry. Its development strategy changed from import-substitution industrialisation during the 1960s to export-oriented industrialisation from the 1970s. Since the start of trade and investment liberalisation, Thailand has entered into many bilateral and regional trade agreements.

Thailand is now an upper-middle-income country with an open economy and net trade surplus, and a high level of dependency on international merchandise trade, which was

approximately 100.9% of gross domestic product (GDP) in 2017 (World Bank, 2019). Exporting US\$237 billion worth of goods, Thailand ranked as the world's 20th-largest exporter in 2017 (World Bank, 2019). Imports in the same year totalled US\$223 billion, the 23rd-highest value in the world (World Bank, 2019). Many producers have successfully participated in the global value chain, especially in the electronics and automotive sectors.

Exports accounted for around 52.0% of GDP in 2017 (World Bank, 2019). Exports are mainly manufactured goods, the most important being computers (7.9% of total exports in 2016), motor vehicles (7.9%), electronic integrated circuits (4.6%), and telephone sets (2.6%). Rubber and rice each account for 1.8%. Major export partners are ASEAN countries (25.2%), the United States (12.4%), the European Union (11.2%), and Japan (9.4%) (Center for International Development, 2019).

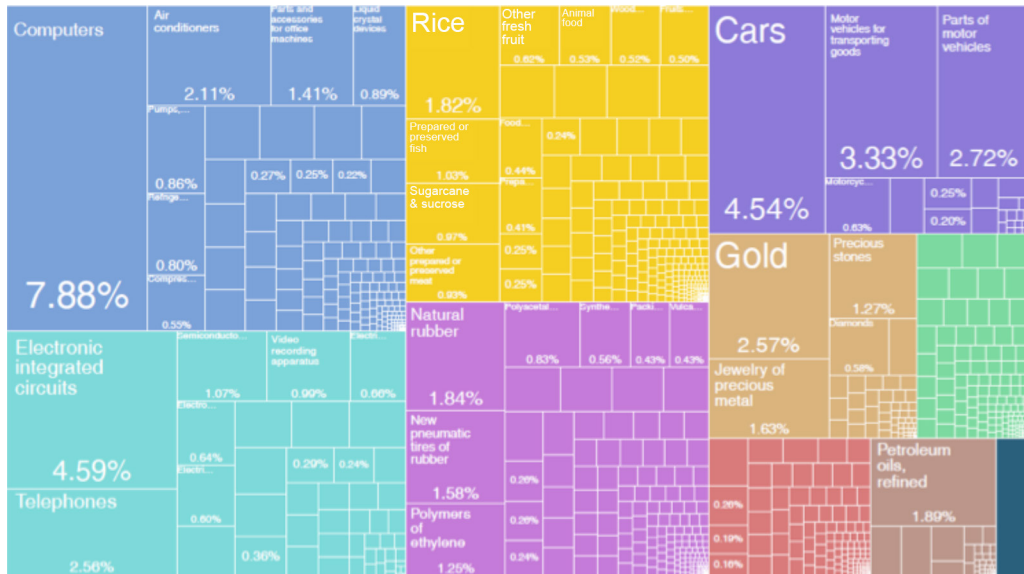
Thailand imports mainly raw materials and intermediate goods: parts of electronic appliances, base metals, chemicals, and plastic. Whilst fuel accounted for 11.5% of total imports in 2016, electronic integrated circuits (4.4%) and automotive parts (3.0%) were among the most crucial imports (Figure 9.2). The main import partners are China (19.9% of total imports), ASEAN countries (18.6%), Japan (14.4%), and the European Union (11.2%) (Center for International Development, 2019).

Thailand's simple average most favoured nation (MFN) applied tariff rate for all imported products was 9.5% in 2017, much lower than its bound rate of 28.0%. For imported non-agricultural products, where 40.5% of tariff lines in 2017 were MFN duty-free, the simple average MFN applied tariff rate was 7.2%. Yet, Thailand levied high tariffs on non-agricultural goods: for example, motor vehicles were subject to a tariff of 60%–200%, wood products 60%–80%, and jewellery 60%. In contrast, imported agricultural products were more sensitive. In the same year, only 12.4% of tariff lines for agricultural products entered the country MFN duty-free, and the simple average MFN applied tariff rate for agricultural products was 25.1%. The tariff on sugar cane was 65%, whilst a maximum MFN duty of 60% was imposed on onions, processed fish products, distilled spirits, and tobacco products.

Thailand imposes tariffs on a small number of exports: certain types of bovine hides, certain wood and sawn wood, and oil exported from the Thailand–Malaysia Joint Development Area to other countries.

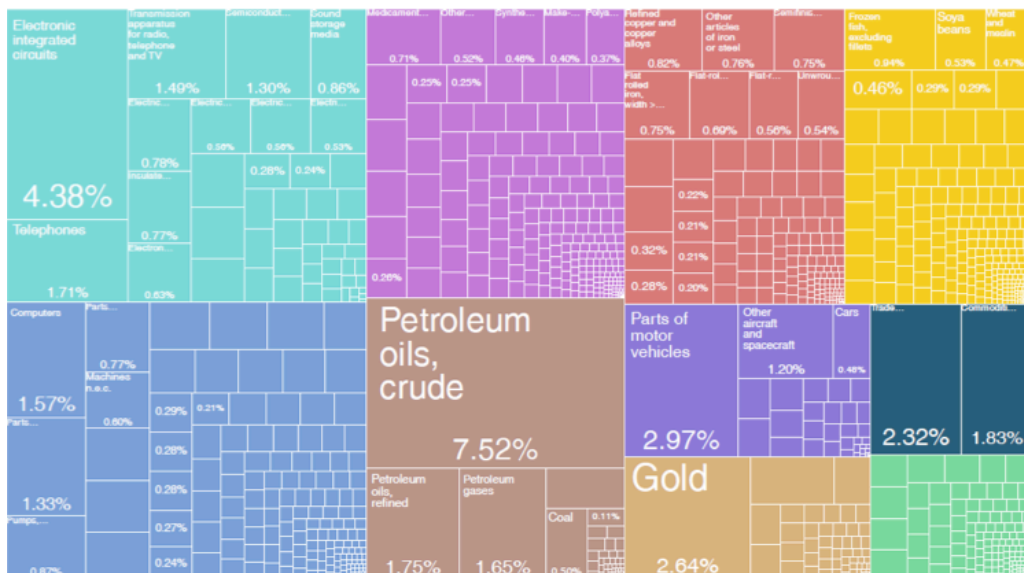
NTMs have played a significant role in Thailand's international trade policy regime. Depending on type, agricultural and non-agricultural products, either imported or exported, are subject to certain kinds of NTMs, the details of which are summarised in subsequent sections.

Figure 9.1: Composition of Thailand's Exports, 2016



Source: Center for International Development (2019).

Figure 9.2: Composition of Thailand's Imports, 2016



Source: Center for International Development (2019).

## 1.2. Non-tariff Measure-related Laws and Regulations in Thailand

Four types of laws are in place: the constitution, acts and emergency decrees, royal decrees, and administrative regulations (Figure 9.3). They function in a hierarchy, which determines how they rank in authority and how the authority and scope of each level is derived from the precedent one. A lower-level regulation generally cannot contradict a higher-level one.

The constitution is the supreme law. A constitution-based law defines, in general, the powers of and relationships among the three branches of government as well as those between the government and citizens regarding fundamental rights and responsibilities. The constitution does not directly stipulate NTMs.

Acts and emergency decrees are similar in hierarchical order but result from different procedures. Whilst acts are enacted with the approval of parliament, emergency decrees are endorsed by the cabinet to deal with crises. An example of an NTM-related act is the Industrial Products Standards Act, B.E. 2511 (1968), which authorises a specific entity to oversee all standards-related activities regarding industrial products. The act mentions not only how the competent entity may exercise its authority but also how businesses should comply with the act. However, the act does not contain a list of affected products.

A royal decree specifies principles and details for selected provisions of an act or emergency decree. It can be issued by the executive power without parliamentary approval, normally through the minister of the ministry authorised under a specific act or emergency decree. An example of an NTM-related royal decree is the Royal Decree Stipulating That White Portland Cement Has to Comply with the Standard, B.E. 2558 (2015). However, the royal decree does not mention details of standard criteria or their conformity assessment.

An administrative regulation is at the lowest level and typically incorporates detailed information about requirements, criteria, procedures, and penalties. It is enacted under the specific provisions of an act or emergency decree by the executive power. The exercise of power by the minister without prior cabinet approval is a ministerial notification, and when the minister has prior cabinet approval, a ministerial regulation. Because they contain so much information, administrative regulations at the ministerial level are the main source of NTM-related regulations.<sup>1</sup> An example of an NTM-related administrative

---

<sup>1</sup> Subordinate entities issue sub-levels of administrative regulations, such as department and committee notifications, which generally give no information crucial for registering NTMs.



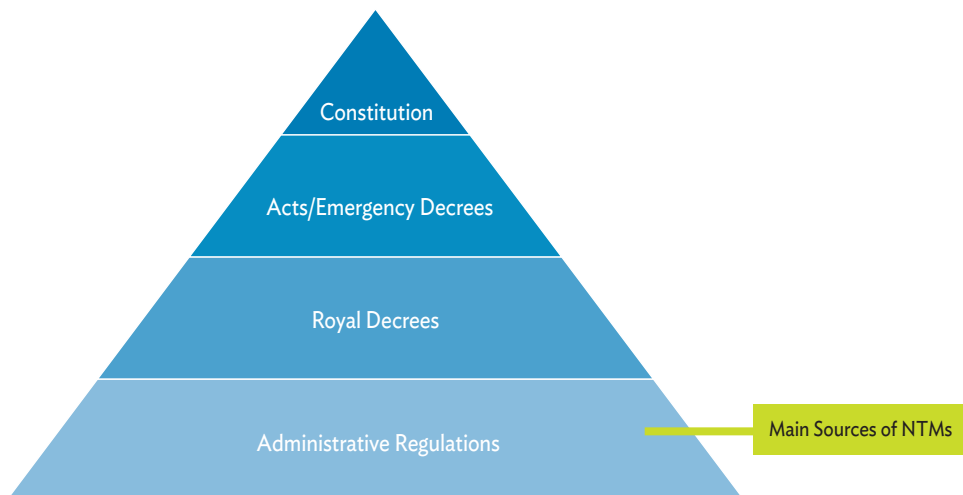
regulation is the Notification of the Ministry of Industry No. 4530 B.E. 2556 (2013) Stipulating the New Standards for White Portland Cement.

There are four centralised sources of legal documents and a long list of websites belonging to at least 35 regulatory agencies. There is not a single best source that covers all NTM-related regulations. Each source has advantages and disadvantages.

As all laws and regulations, regardless of hierarchical order, are required to be chronologically published in the Royal Thai Government Gazette (<http://www.mratchakitcha.soc.go.th>) before entry into force, the website has the most comprehensive and up-to-date legal documents, including the digital version of laws and regulations published in every volume since it was first published in 1858. It is impractical, however, to go through each volume to collect a list of NTM-related regulations. This source is the best but last resort when other sources are missing, inaccessible, or outdated.

The National Trade Repository (<http://www.thailandntr.com>) is the centralised database not only for NTMs but also key information about the country's international trade regime, such as tariffs, customs regulations, and service trade and e-commerce regulations. The website has at least two drawbacks. First, the regulations are submitted by the regulatory agencies at their own discretion and depending on their understanding of NTMs and willingness to make public NTM-related regulations. Second, it is unknown whether the regulations submitted are up to date.

**Figure 9.3: Hierarchy of Thailand's Laws and Regulations**

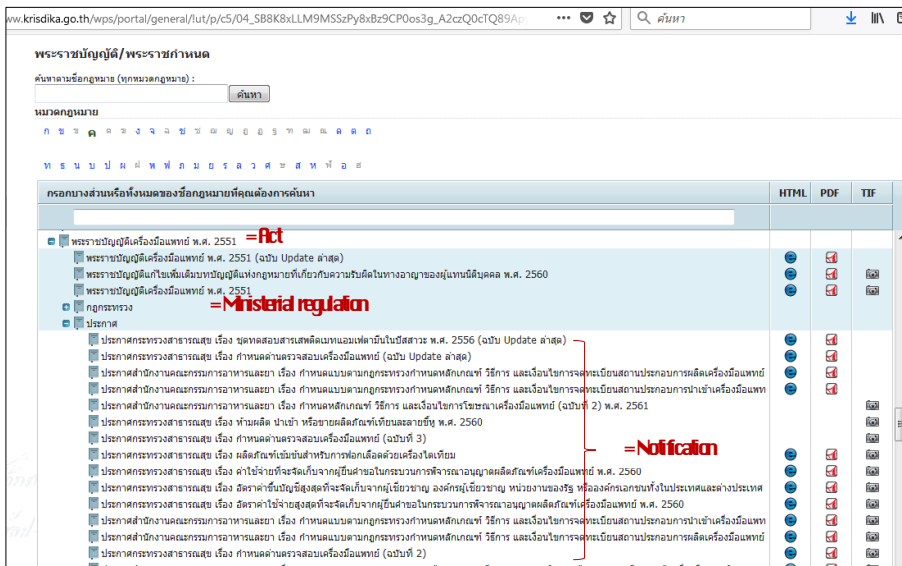


Source: Authors.

This study relied heavily on the Office of the Council of State (<http://www.krisdika.go.th>) (Figure 9.4). It is a centre for compiling and disseminating legal information. Lower-level regulations are listed and classified under their associated acts or emergency decrees. The website shows whether regulations are in force or revoked. The only imperfection is that it is uncertain whether all promulgated regulations are listed and updated.

The websites of regulatory agencies were thoroughly scrutinised. Whilst some deserve praise, many need massive and immediate reform. An example of a good website is that of the Department of Foreign Trade, where all regulations under its supervision are systematically categorised into type, product affected, and legal status. Other websites, however, lack information.

**Figure 9.4: Appearance of the Office of the Council of State’s Website**



Source: <http://www.krisdika.go.th> (accessed 1 February 2019).

## 2. Overview of Thailand’s Non-tariff Measures

This section summarises the comprehensiveness of the NTM database and provides a set of stylised facts about the types of NTMs and the regulatory institutions involved.

### 2.1. Comprehensiveness of Non-tariff Measures

NTMs have played an increasing role in Thailand’s international trade policy regime. In 2015, they were scattered amongst 59 acts or emergency decrees, then amongst 60 in

2017 when the Control of Marketing Promotion of Infant and Young Child Food Act, B.E. 2560 (2017) was issued. The act came with a new regulatory institution, increasing the number of such institutions from 34 in 2015 to 35 in 2018 (Table 9.1).

A combination of centralised and decentralised methods to collect data<sup>2</sup> showed that 757 regulations containing NTMs were implemented in 2015 and 821 in 2018.<sup>3</sup> Most of the regulations are in the Plant Quarantine Act, B.E. 2507 (1964), Industrial Products Standards Act, B.E. 2511 (1968), and Food Act, B.E. 2522 (1979) (Appendix).

We classified 3,039 NTMs in 2015 and 3,295 NTMs in 2018, about 70% of which were in the three acts mentioned above. The number of NTMs in the database was about 16 times more than reported to the World Trade Organization (WTO).

The conversion of the products described in each regulation into analogous harmonised codes resulted in 10,635 affected products at the national tariff line 8-digit level. This implies that NTMs hit 100% of all tariff lines and thus have an impact on the trade of these products.

**Table 9.1: Comprehensiveness of Non-tariff Measures in Thailand**

Comprehensiveness	Number in 2015	Number in 2018
Total number of acts/emergency decrees involved	59	60
Total number of regulatory agencies	34	35
Total number of coded regulations	757	821
Total number of NTMs reported to the WTO (measures in force) <sup>1</sup>	184	200
Total number of coded NTMs	3,039	3,295
Total affected products at the national tariff line level		
a. Total number of affected products <sup>2</sup>	10,635	10,635
b. Share of the number of affected products to the number of total products <sup>3</sup>	100.0	100.0

NTM = non-tariff measure.

Notes:

1. NTMs reported to the World Trade Organization exclude contingent trade-protective measures.
2. One product may be affected by more than one measure, but the same HS-coded product will be counted as one product, e.g. HS 01012100 has three NTMs but will be counted as 'one affected product'.
3. Thailand adopts the HS-8 digit at the national tariff line level and has 10,635 tariff lines.

Source: Authors, based on ERIA-UNCTAD (2019) and WTO (2019).

<sup>2</sup> Thanks to recent efforts by the Office of the Council of State and many government agencies, the 2018 database was more comprehensive than the 2015 one.

<sup>3</sup> Unless otherwise specified, all figures mentioned in this study are from 31 December 2015 and 31 December 2018.

## 2.2. Regulatory Institutions Issuing Non-tariff Measures

Regulatory institutions issuing NTMs are diverse across ministries. In 2018, there were 35 sub-agencies: 33 were under the supervision of 13 ministries, and 2 were independent public institutions. In 2015–2018, 20 sub-agencies saw increasing numbers of NTMs, while no institution saw a decrease, and the Department of Health was the only newcomer.

The numbers of NTMs adopted in 2018 and 2015 were highly concentrated in a few agencies (Table 9.2). At the ministerial level, about four-fifths of total NTMs are regulated by the Ministry of Agriculture and Cooperatives' Department of Agriculture (plants), Department of Livestock Development (land animals), and Department of Fisheries (aquatic creatures); the Ministry of Public Health's National Trade Repository (edible food, edible and inedible medicament); and the Ministry of Industry's Thai Industrial Standards (industrial products).

**Table 9.2: Non-tariff Measures in Thailand Classified by Issuing Institution**

	Issuing Institution	NTMs in 2015		NTMs in 2018	
		Number	Proportion (%)	Number	Proportion (%)
<b>1</b>	<b>Ministry of Agriculture and Cooperatives</b>	<b>1,150</b>	<b>37.84</b>	<b>1,257</b>	<b>38.15</b>
1.1	Department of Agriculture	1,068	35.14	1,145	34.75
1.2	Department of Livestock Development	51	1.68	53	1.61
1.3	Department of Fisheries	22	0.72	46	1.40
1.4	National Bureau of Agriculture Commodity and Food Standards	9	0.30	13	0.39
<b>2</b>	<b>Ministry of Public Health</b>	<b>814</b>	<b>26.79</b>	<b>863</b>	<b>26.19</b>
2.1	Food and Drug Administration	789	25.96	836	25.37
2.2	Department of Disease Control	12	0.39	12	0.36
2.3	Department of Medical Sciences	11	0.36	12	0.36
2.4	Department of Thai Traditional and Alternative Medicine	2	0.07	2	0.06
2.5	Department of Health	0	0.00	1	0.03
<b>3</b>	<b>Ministry of Industry</b>	<b>559</b>	<b>18.39</b>	<b>622</b>	<b>18.88</b>
3.1	Thai Industrial Standards	510	16.78	564	17.12
3.2	Department of Industrial Works	27	0.89	34	1.03
3.3	Office of the Cane and Sugar Board	18	0.59	19	0.58
3.4	Department of Primary Industries and Mines	4	0.13	5	0.15
<b>4</b>	<b>Ministry of Commerce</b>	<b>263</b>	<b>8.65</b>	<b>278</b>	<b>8.44</b>
4.1	Department of Foreign Trade	223	7.34	236	7.16
4.2	Department of Internal Trade	40	1.32	42	1.27

	Issuing Institution	NTMs in 2015		NTMs in 2018	
		Number	Proportion (%)	Number	Proportion (%)
5	<b>Prime Minister's Office</b>	<b>70</b>	<b>2.30</b>	<b>73</b>	<b>2.22</b>
	5.1 Office of the Consumer Protection Board	65	2.14	68	2.06
	5.2 Secretariat of the Cabinet	5	0.16	5	0.15
6	<b>Ministry of Energy</b>	<b>61</b>	<b>2.01</b>	<b>61</b>	<b>1.85</b>
	6.1 Department of Energy Business	57	1.88	57	1.73
	6.2 Energy Policy and Planning Office	3	0.10	3	0.09
	6.3 Department of Mineral Fuels	1	0.03	1	0.03
7	<b>Other public institutions</b>	<b>50</b>	<b>1.65</b>	<b>56</b>	<b>1.70</b>
	7.1 Office of the National Broadcasting and Telecommunications Commission	48	1.58	52	1.58
	7.2 Royal Thai Police	2	0.07	4	0.12
8	<b>Ministry of Natural Resources and Environment</b>	<b>33</b>	<b>1.09</b>	<b>39</b>	<b>1.18</b>
	8.1 Pollution Control Department	16	0.53	20	0.61
	8.2 Department of National Park, Wildlife and Plant Conservation	12	0.39	14	0.42
	8.3 Department of Mineral Resources	3	0.10	3	0.09
	8.4 Royal Forest Department	2	0.07	2	0.06
9	<b>Ministry of Finance</b>	<b>15</b>	<b>0.49</b>	<b>18</b>	<b>0.55</b>
	9.1 Excise Department	15	0.49	18	0.55
10	<b>Ministry of Defence</b>	<b>8</b>	<b>0.26</b>	<b>8</b>	<b>0.24</b>
	10.1 Defence Technology Institute (Public Organisation)	5	0.16	5	0.15
	10.2 Office of the Permanent Secretary for Ministry of Defence	2	0.07	2	0.06
	10.3 Defence Industry Department	1	0.03	1	0.03
11.	<b>Ministry of Science and Technology</b>	<b>2</b>	<b>0.07</b>	<b>6</b>	<b>0.18</b>
	11.1 Office of Atoms for Peace	2	0.07	6	0.18
12.	<b>Ministry of Culture</b>	<b>5</b>	<b>0.16</b>	<b>5</b>	<b>0.15</b>
	12.1 Fine Arts Department	4	0.13	4	0.12
	12.2 Office of the Permanent Secretary for Ministry of Culture	1	0.03	1	0.03
13.	<b>Ministry of Interior</b>	<b>5</b>	<b>0.16</b>	<b>5</b>	<b>0.15</b>
	13.1 Department of Provincial Administration	5	0.16	5	0.15
14.	<b>Ministry of Transport</b>	<b>4</b>	<b>0.13</b>	<b>4</b>	<b>0.12</b>
	14.1 Department of Land Transport	4	0.13	4	0.12
	<b>Total</b>	<b>3,039</b>	<b>100.00</b>	<b>3,295</b>	<b>100.00</b>

NTM = non-tariff measure.

Source: Authors, based on ERIA-UNCTAD (2019).

### 2.3. Non-tariff Measure Classification by Type

Thailand has imposed many types of NTMs, but none were reported as a finance measure, during 2015–2018. About 86% of NTMs in force in 2018 were import-related, whilst the rest were export-related, implying that imported goods catch regulatory agencies' attention more than other goods (Table 9.3).

As for import-related NTMs, sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT) have been outstanding. In 2018, a total of 1,256 NTMs were identified as SPS measures and 1,098 as TBT. SPS measures comprised 38% of total existing NTMs and were identified from 12 acts or emergency decrees. The regulations under the Plant Quarantine Act, B.E. 2507 (1964) on the control and prevention of pest outbreaks contributed the most SPS measures (about 55%), followed by food safety regulations under the Food Act, B.E. 2522 (1979) (39%). The most frequently used SPS measure was the certification requirement to prove that goods to be imported comply with technical SPS specifications (A83). Other common SPS measures included authorisation requirements for importers from the competent authorities (A15), as well as requirements related to packaging (A33) and storage and transport conditions (A64) to ensure that goods have been properly handled before reaching consumers. In 2015–2018, SPS measures saw a relatively small net increase of 4%.

TBT accounted for about one-third of total NTMs in 2018, associated with 33 acts or emergency decrees. Approximately 51% of total TBT came from regulations under the Industrial Product Standard Act, B.E. 2511 (1968) and other requirements, such as for labelling and packaging of certain products. The regulations under the Food Act, B.E. 2522 (1979) accounted for 13.92%. Unsurprisingly, labelling (B31) as well as product quality, safety, or performance requirements (B7) topped the TBT list. The most regularly used conformity assessments related to TBT were testing (B82) and certification requirements (B83). TBT recorded an 8% net increase in 2015–2018.

Pre-shipment inspection and other formalities were the next-highest import-related NTMs, accounting for 6% of total NTMs registered in 2018 and associated with 20 acts or emergency decrees. A high proportion (69%) of such NTMs was mentioned in the Plant Quarantine Act, B.E. 2507 (1964) regulations, and the other 12% was mentioned in the Prices of Goods and Services Act, B.E. 2542 (1999) regulations. Requirements for goods to pass through specified ports of customs (C3) as well as import-monitoring and surveillance requirements (C4) were at times stipulated for goods requiring a high level of attention. A big net increase of 25% in the number of such NTMs was observed in 2015–2018.

Price control measures, including additional taxes and charges, accounted for 5% of total NTMs in 2018. They were identified in 30 acts or emergency decrees, with the Plant Quarantine Act, B.E. 2507 (1964) accounting for most of the NTMs. The most popular measure was the import license fee (F65), which targets many agricultural and industrial products. In 2015–2018, measures related to price control and additional taxes and charges increased by 8%.

Non-automatic licensing, quotas, prohibitions, and quantity control measures other than for SPS measures or TBT comprised 4% of total NTMs in 2018. Their objective is to protect domestic industry, particularly sensitive products such as garlic, onion, soybeans, milk, palm oil, and sugar. Thailand also adopted a regulation that certain agricultural products could be imported only by the state-trading enterprise – the Public Warehouse Organization.

Export-related measures in 39 acts or emergency decrees accounted for 14% of total NTMs in 2018. The Plant Quarantine Act, B.E. 2507 (1964) accounted for 23% of all export-related NTMs, the Export Commodity Standards Act, B.E. 2503 (1960) for 18%, and the Export and Import of Goods Act, B.E. 2522 (1979) for 15%. Export-related NTMs vary widely: for instance, export license requirements (P13); export fees levied in connection to services provided (P43); product quality, safety, or performance requirements (P16); certification requirements (P183); and testing requirements (P181). In 2015–2018, the number of export-related measures saw a huge increase of 14%.

Thailand implemented a total of 100 sub-types of NTMs based on the 2018 UNCTAD classification. The 10 most intensively employed NTMs typically accounted for more than half of total NTMs (Table 9.4) and rarely changed during 2015–2018. TBT-related labelling requirements (B31) were the most used, followed by product quality, safety, or performance requirements (B7) and SPS certification requirements (A83).

**Table 9.3: Non-tariff Measures in Thailand Classified by Chapter**

	Chapter	NTMs in 2015		NTMs in 2018	
		Number	Proportion (%)	Number	Proportion (%)
A	Sanitary and phytosanitary (SPS)	1,204	39.62	1,256	38.12
B	Technical barriers to trade (TBT)	1,015	33.40	1,098	33.32
C	Pre-shipment inspection and other formalities	161	5.30	202	6.13
E	Non-automatic licensing, quotas, prohibitions, and quantity control measures other than SPS or TBT reasons	106	3.49	116	3.52
F	Price control measures, including additional taxes and charges	157	5.17	170	5.16

	Chapter	NTMs in 2015		NTMs in 2018	
		Number	Proportion (%)	Number	Proportion (%)
G	Finance measures	0	0.00	0	0.00
H	Measures affecting competition	1	0.03	1	0.03
P	Export-related measures	395	13.00	452	13.72
	<b>Total NTMs</b>	<b>3,039</b>	<b>100.00</b>	<b>3,295</b>	<b>100.00</b>

Source: Authors, based on ERIA-UNCTAD (2019).

**Table 9.4: Top 10 Non-tariff Measures in Thailand**

NTM Type	NTM Code	NTMs in 2015		NTMs in 2018	
		Number	Proportion (%)	Number	Proportion (%)
Technical barriers to trade (TBT)-related labelling requirements	B31	303	9.97	333	10.11
Product quality, product safety, or product performance requirements	B7	254	8.36	259	7.86
Sanitary and phytosanitary (SPS) certification requirements	A83	212	6.98	232	7.04
TBT testing requirements	B82	150	4.94	162	4.92
TBT certification requirements	B83	139	4.57	155	4.70
Import license fee	F65	140	4.61	153	4.64
Requirements for goods to pass through specified ports of customs	C3	129	4.24	141	4.28
SPS authorisation requirements for importers from the competent authorities	A15	124	4.08	132	4.01
SPS-related packaging requirements	A33	108	3.55	114	3.46
SPS-related storage and transport conditions	A64	66	2.17	67	2.03
Others		1,414	46.53	1,547	46.95

Source: Authors, based on ERIA-UNCTAD (2019).

### 3. Non-tariff Measure Indicators

NTM incidence is further analysed using the frequency index, coverage ratio, and prevalence score. The frequency index is the share of tariff lines within a product group affected by at least one NTM. The coverage ratio, which is simply the frequency ratio weighted by trade, is the share of the trade values of each tariff line within a product group affected by at least one NTM. The prevalence score indicates the average number of distinct NTMs imposed on tariff lines within a product group. All NTM indicators were calculated based on UNCTAD's methodology by excluding NTMs that cover only some products at the 6-digit harmonised level. This exclusion aims to downplay the overstatement of some specific NTMs imposed only on products with specific characteristics or purposes.



For example, whilst only irradiated food products are subject to the specific labelling requirement, food products more commonly found in the market are non-irradiated and hence not subject to this requirement. The specific labelling requirement for irradiated food products is thus excluded when calculating the NTM indicators. As a result, even though 100% of products at the 8-digit national tariff line level were affected by NTMs, it was not necessary for the frequency index to be 100%.

### 3.1 Export-related Non-tariff Measure Indicators

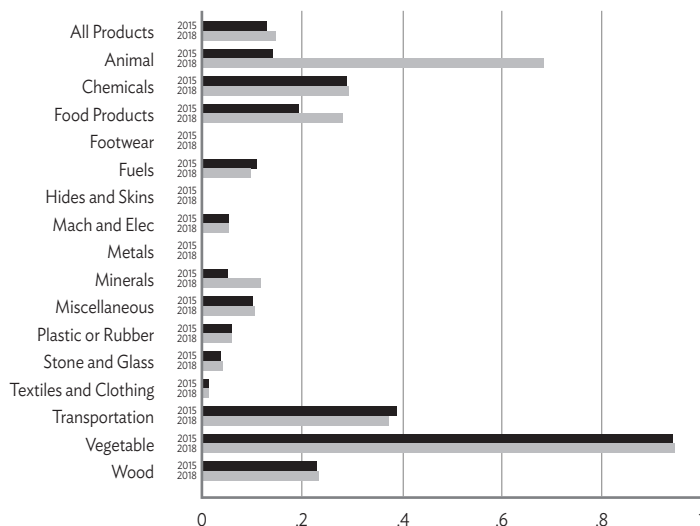
Thailand has seldom adopted NTMs on its exports (Figure 9.5 and Figure 9.6). In 2018, the frequency index for exports was 0.15 and the coverage ratio 0.33, which means that 15% of different types of exported goods at the national tariff line level, accounting for 33% of total exports in 2018, were subject to at least one NTM. Goods in most sectors have a frequency index below 10% and a coverage ratio under 30%. There are only two sectors with exceptionally high percentages, either in terms of the frequency index or coverage ratio, or the number of goods affected by at least one NTM – vegetable and animal products. The NTMs imposed on them are mainly to ensure that they are pest-free, disease-free, and perfectly safe for consumers. Exported transport, chemical, and food products also have a moderate frequency index with a high coverage ratio, which implies that, as Thailand is a leading exporter of these products, exported goods are required to meet specified standards and provide key information to consumers.

The frequency indices of exported goods in all sectors, except three, rarely changed in 2015–2018. Animal and mineral products recently saw a swift increase in their frequency index and coverage ratio. The frequency index for animal products rose markedly because of the requirements related to the revamped Animal Epidemics Act, Animal Feed Quality Control Act, and Emergency Decree on Fisheries. The refurbished Minerals Act resulted in a noticeable increase in the frequency index as the government moved to ensure that the newly enacted licensing requirements had better coverage of valuable minerals to be exported. Stone and glass product exports saw a considerable increase in coverage ratio but not in frequency index.

The overall prevalence score for all exports was low at only 0.52 in 2018 (Figure 9.7). Almost all exports had a prevalence score of less than 1. But animal and vegetable products had a relatively high prevalence score. On average, 2.90 export-related measures were applied to animal products and 1.73 to vegetable products. Exporters of these products must have an export license. SPS certification is also usually required as proof that the product meets specified SPS requirements, such as tolerance limits for residues or contamination by certain non-microbiological substances, restricted use of certain substances in foods and feeds and their contact materials, and hygienic requirements related to SPS.

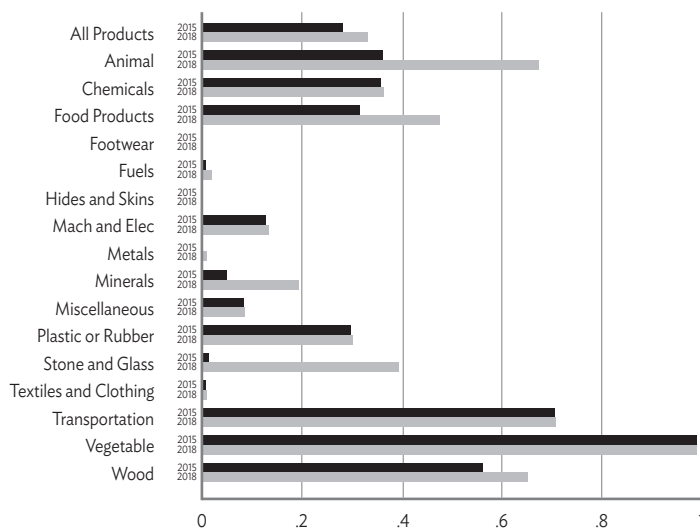
The prevalence score of most exports also rarely changed in 2015–2018. However, animal products saw an immense increase in every NTM indicator; the prevalence score jumped from 0.49 in 2015 to 2.90 in 2018, implying that each exported product was subject to at least two additional measures. This indicates that animal products have recently become a priority in enforcing NTMs.

**Figure 9.5: Frequency Index of Thailand’s Exports by Product Group, 2015 and 2018**

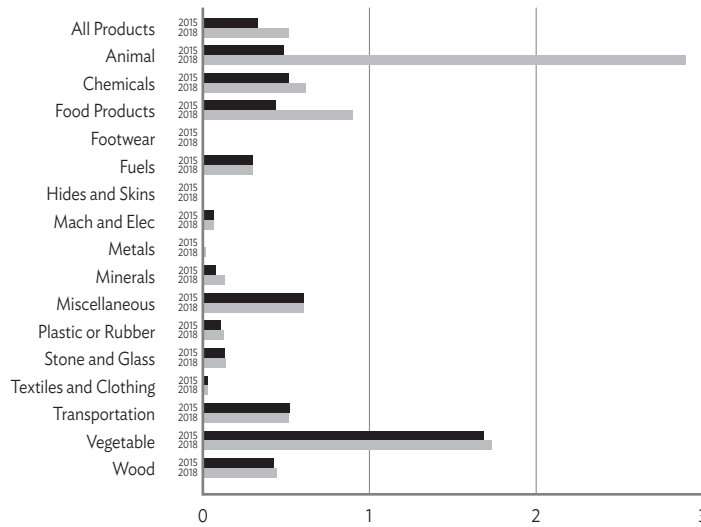


Note: Products and product groups are defined at the 8- and 2-digit HS codes, respectively.  
Source: ERIA–UNCTAD (2019).

**Figure 9.6: Coverage Ratio of Thailand’s Exports by Product Group, 2015 and 2018**



Note: Products and product groups are defined at the 8- and 2-digit HS codes, respectively.  
Source: ERIA–UNCTAD (2019).

**Figure 9.7: Prevalence Score of Thailand's Exports by Product Group, 2015 and 2018**

Note: Products and product groups are defined at the 8- and 2-digit HS codes, respectively.

Source: ERIA–UNCTAD (2019).

### 3.2 Thailand's Import-related Non-tariff Measure Indicators

Imports have been more susceptible than exports to at least one NTM (Figure 9.8 and Figure 9.9). The frequency index for imports, in general, is about double that for exports; 29% of different types of imports at the national tariff line level in 2018 were subject to at least one NTM (Figure 9.8). In most sectors, imports have a higher frequency index than exports. More than 9 out of 10 vegetable, animal, and food imports were subject to NTMs.

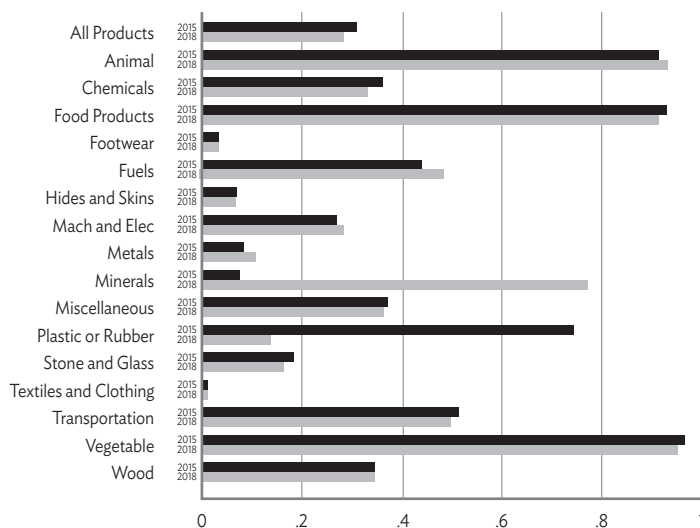
The overall coverage ratio for imports is slightly higher than for exports; 38% of total imports in 2018 were subjected to NTMs. Whilst NTMs were imposed on almost 100% of vegetable and animal products traded, few NTMs were imposed on imported textiles and clothing, footwear, and metals. It would be instructive to study further why imported food products' coverage ratio is lower than their frequency index. Is the country's trade structure the reason for lower demand for products affected by NTMs, or do NTMs restrict import volume?

The frequency index and coverage ratio of imported goods in almost all sectors rarely changed in 2015–2018. Thailand kept close watch on almost all imported vegetable, animal, and food products, whilst the amended Minerals Act resulted in a notable increase in NTMs applied to imported minerals.

The overall prevalence score for imports in 2018 was high at 2.66 (Figure 9.10), which means that on average almost three NTMs were imposed on each product imported. Imported food products had the top prevalence score at 12.47, followed by animal products at 12.35, and vegetable products at 10.44. Import licensing is normally a prerequisite for importing these goods. Depending on the type of goods, either or both SPS and TBT certification is also required. In many cases, inspection and laboratory testing related to SPS, TBT, or both are also needed. Labelling is often mandatory for SPS, TBT, or both purposes. Products specifically subject to SPS standards must meet requirements such as tolerance limits for residues of or contamination by certain non-microbiological substances, restricted use of certain substances in foods and feeds and their contact materials, hygienic requirements related to SPS, and treatment to eliminate plant and animal pests and disease-causing organisms in the final product. When TBT is mentioned, product quality, safety, or performance requirements are commonly obligatory. As epidemics occur frequently, the authorities adopt a systems approach to better cope with SPS-related risks, and sometimes prohibit the import of products from countries or regions affected by contagious diseases.

The prevalence score for imports changed insignificantly in 2015–2018. The prevalence score for mineral products changed mainly because of the extension of product coverage, not because of the increase in number of measures.

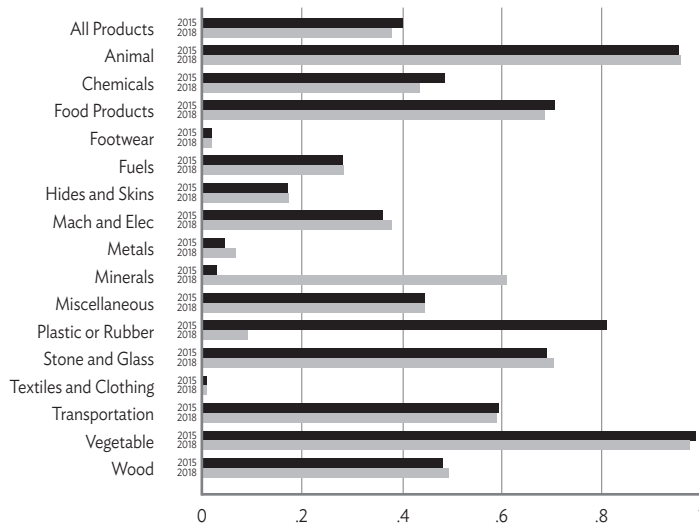
**Figure 9.8: Frequency Index of Thailand’s Imports by Product Group, 2015 and 2018**



Note: Products and product groups are defined at the 8- and 2-digit HS codes, respectively.

Source: ERIA-UNCTAD (2019).

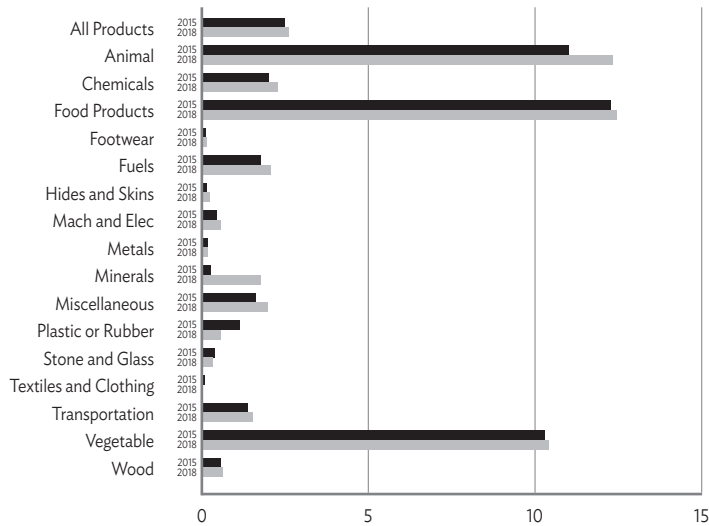
**Figure 9.9: Coverage Ratio of Thailand's Imports by Product Group, 2015 and 2018**



Note: Products and product groups are defined at the 8- and 2-digit HS codes, respectively.

Source: ERIA-UNCTAD (2019).

**Figure 9.10: Prevalence Score of Thailand's Imports by Product Group, 2015 and 2018**



Note: Products and product groups are defined at the 8- and 2-digit HS codes, respectively.

Source: ERIA-UNCTAD (2019).

## 4. Conclusions and Policy Recommendations

Using a combination of centralised and decentralised sources of information, and based on the UNCTAD's 2018 NTM classification, we updated Thailand's database of NTMs implemented during 2015–2018. More comprehensive than the previous database, the 2018 database contains 3,039 NTMs for 2015 and 3,295 NTMs for 2018. The number of classified NTMs was about 16 times more than reported to the WTO.

Although the number of NTMs in force in Thailand is higher than in other ASEAN countries and continues to rise, most of the NTMs are technical measures to ensure safety for all. The Department of Agriculture, Food and Drug Administration, and Thai Industrial Standards are the 'big three' regulatory sub-agencies, holding almost four-fifths of all NTMs. SPS and TBT safety concerns are their responsibility. The Department of Agriculture mainly utilises the Plant Quarantine Act, B.E. 2507 (1964) to keep close watch over the plant-related NTMs. With the Food Act, B.E. 2522 (1979), the Food and Drug Administration regulates edible food and edible and inedible medicaments. Thai Industrial Standards is guided by the Industrial Products Standards Act, B.E. 2511 (1968).

NTMs affect 100% of all 8-digit tariff lines. Of NTMs in force in 2018, about 86% were import-related, implying that regulatory agencies pay more attention to imports. The total number of affected goods (i.e. 100%) might be overstated, however, because, in many cases, a specific NTM was imposed only on products with certain characteristics or purposes. We therefore further analysed the incidence of NTMs by using the frequency index, coverage ratio, and prevalence score.

Of the goods at the national tariff line level, 29% accounted for 38% of total imports in 2018 and were subject to at least one NTM. On average, almost three import-related NTMs were imposed per product. Regardless of any indicators used, imported food, animal, and vegetable products were subject to a high incidence of applied NTMs: 12.47, 12.35, and 10.44, respectively. Few NTMs were imposed on imported textiles and clothing, footwear, and metals.

Thailand has applied NTMs to certain key exports: 15% of exported goods at the national tariff line level accounted for 33% of total exports in 2018 and were subject to at least one NTM. The overall prevalence score for all exports is low at only 0.52 in 2018; almost all export sectors have a prevalence score of less than 1, except for animal (2.90) and vegetable products (1.73).

The government has adopted many initiatives to pull Thailand out of the middle-income trap. 'Government 4.0' aims to make the government more open and connected, citizen-

centric, as well as smart and high performing; give individuals and businesses access to clear and straightforward information; make it easy for all stakeholders to comply with regulations; and make the exercise of authority more transparent and speedy.

Although they have a long way to go, two efforts are praiseworthy. One is the enforcement of the Licensing Facilitation Act B.E.2558 (2015), stipulating that each government authority shall prepare a public manual outlining the rules, procedures, and conditions for the submission of applications; defining the work flow; and specifying the time it takes to grant licenses. The manual should also list the documents to be attached to the application and specify whether electronic application is available or not for the license of interest. The other is the collaboration among the Office of the Public Sector Development Commission, Office of the Council of State, and Electronic Government Agency (Public Organisation) to help regulatory agencies disseminate their regulations online. These two efforts will result in the successful collection and classification of NTMs.

To streamline NTMs, the following immediate actions are proposed:

- Validate and merge NTMs in the database with those in the National Trade Repository, which should be the only and official comprehensive and referable databank, and confirm which NTMs are missing in the repository as well as which agencies misreport NTMs. Agencies may misreport NTMs because they are either not aware that their regulations are NTMs or want to hide these NTMs. NTMs can be streamlined only if regulatory institutions admit the existence of NTMs in the first place.
- Work closely with the government task force to streamline important NTMs and abolish unnecessary ones. Businesses complain that licensing requirements are amongst the most burdensome NTMs (Thailand Development Research Institute, 2013, 2015). The government's response is the Regulatory Guillotine Committee, which reviews national license and permit requirements to eliminate redundant ones, and streamline burdensome and complex procedures to promote efficiency and economic development. At least two flagships are in the committee's pipeline: the Food and Drug Administration's registration of health-related products and the Department of Agriculture's SPS licensing of agricultural products (Office of the Public Sector Development Commission, 2018). Our database could help the committee.

## **References**

Center for International Development (2019), *The Atlas of Economic Complexity, 2019*. Cambridge, MA: Center for International Development. <http://atlas.cid.harvard.edu/> (accessed 1 February 2019).

Economic Research Institute for ASEAN and East Asia and United Nations Conference on Trade and Development (2019), *ERIA-UNCATD NTM database, 2018*. Geneva: United Nations Conference on Trade and Development (accessed 1 February 2019).

Office of the Public Sector Development Commission (2018), *Annual reports on the public sector development*. Bangkok: Office of the Public Sector Development Commission, Thailand.

Thailand Development Research Institute (2013), *NTMs of Thailand trade partners in ASEAN*. Bangkok: Office of Industrial Economics, Ministry of Industry, Thailand.

Thailand Development Research Institute (2015), 'Thailand Country Study ASEAN Economic Community Blueprint Mid-term Review Project', *ERIA Discussion Paper Series*, ERIA-DP-2015-46.

World Bank (2019), *World Development Indicators, 2019*. Washington, DC: World Bank. <https://data.worldbank.org/indicator/tg.val.totl.gd.zs> (accessed 1 February 2019).

World Bank (2019), *World Development Indicators, 2019*. Washington, DC: World Bank. <https://data.worldbank.org/indicator/tm.val.mrch.cd.wt> (accessed 1 February 2019).

World Bank (2019), *World Development Indicators, 2019*. Washington, DC: World Bank. <https://data.worldbank.org/indicator/tx.val.mrch.cd.wt> (accessed 1 February 2019).

World Trade Organization (2017), *World Trade Statistical Review*. Geneva: World Trade Organization.

World Trade Organization (2018), *World Tariff Profiles 2018*. Geneva: World Trade Organization.

World Trade Organization (2019), *Integrated Trade Intelligence Portal 2019*. Geneva: World Trade Organization. <https://i-tip.wto.org/goods/Default.aspx> (accessed 1 February 2019).



## Appendix

Table 9.A1: Non-tariff Measures in Thailand Classified by Act or Emergency Decree

Act or Emergency Decree	Number of Regulations		Number of NTMs	
	2015	2018	2015	2018
<b>Newly issued</b>				
Control of Marketing Promotion of Infant and Young Child Food Act, B.E. 2560 (2017)	0	1	0	1
<b>Existing</b>				
Act on Ancient Monuments, Antiques, Objects of Art and National Museums, B.E. 2504 (1961)	2	2	4	4
Agricultural Standards Act, B.E. 2551 (2008)	5	8	9	13
Alcohol Beverage Control Act B.E. 2551 (2008)	1	1	1	1
Animal Breeding Development Act, B.E. 2509 (1966)	1	1	1	1
Animal Epidemics Act, B.E. 2558 (2015)	7	7	21	25
Animal Feed Quality Control Act, B.E. 2558 (2015)	15	18	29	27
Arms Control Act, B.E. 2530 (1987)	2	2	2	2
Arms Factory act, B.E. 2550 (2007)	4	4	5	5
Beasts of Burden Act, B.E. 2482 (1939)	1	1	2	2
Broadcasting and Television Businesses Act, B.E. 2551 (2008)	1	1	2	2
Chain Saw Act, B.E. 2545 (2002)	2	2	2	2
Commodities Control Act, B.E.2495 (1952)	1	1	4	4
Consumer Protection Act, B.E. 2522 (1979)	65	68	65	68
Control of Exports of Armaments and War Materials out of the Kingdom. Act, B.E. 2495 (1952)	1	1	1	1
Cosmetics Act, B.E. 2558 (2015)	9	9	17	18
Elephant Ivory Tusks Act, B.E.2558 (2015)	2	2	6	6
Emergency Decree on Fisheries, B.E. 2558 (2015)	5	11	20	44
Emergency Decree on Prevention against Abuse of Volatile Substances, B.E. 2533 (1990)	1	1	1	1
Emergency Decree on Remedy and Prevention of Shortage of Fuel Oil, B.E. 2516 (1973)	2	2	2	2
Energy Conservation Promotion Act, B.E. 2535 (1992)	1	1	1	1
Enhancement and Conservation of the National Environmental Quality Act, B.E. 2535 (1992)	9	11	16	20
Excise Act, B.E. 2560 (2017)	3	6	11	15
Export And Import Of Goods Act, B.E. 2522 (1979)	83	86	152	157
Export Commodity Standards Act, B.E. 2503 (1960)	28	30	75	83
Fertilisers Act, B.E. 2518 (1975)	5	5	13	13
Film and Video Act, B.E. 2551 (2008)	1	1	1	1
Firearms, Ammunition, Explosives, Fireworks and Imitation Firearms Act B.E. 2490 (1947)	3	3	3	3
Food Act, B.E. 2522 (1979)	98	102	617	647

## NON-TARIFF MEASURES IN ASEAN - AN UPDATE

Act or Emergency Decree	Number of Regulations		Number of NTMs	
	2015	2018	2015	2018
Fuel Trade Act, B.E. 2543 (2000)	16	16	57	57
Hazardous Substance Act, B.E. 2535 (1992)	10	14	27	34
Health Promotion Foundation Act, B.E. 2544 (2001)	1	1	2	2
Industrial Products Standards Act, B.E. 2511 (1968)	108	118	510	564
Measurement Act, B.E. 2542 (1999)	4	5	8	12
Medical Device Act, B.E. 2551 (2008)	22	24	78	85
Medicine Act, B.E. 2510 (1967)	10	10	19	19
Minerals Act, B.E. 2560 (2017)	2	3	4	5
Narcotic Act B.E. 2522 (1979)	10	12	24	30
Nuclear Energy for Peace Act, B.E. 2559 (2016)	1	1	2	6
Paleontological Resources Protection Act, B.E. 2551 (2008)	3	3	3	3
Pathogens and Animal Toxins Act, B.E. 2558 (2015)	2	4	11	12
Petroleum Act, B.E. 2514 (1971)	1	1	1	1
Plant Quarantine Act, B.E. 2507 (1964)	94	103	1,029	1,106
Plant Variety Protection Act, B.E. 2542 (1999)	1	1	2	2
Plants Act, B.E. 2518 (1975)	5	5	14	14
Prices of Goods and Services Act, B.E. 2542 (1999)	26	24	26	24
Printing Recordation Act, B.E. 2550 (2007)	2	4	2	4
Protection and Promotion of Thai Traditional Medical Knowledge Act, B.E. 2542 (1999)	2	2	2	2
Psychotropic Substances Act, B.E. 2559 (2016)	19	20	29	32
Radio Communications Act, B.E. 2498 (1955)	31	32	46	50
Rice Trading Act, B.E. 2489 (1946)	1	1	2	2
Rubber Control Act, B.E. 2542 (1999)	3	3	10	10
State Administration Act, B.E. 2534 (1991)	1	1	5	5
Sugar cane and Granulated Sugar Act, B.E. 2527 (1984)	9	9	18	19
Thai Public Broadcasting Service Act, B.E. 2551 (2008)	1	1	2	1
Tobacco Product Control Act, B.E.2560 (2017)	8	8	11	11
Vehicle Act, B.E. 2522 (1979)	4	4	4	4
Wild Animal Reservation and Protection Act, B.E. 2535 (1992)	2	3	8	10
<b>Total</b>	<b>757</b>	<b>821</b>	<b>3,039</b>	<b>3,295</b>

NTM = non-tariff measure.

Source: Authors, based on ERIA-UNCTAD (2019).

# NON-TARIFF MEASURES IN VIET NAM<sup>1</sup>

**Duong Anh Nguyen,<sup>2</sup> Hang Thu Dinh,<sup>3</sup>  
Thien Thi Nhan Do,<sup>4</sup> and Thanh Tri Vo<sup>5</sup>**  
Central Institute for Economic Management, Viet Nam

## 1. Introduction

Since the start of Doi Moi (Renovation) in 1986, Viet Nam has implemented comprehensive economic reforms, broadly categorised into (1) market-oriented institutional reforms, (2) macroeconomic stabilisation, and (3) proactive integration. The periods with meaningful efforts to liberalise trade and investment (1989–1996 and 2000–2007) were associated with comprehensive reforms of domestic economic institutions. Even the country’s accession to the World Trade Organization (WTO) in 2007 did not end the country’s regional and global economic integration process. Viet Nam negotiated, signed, and implemented more free trade agreements (FTAs) during 2008–2018 to (1) enhance access to foreign markets and foreign resources (capital, technology, know-how, amongst others); and (2) introduce domestic economic reforms closely aligned with international best practices.

As of January 2019, Viet Nam was amongst the countries most open to trade, with 16 FTAs, of which 11 has already taken effect. It has built a network of strategic partnerships with 15 countries and comprehensive partnerships with 10, including 5 permanent

---

<sup>1</sup> This research was conducted as a part of the project of the Economic Research Institute for ASEAN and East Asia (ERIA) and the United Nations Conference on Trade and Development (UNCTAD) on NTMs in ASEAN (second phase). The authors would like to express appreciation to both ERIA and UNCTAD for constructive guidance and ideas. The opinions expressed in this paper are the sole responsibility of the authors and do not reflect the views of ERIA or UNCTAD or the Central Institute for Economic Management (CIEM).

<sup>2</sup> Lead author, director, Department for General Economic Issues and Integration Studies (DGEIIS), CIEM. [anhduong510@yahoo.com](mailto:anhduong510@yahoo.com) / [aduong@mpi.gov.vn](mailto:aduong@mpi.gov.vn). 68 Phan Dinh Phung Street, Ba Dinh District, Hanoi, Viet Nam.

<sup>3</sup> Deputy director, DGEIIS, CIEM.

<sup>4</sup> Researcher, DGEIIS, CIEM.

<sup>5</sup> Senior expert, CIEM.

members of the UN Security Council. Trade openness, measured by trade as a percentage of gross domestic product (GDP), increased rapidly from 143.8% in 2007 to 196.1% in 2018.

As economic integration deepens, a question that arises is how much more policy space Viet Nam has to protect legitimate community objectives in trade. Viet Nam has significantly phased out tariff barriers to trade and eliminated many non-tariff barriers (NTBs), including quantitative restrictions on imports, quotas, bans, permit requirements, prior authorisation requirements, and licensing requirements. In line with the WTO Trade Facilitation Agreement (TFA), Viet Nam has gradually reformed the system of regulations, improved the transparency of non-tariff measures (NTMs), and simplified administrative procedures, especially in the specialised inspection of traded goods.

This chapter examines the NTMs in effect before 31 March 2018 with updates to the NTMs in effect before 31 March 2015 (first phase) and between 31 March 2015 and 31 March 2018 (second phase). The NTM update was based on the United Nations Conference on Trade and Development (UNCTAD) International Classification of NTMs, interim 2018 version. Section 2 of this paper gives an overview of trade performance. Section 3 describes NTM statistics. Section 4 discusses NTM incidence via the frequency index, coverage ratio, and prevalence score. Section 5 concludes the paper and recommends policies.

## **2. Trade Performance**

### **2.1. Trade Structure**

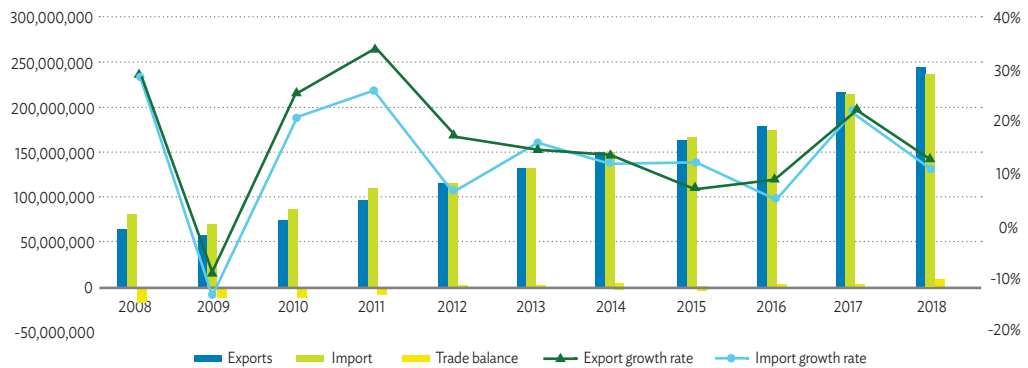
Viet Nam's exports and imports expanded almost continuously in 2008–2018 (Figure 10.1). The annual export growth rate averaged 15.78%. In 2008, exports grew at a high rate of 29.1%. The adverse effects of the global financial crisis and economic recession then caused Viet Nam's exports to drop by 8.9% in 2009. Yet, export growth bounced back in 2010 and mostly stayed at two-digit levels, except in 2016. In 2018, Viet Nam's exports amounted to almost US\$243.5 billion or 99.4% of GDP.

Similarly, Viet Nam's import value increased almost continuously, except for the one-off contraction in 2009 due to the global financial crisis and economic recession. Imports grew by 40.0% in 2007 and 28.6% in 2008 before decreasing by 13.3% in 2009. Since 2010, imports have surged but more slowly than exports. Remarkably, since 2013, import growth has been more closely associated with export growth, as exports depended more heavily on the foreign-invested sector, which sourced a large share of intermediate inputs

from imports (Vo et al., 2017). As of 2018, imports reached US\$236.7 billion or 96.6% of GDP.

The import growth rate has lagged behind the export growth rate since 2010 (Figure 10.1). The trade deficit narrowed from US\$18.03 billion in 2008 to US\$9.84 billion in 2011. Since 2012, Viet Nam has started to report trade surpluses more frequently as export growth has surpassed import growth. The trade surplus rose from US\$2.23 billion in 2016 to US\$6.79 billion in 2018, partly reflecting comprehensive efforts to (1) promote exports, including via improved compliance with international standards and best practices; and (2) restrain imports, including via changes in importation requirements.

**Figure 10.1: Exports and Imports, Viet Nam, 2008–2018 (US\$ thousand, %)**



Note: The growth rates for exports and imports are on the right-hand axis.

Source: Authors, calculated from GSO (2018) and Trade Map (2019).

### *Trade by Partner*

The key markets – the Association of Southeast Asian Nations (ASEAN), the European Union (EU), China, Japan, the Republic of Korea (henceforth, Korea), and the United States (US) – bought the lion's share of Viet Nam's exports, averaging 76.83% in 2008–2012 and 77.26% in 2013–2018 (Table 10.1). The shares of ASEAN and Japan went down, whilst those of the EU, the US, China, and Korea increased. In 2013–2018, Viet Nam had lower growth rates of exports to most markets than in 2008–2012. The average growth rates of exports indicated that Viet Nam could exploit export opportunities in new destinations (Korea and China) instead of traditional ones (EU, US, ASEAN).

The total share of imports from the six major markets rose from 76.95% in 2008–2012 to 80.26% in 2013–2018. China has for years been the largest source of imports, with its share going up significantly to 28.42% in 2013–2018 from 23.41% in 2008–2012. However, the share of imports from Korea grew most rapidly, from an average of 11.56%

in 2008–2012 to 18.38% in 2013–2018. Imports from most markets grew more slowly in 2013–2018 than in 2008–2012 despite a high value in absolute terms. ASEAN’s share fell from 20.07% to 14.22% over the same period (Table 10.2).

**Table 10.1: Export Structure and Export Average Growth Rates to Major Destinations, Viet Nam (%)**

Export	Shares		Growth Rates	
	2008–2012	2013–2018	2008–2012	2013–2018
ASEAN	15.01	11.10	16.53	6.01
China	10.52	13.28	28.62	21.49
EU	17.01	18.29	17.39	12.84
Japan	11.57	8.59	16.49	6.30
Korea	4.32	6.23	35.03	21.78
US	18.40	19.79	14.25	15.83
<b>Total</b>	<b>76.83</b>	<b>77.26</b>		

ASEAN = Association of Southeast Asian Nations, EU = European Union, Korea = Republic of Korea, US = United States.

Source: Authors, calculated from GSO (2018) and Trade Map (2019).

**Table 10.2: Import Structure and Import Average Growth Rates from Major Destinations, Viet Nam, 2008–2018 (%)**

Import	Shares		Growth Rates	
	2008–2012	2013–2018	2008–2012	2013–2018
ASEAN	20.07	14.22	5.53	7.29
China	23.41	28.42	17.97	14.50
EU	7.54	6.16	11.31	7.91
Japan	10.25	8.38	13.39	8.58
Korea	11.56	18.38	23.81	20.47
US	4.13	4.69	23.28	17.52
World	76.95	80.26		

ASEAN = Association of Southeast Asian Nations, EU = European Union, Korea = Republic of Korea, US = United States.

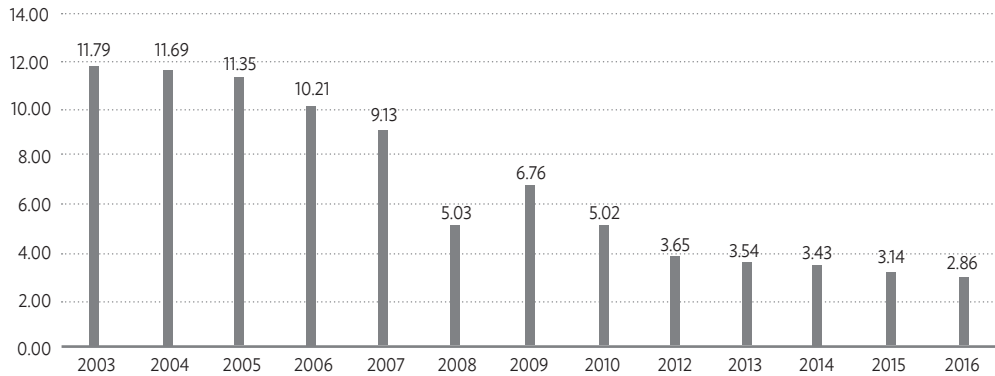
Source: Authors, calculated from GSO (2018) and Trade Map (2019).

### **Weighted Average Tariff**

Tariff rates have been phased out gradually in accordance with Viet Nam’s commitments under FTAs and the WTO. There are three sets of tariff rates: (1) most favoured nation (MFN) under rates the WTO, (2) preferential rates under FTAs, and (3) general rates for the few countries and territories without MFN status. The weighted average of the

effectively applied tariff rate of Viet Nam dropped sharply from 11.79% in 2003 to 2.86% in 2016 (Figure 10.2). The industries producing intermediate goods (chemicals, fertiliser, metal products, and construction materials, for example) have low rates of nominal protection. In contrast, final goods (particularly food and drinks, pharmaceuticals, and garments) remain subject to higher tariffs.

**Figure 10.2: Effectively Applied Tariffs (AHS), Weighted Average Over Time, Viet Nam, 2003–2016 (%)**



Source: World Integrated Trade Solution (2019).

## 2.2 Legal Comprehensiveness

### 2.2.1 Hierarchy of Laws and Regulations

In 2015, to improve legislation, the National Assembly passed Law No. 80/2015/QH13 on the promulgation of legal normative documents, which came into effect in July 2016. Legal documents include the following categories in order of decreasing validity: (1) the Constitution; (2) codes, laws, and resolutions of the National Assembly; (3) ordinances and resolutions of the Standing Committee of the National Assembly; (4) orders and decisions of the President; (5) decrees of the government; (6) decisions of the Prime Minister; and (7) circulars of ministers and heads of ministerial agencies (Table 10.3).

**Table 10.3: Hierarchy of Legal Documents, Viet Nam**

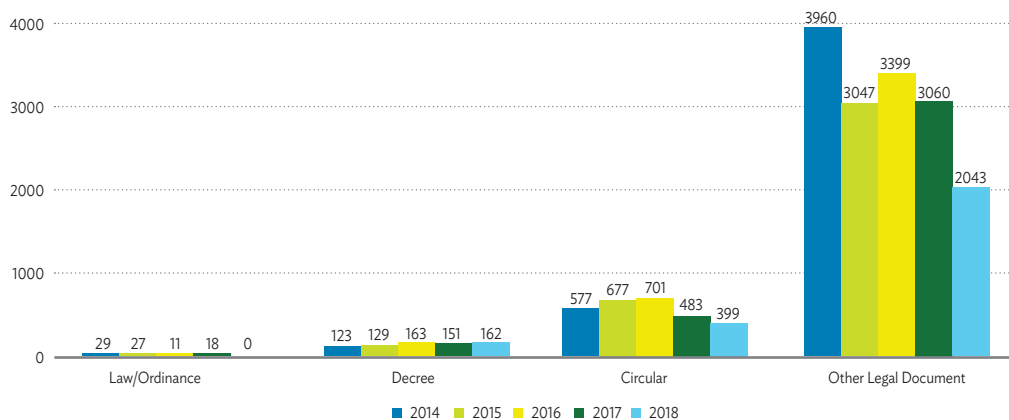
Priority	English title	Vietnamese title	Description	Issued by
1	Constitution	Hiến pháp	Supreme law of the land	National Assembly
2	Law	Luật	Rules established in line with the Constitution	National Assembly
	Ordinance	Pháp lệnh	Implemented under the National Assembly's assignment	National Assembly Standing Committee

Priority	English title	Vietnamese title	Description	Issued by
3	Resolution	Nghị quyết	Issued by the National Assembly to set out activities to implement laws and policies	National Assembly, National Assembly Standing Committee
4	Order	Lệnh	Issued to fulfil a certain task	President
5	Decision	Quyết định	Sets out objectives, tasks, activities, and implementation mechanism for certain activities	President, Prime Minister
6	Decree	Nghị định	Detailed instructions to implement certain laws, and resolutions of the National Assembly and its Standing Committee	Government
7	Circular	Thông tư	Detailed instructions to implement certain laws, decrees	Minister

Source: Authors.

All laws are under the authority of the National Assembly, whilst ordinances are issued by the Standing Committee of the National Assembly. However, the implementation and guidance of laws rely heavily on government agencies. Decisions, decrees, and circulars are largely issued by the government or members of government. The enforcement of laws and policies depends heavily on the circulars and guiding policy documents issued by ministries and other authorities. However, the number of circulars and other policy documents is large (Figure 10.3).

**Figure 10.3: Number of Issued Legal Documents, Viet Nam, 2014–2018**



Source: Authors, compiled from Government of Viet Nam (2019)

### 2.2.2 Regulatory Reform Until 2013

Since 1986, market-oriented reforms have covered a wide range of institutional changes to enhance the freedom to do business, level the playing field for all economic actors, and



strengthen market competition, amongst others. Regulatory reforms have been crucial. The functions of the government and public administration agencies at all levels have shifted progressively from direct intervention to indirect management, using legal and economic instruments.

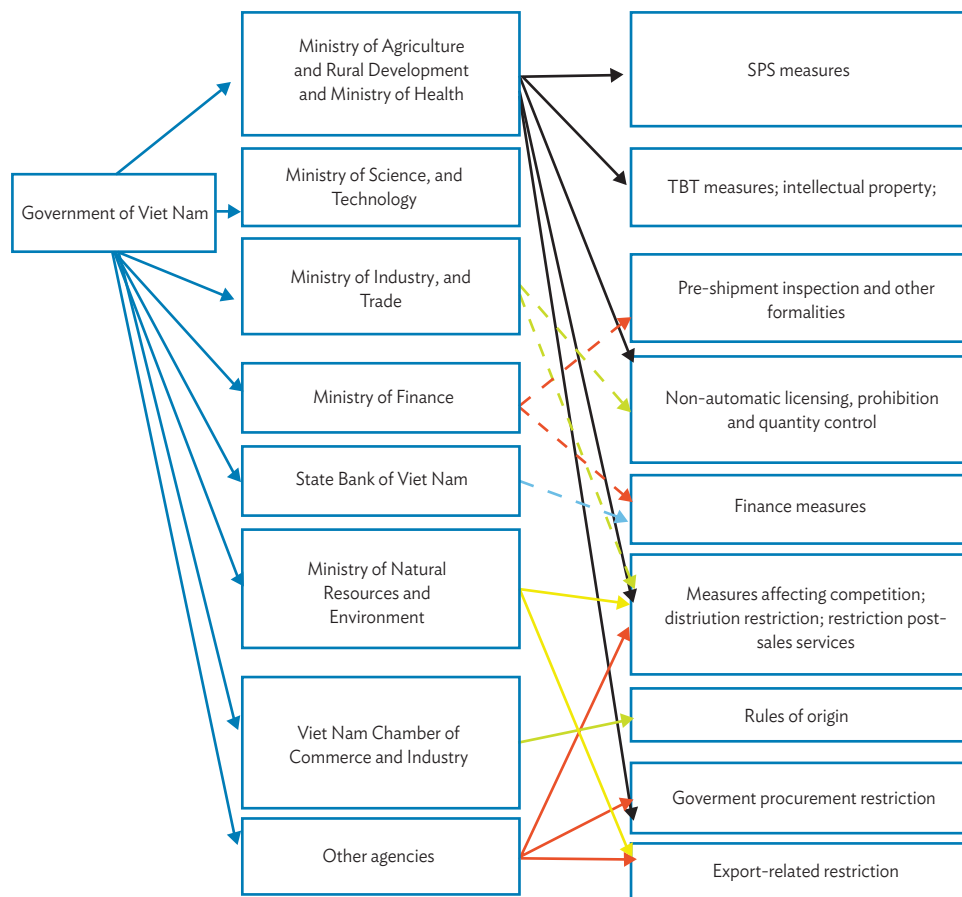
**Table 10.4: Major Contextual Changes in Regulatory Reform Since 1986, Viet Nam**

Period	Major Events and Changes
<b>1986–1988</b>	<ul style="list-style-type: none"> <li>- Abolition of central economic planning</li> <li>- Reforms towards a multi-sector economy, with more participation of private and foreign enterprises</li> <li>- Setting up of legal frameworks for foreign trade, foreign direct investment</li> </ul>
<b>1989–1996</b>	<ul style="list-style-type: none"> <li>- Amendment of the Constitution in 1992</li> <li>- Reforms in agriculture, trade, exchange rate, financial system, state-owned enterprises (SOEs), amongst others</li> <li>- Expansion of trade relations with other countries and territories</li> <li>- Joined ASEAN in 1995</li> </ul>
<b>1997–1999</b>	<ul style="list-style-type: none"> <li>- Asian financial monetary crisis</li> <li>- Slowdown of reforms and international economic integration</li> </ul>
<b>2000–2008</b>	<ul style="list-style-type: none"> <li>- Comprehensive reforms of SOEs, state budget, competition, and markets for production factors, amongst others</li> <li>- Regulatory changes for more equal treatment of domestic and foreign entities</li> <li>- Accession to the World Trade Organization in 2007</li> <li>- Public administrative reforms</li> </ul>
<b>2009–2014</b>	<ul style="list-style-type: none"> <li>- Slower growth due to the impacts of global financial crisis and macroeconomic stabilisation policies</li> <li>- Amendment of the Constitution in 2013</li> <li>- Modest regulatory changes for further trade and investment liberalisation, reforms of business environment (including public administrative procedures), amongst others</li> </ul>
<b>2014–2018</b>	<ul style="list-style-type: none"> <li>- Strengthening of the macro- and micro-economic foundations to improve the business investment environment and competitiveness</li> <li>- Removal of unnecessary business investment conditions to create a more favourable environment for all types of enterprises and level the playing field for foreign investors</li> <li>- Amendment and supplementing of existing regulations and issuance of new laws and regulations towards a market economy and international standards (e.g., amended Enterprise Law, amended Investment Law, Competition Law, Cyber-security Law, amongst others, and guiding documents)</li> </ul>

Source: Authors, adapted from Vo and Nguyen (2016).

Regulatory reforms also covered trade-related regulations and associated institutional arrangements. NTBs became less prevalent by the 2000s as some were replaced by tariffs ('tariffication'). Since 2011, however, NTMs have become more popular. They are under the authority of various agencies, ministries, and line ministries, given the division of state management competency over trade-related regulations and policies. The ASEAN Division under the Multilateral Trade Policy Department, Ministry of Industry and Trade (MOIT) serves as the focal point for NTM-related issues in ASEAN (Figure 10.4). To make NTMs more transparent while Viet Nam deepens its regional and international economic integration and further liberalises trade, a focal point for sanitary and phytosanitary (SPS) matters was established in the Ministry of Agriculture and Rural Development (MARD), and one for technical barriers to trade (TBT) in the Directorate for Standards, Metrology and Quality, Ministry of Science and Technology (MOST).

**Figure 10.4: Responsibility for Non-tariff Measures–related Regulations, Viet Nam**



SPS = sanitary and phytosanitary, TBT = technical barriers to trade.

Source: Artuso and Nguyen (2017).

### 2.2.3 Streamlining Non-tariff Measures, 2014–2018

By the end of 2018, Viet Nam had no official programme for streamlining or classifying NTMs. Efforts until 2018 focused on the transparency of NTM-related regulations under the ASEAN framework. Viet Nam adopted the WTO TFA,<sup>6</sup> of which NTM streamlining and transparency are integral components. However, TFA implementation remains nascent, and streamlining NTMs has to rely on a more indirect approach – simplification of administrative procedures, and reduction of unnecessary regulatory burdens on businesses, such as sectoral inspection and business conditions, amongst others. Such

<sup>6</sup> The TFA was officially adopted on 22 February 2017, with the approval of 110 out of 164 WTO member countries. Viet Nam issued Decision No. 1969/QĐ-TTg, 13 October 2016, on approving the plan to prepare and implement the TFA.

an indirect approach can cover only a portion of NTM-related regulations, as NTMs are not just administrative procedures or inspections. Such an indirect approach may overly focus on NTMs' costs to firms, which may along the process be weighed inappropriately vis-à-vis other public policy objectives of regulations.

Since 2011, a wide range of legal documents on simplifying and improving administrative documents and business investment procedures have been promulgated and implemented. The most important ones include the series of Resolution No. 19 (2014–2018) and Resolution No. 02 (1 January 2019), amongst many others. As part of the Asia-Pacific Economic Cooperation (APEC) Ease of Doing Business (EoDB) Initiative, Viet Nam also committed to cut administrative requirements and procedures to meet APEC targets: make it 25% cheaper, faster, and easier to do business within APEC economies by 2015 under the 2010–2015 EoDB Action Plan; and make it 10% easier to start a business, get credit, enforce contracts, trade across borders, and deal with permits under the 2016–2018 EoDB Action Plan.

In the series of Resolution No. 19 of 2014–2018 and Resolution No. 02/NQ-CP of 2019, key measures aim to simplify or abolish unnecessary regulatory burdens on business activities, including import and export. Regulations affecting trade across borders were targeted for simplification. In August 2017, the Ministry of Planning and Investment proposed removing or simplifying about 2,000 business-related conditions (nearly half), many of which were, effectively, NTMs. Amongst them were 302 conditions related to financial aspects, 85 to business premises, 1,336 to production capacity, 127 to business modality, and 80 to master planning, amongst others (Artuso and Nguyen, 2017). By November 2018, 25 decrees on reducing business conditions had been issued, amending and supplementing 80 decrees in 15 state management areas of 15 ministries and line ministries (except the Ministry of Police) (VCCI, 2018). Resolution No. 19's target of reducing at least 50% of all business conditions was achieved. In 2015–2018, the number of imported and exported goods subject to state management and sectoral inspection was reduced by about 4,400 (General Department of Customs, 2018).

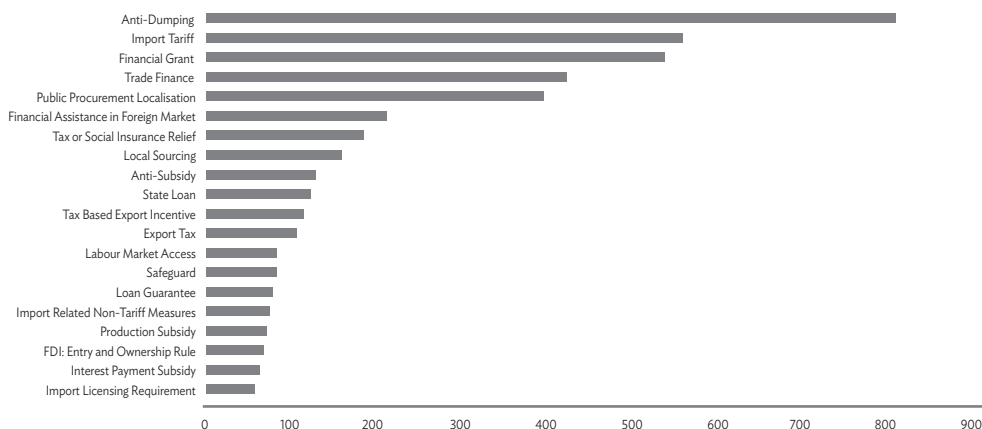
Viet Nam has made tremendous efforts to harmonise domestic laws with international norms and practices. Legal documents such as the Enterprise Law, Investment Law and guiding documents, amongst others, were issued, amended, and supplemented to level the playing field for all enterprises. The 2015 Enterprise Law and Investment Law simplify registration, making it much easier to trade from and to Viet Nam. The key changes include the following: (1) enterprises may freely conduct business not prohibited by law; (2) enterprises no longer have to list their line of business in their business license registration; (3) foreign investors and foreign-invested enterprises may establish domestic affiliates, providing they hold under 51% equity; (4) the number of prohibited sectors for foreign

investors was reduced from 51 to 6,<sup>7</sup> thus opening Viet Nam’s industries to investment; amongst many others. In early 2015, the Central Institute for Economic Management reviewed business conditions stipulated in various regulations issued by ministries. Of the 5,850 business conditions, more than 3,000 had been introduced in circular-level documents. All these conditions were to be abolished from 1 July 2016 according to the amended Investment Law, and the 3,000 conditions would no longer apply from 1 July 2015.

Efforts to further reduce NTMs may encounter challenges. First, Viet Nam has not yet reached consensus on the rationale for and scope of NTMs. Whilst some regulations serve non-economic purposes, others are considered necessary to target imports without violating international agreements. This issue is further complicated by the absence of regulatory objectives in the regulations themselves.

Second, concerns over protectionism have been on the rise over the past few years. The trend may go well beyond tariffs, i.e., the use of NTMs to restrict trade has spread widely across economies. A study by the Pacific Economic Cooperation Council (PECC) (2018) indicated that anti-dumping is deployed most frequently, followed by import tariffs, financial grants, trade finance, and public procurement localisation, amongst others (Figure 10.5). Efforts to review NTMs in existing regulations must be continuous since some NTMs may have already been incorporated into new draft regulations.

**Figure 10.5: Top-20 Trade-restricting Measures Adopted by Asia-Pacific Economies since 2008**



Source: Global Trade Alert, cited in PECC (2018).

<sup>7</sup> Foreign investors are still prohibited from investing in activities related to certain chemicals, drugs, animals and wild plants, prostitution, human tissue and body parts, and human reproductive cloning. The law also specifies a consolidated and unified list of 267 conditional sectors, which may be amended from time to time only by the National Assembly.

Finally, in July 2017, Viet Nam could barely get the trade portal up and running. Despite greater convenience and level of detail, it is different from the National Trade Repository (NTR) required of Viet Nam when it participates in the ASEAN Economic Community.<sup>8</sup> Although this could be explained by the delay in reaching consensus on the technical design of the ASEAN Trade Repository with which the NTR would integrate, the failure to promptly improve the NTR has hampered trade activities, especially those related to identifying requirements vis-à-vis specific HS codes.

### 3. Description of Non-tariff Statistics

#### 3.1 Comprehensiveness of Non-tariff Measures

This chapter builds on efforts to update the coded regulations and NTMs. The first phase (2014–2015) covered all regulations taking effect by 31 March 2015. The activities under the second phase included (1) reviewing, correcting, and updating all coded regulations and measures under the first phase; and (2) coding new regulations and NTMs that took effect from 31 March 2015 to 31 March 2018. NTMs were then coded in line with the updated NTM classification by UNCTAD (interim version, February 2018).

Table 10.5 summarises the legal comprehensiveness under both phases of NTM database collection under the updated NTM classification. Starting from original laws and ordinances (such as the 2017 Law on Foreign Trade Management,<sup>9</sup> the law on amendment and supplement to Article 6 and Annex 4 on the list of conditional business lines stipulated in the Law on Investment,<sup>10</sup> the Law on Pharmacy,<sup>11</sup> amongst others), guiding regulations were reviewed, corrected, updated, or added to the database. During the process, if any NTM was mentioned in several levels of legal hierarchy (laws and decrees), only the NTM at the lowest level of legal hierarchy was recorded to (1) avoid duplication; and (2) ensure relevance, as the lowest regulations often provide the most details for traders' compliance. Coded regulations in the second phase numbered 108, almost the same as in the first phase. Twenty agencies issued NTM-related regulations during both phases, including the National Assembly, the government, the Prime Minister, the Standing Committee of the National Assembly, and ministries and line ministries (including the inter-ministerial

<sup>8</sup> In July 2017, the World Bank and the General Department of Customs of Viet Nam launched the Trade Information Portal so Viet Nam could comply with the WTO TFA. The portal aims to help traders comply with regulatory import and export requirements, but it is not sufficiently interactive, as certain topics, such as business opportunities, and lists of partners, amongst others, will still require traders to directly consult MOIT, and the Ministry of Planning and Investment, amongst others.

<sup>9</sup> Law No. 05/2017/QH14, 12 June 2017.

<sup>10</sup> Law No. 03/2016/QH14, 22 November 2016.

<sup>11</sup> Law No. 105/2016/QH13, 6 April 2016.

mechanism). Coded NTMs in effect for at least a portion of 2018 numbered 764, or 1.4 times higher than for 2015 (527). Coded NTMs were significantly more numerous than those reported to the WTO (127 in 2015, 48 in 2018).<sup>12</sup> Some NTMs applied to all products, such as registration of exporters and importers, and certificates of free sale, amongst others. Therefore, the share of NTM-affected products is effectively 100%.

**Table 10.5: Legal Comprehensiveness, Viet Nam, 2015 and 2018**

	Category	2015	2018
1	Total number of coded regulations	110	108
2	Total number of NTMs reported to the World Trade Organization (measures in force)	127	148
3	Total number of coded NTMs (measures in force)	527	764
4	Total affected products (HS lines, national tariff lines)		
	a. Total number of affected products at HS 6-digit level	5,387	5,387
	b. Affected products as a share of total products	100%	100%
5	Total number of regulatory agencies	19	19

HS = Harmonised System, NTM = non-tariff measure.

Note: The number of NTMs in force each year covers all NTMs that are effective for at least a portion of the year.

Source: Viet Nam's NTM database (2018); WTO I-TIP (2019).

Several caveats, however, should be considered in interpreting the number of coded NTMs. First, the number of NTMs does not reflect the prevalence or level of protection for domestic products or trade restriction on imported ones. In practice, some NTMs may be applied only to selected product codes in the HS 8-digit category and/or to some partners, which may not have a trade effect comparable to one NTM applied horizontally to all products and to all partners. Second, the review and coding of NTM-related regulations does not take into account the trade effect of those regulations. NTMs are collected directly from the regulations, whilst the cost-effectiveness of regulations cannot be assessed. Fourth, the coded NTMs for 2018 were restricted to those taking effect before 31 March 2018. Finally, the development and issuance of more NTM-related regulations may merely mean that more attention is being given to fulfilling various regulatory and/or specific objectives. Yet, this is an area where rule-making needs improvement, as not all regulations explicitly mention the objectives.

<sup>12</sup> WTO I-TIP database (accessed 25 February 2019).

### 3.2 Classification of Non-tariff Measures by Issuing Institution

In the NTM database, 20 agencies are responsible for NTM-related regulations. In 2015, 19 agencies were responsible for NTMs in effect, and in 2018, 18 were. The regulatory agencies included inter-ministerial mechanisms. Table 10.6 shows the number and share of coded NTMs by issuing institution for both phases of NTM data collection.

**Table 10.6: Legal Comprehensiveness, Viet Nam, 2015 and 2018**

Issuing Institution	2015		2018	
	No. of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
Ministry of Industry	3	0.6	1	0.1
Ministry of Industry and Trade	60	11.4	64	8.4
Ministry of Industry and Trade – Ministry of Science and Technology	2	0.4	0	0.0
Ministry of Industry and Trade – Ministry of Finance	8	1.5	8	1.0
Ministry of Transport	8	1.5	21	2.7
Ministry of Science and Technology	3	0.6	14	1.8
Ministry of Agriculture and Rural Development	174	33.0	188	24.6
Ministry of Finance	9	1.7	21	2.7
Ministry of Natural Resources and Environment	11	2.1	11	1.4
Ministry of Information and Communication	18	3.4	20	2.6
Ministry of Construction	6	1.1	8	1.0
Ministry of Health	78	14.8	83	10.9
Ministry of Health – Ministry of Agriculture and Rural Development – Ministry of Industry and Trade	2	0.4	2	0.3
Government	109	20.7	252	33.0
National Assembly	19	3.6	53	6.9
General Department of Customs	1	0.2	1	0.1
Directorate of Standard, Metrology and Quality	2	0.4	2	0.3
Prime Minister	1	0.2	2	0.3
Standing Committee of National Assembly	13	2.5	13	1.7
<b>Total</b>	<b>527</b>	<b>100.0</b>	<b>764</b>	<b>100.0</b>

Source: Viet Nam's NTM database (2018).

As of 2018, the government accounted for the largest share of NTMs in effect (252 or 33% of the total). MARD followed with 188 or 24.6%. One explanation for the swap in ranking in 2018 (MARD ranked first in 2015 and the government ranked second) was the amended Law on Investment, July 2015, which requires that all conditions related to business and production not be issued in the regulations below the decree.

In 2018, the Ministry of Health (MOH) was responsible for 83 NTMs (10.9%), MOIT for 64 (8.4%), and the National Assembly for 53 (6.9%). MOH's share in 2018 was significantly smaller than in 2015 (14.8%). MOIT saw only a marginal increase in NTMs in 2018 compared with 2015 (64 vs. 60). In some cases, certain products were exposed to NTM-related regulations by more than one regulatory agency. For instance, imported vegetable oil and fat for consumer use (HS 15) are subject to regulations of MOH (safety and hygiene requirements); MOIT (import licence); and MOST (national quality and standards of TCVN 7597:2007, Codex Stan 210-2005, amended in 2003 and 2005, which relates to requirement of announcement of conformity); amongst others.

### 3.3 Classification of Non-tariff Measures by Chapter

The rankings of major NTM chapters do not vary in 2015–2018 (Table 10.7). In 2018, technical barriers to trade (TBT) accounted for most NTMs, including 310 measures or 40.6% of all NTMs. Chapter P (export measures) follows with 219 measures or 28.7% of all NTMs. Chapter A (SPS) ranks third with 114 measures or 14.9% of all NTMs. Another major category is chapter E (non-automatic licensing, quotas, prohibition, and quality-control measures other than for SPS and TBT reasons) with 78 measures or 10.2% of all NTMs. The share of TBT measures rose by almost 12.7 percentage points in 2018 compared with 2015, whilst that of price control measures, including additional taxes and charges, increased by only 0.4 percentage points. Conversely, the shares of SPS measures decreased by 7.5 percentage points and export measures by 3.0 percentage points. The proportion of other measures, such as C, D, F, G, H, J, and N, is relatively modest, although a slight variation was witnessed during the studied period.

**Table 10.7: Non-tariff Measures by Chapter, Viet Nam, 2015 and 2018 (number, %)**

Chapter		2015		2018	
		No. of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
A	Sanitary and phytosanitary (SPS)	118	22.39	114	14.92
B	Technical barriers to trade (TBT)	147	27.89	310	40.58
C	Pre-shipment inspection and other formalities	4	0.76	7	0.92
D	Contingent trade-protective measures	0	0.00	0	0.00
E	Non-automatic licensing, quotas, prohibition, and quality-control measures other than for SPS and TBT reasons	65	12.33	78	10.21
F	Price control measures, including additional taxes and charges	11	2.09	19	2.49
G	Finance measures	2	0.38	2	0.26
H	Measures affecting competition	10	1.90	10	1.31



Chapter		2015		2018	
		No. of NTMs	Share of NTMs (%)	Number of NTMs	Share of NTMs (%)
I	Trade-related investment measures	0	0.00	0	0.00
J	Distribution restrictions	2	0.38	4	0.52
N	Intellectual property	1	0.19	1	0.13
P	Export-related measures	167	31.69	219	28.66
<b>Total</b>		<b>527</b>	<b>100</b>	<b>764</b>	<b>100</b>

NTM = non-tariff measure.

Source: Viet Nam's NTM database (2018).

The large share of export-related measures – mostly TBT and SPS measures – is partly explained by efforts to ensure the quality of exports, contributing to the enhanced quality and competitiveness of Vietnamese products. Imposing SPS and TBT measures on imports mainly serves the purpose of protecting human and animal health and safety and the environment. Nonetheless, several NTM regulations received complaints about (1) frequent changes and/or inadequate public consultation, which incurred adjustment costs for firms; and (2) the immediate effect of the regulations (i.e., the issuing date and date of effect were the same), which constrained firms' adaptation of business strategies.

The collection of NTM data excludes J (distribution restrictions), K (restrictions on post-sales services), L (subsidies [excluding export subsidies under P7]), M (government procurement restrictions), and O (rules of origin). That is, the numbers for J (distribution restrictions) and N (intellectual property) in Table 10.7 failed to fully reflect the possible NTMs under these chapters in Viet Nam's regulations. Viet Nam has no trade-related investment measures (chapter I).

### 3.4 Top-10 Non-tariff Measures

The shares of the top-10 coded NTMs rose from 46.5% in 2015 to 51.1% in 2018; 9 out of the 10 most frequently utilised NTMs in 2018 were either TBT (B) or export-related measures (P) (Table 8). Most TBT requirements deal with labelling (B31), certification (B83), conformity assessment related to TBT, not elsewhere specified (n.e.s) (B89), quality and safety and performance requirement (B7), and inspection requirement (B84). The use of detailed NTM measures changed significantly. In 2015, for instance, export-related measures were most frequently implemented, mainly dealing with registration requirements (P14) and testing requirements for exports (P161). TBT measures such as B83 (certification requirement), B89 (conformity assessment related to TBT), B31 (labelling requirement), and B82 (testing requirement) accounted for significant shares in

2015 but decreased in importance in 2018. Still, TBT measures on certification, testing, and labelling (B82, B83, B31) and non-automatic licensing, quotas, prohibition, and quality control measures other than for SPS and TBT reasons (E1) were used frequently in 2015 and 2018.

**Table 10.8: Legal Comprehensiveness, Viet Nam, 2015 and 2018**

	2015			2018		
	NTM	No.	Share Of Total (%)	NTM	No.	Share Of Total (%)
1	P14 (Product quality, safety, or performance requirement)	42	7.97	B31 (Labelling requirement)	91	11.91
2	E1 (Non-automatic import-licensing procedures other than authorisations covered under SPS and TBT chapters)	39	7.40	E1 (Non-automatic import-licensing procedures other than authorisations covered under SPS and TBT chapters)	45	5.89
3	P161 (Testing requirement)	35	6.64	P14 (Product quality, safety, or performance requirement)	44	5.76
4	B83 (Certification requirement)	27	5.12	B83 (Certification requirement)	38	4.97
5	B89 (Conformity assessment related to TBT, n.e.s.)	24	4.55	P161 (Testing requirement)	38	4.97
6	B31 (Labelling requirement)	20	3.80	B89 (Conformity assessment related to TBT, n.e.s.)	36	4.71
7	B82 (Testing requirement)	17	3.23	B7 (Product-quality, -safety, or -performance requirement)	33	4.32
8	P11 (Authorisation or permit requirements to export, for technical reasons)	15	2.85	P11 (Authorisation or permit requirements to export, for technical reasons)	22	2.88
9	A83 (Certification requirement)	13	2.47	P169 (Conformity assessment measures, n.e.s.)	22	2.88
10	B7 (Product-quality, -safety, or -performance requirement)	13	2.47	B84 (Inspection requirement)	21	2.75
	Top 10	245	46.49	Top 10	390	51.05
	Others	282	53.51	Others	374	48.95
	<b>Total</b>	<b>527</b>	<b>100.0</b>	<b>Total</b>	<b>764</b>	<b>100.0</b>

n.e.s. = not elsewhere specified, SPS = sanitary and phytosanitary, TBT = technical barriers to trade.

Source: Viet Nam's NTM database (2018).

## 4. Non-tariff Measure Indicators

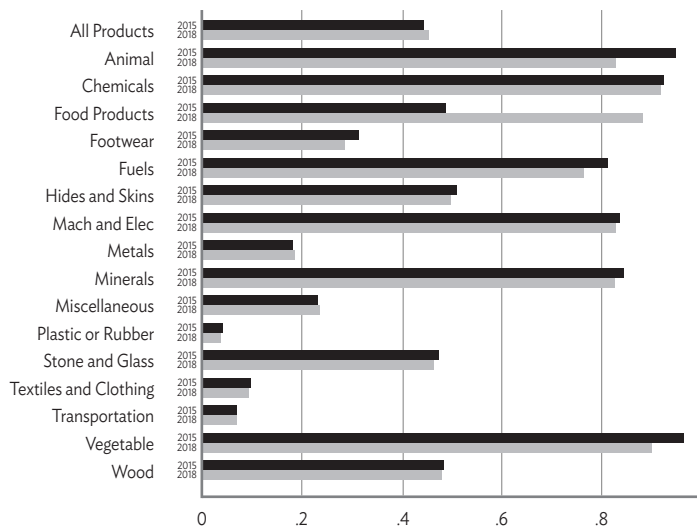
This section discusses the three standard NTM indicators: frequency index, coverage ratio, and prevalence score. The calculations were made at the HS 6-digit level as trade

data are only available at this level. Therefore, all affected products had to be converted into HS 6-digit codes. For comparative analysis, the applicable NTMs include only those in effect – at least partially – in 2015 and 2018. Trade data for 2017 is used as proxy to calculate the indicators for 2018. The calculations exclude NTMs that are applied across all products.

## 4.1 Exports

The frequency index varies significantly across product groups (Figure 10.6). It changed modestly in 2018 from 2015. Overall, 45.6% of exported product lines were subject to NTMs in 2018, a slightly higher share than in 2015 (44.4%). The most notable change was in food products (HS 16-24), with the frequency index jumped to 88.1% in 2018 from 49.0% in 2015. Meanwhile, the index for animal products (HS 01-05) dropped by 12.4 percentage points to 82.7% in 2018. Significant shares in product lines of chemicals (HS 28-38), vegetable (HS 06-15), food products (HS 16-24), mechanical appliances and electrical machinery and equipment (HS 84-85), minerals (HS 25-26), animals (HS 01-05) were also subject to at least one NTM with the frequency index ranging between 76% and 92%. NTMs were applied to only 9.4% of textile and clothes (HS 50-63), 7% of transportation products (HS 86-89) and only 3.9% of plastic and rubber products (HS 39-40).

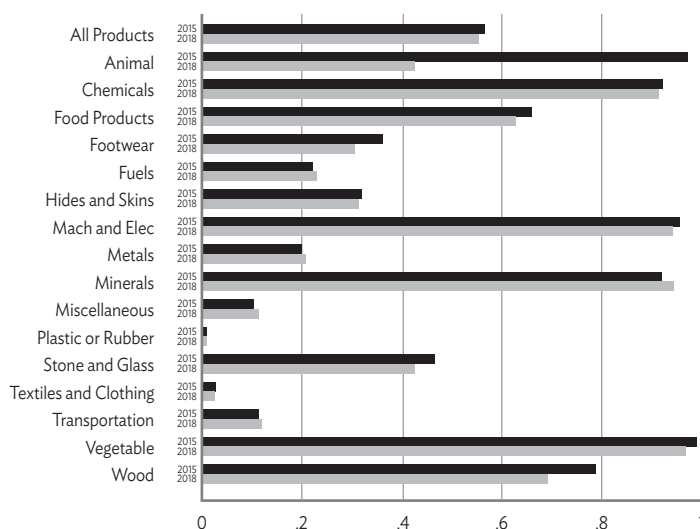
**Figure 10.6: Frequency Index of Exports, Viet Nam, 2015 and 2018**



Source: Viet Nam's NTM database (2018).

Coverage ratios of exports decreased slightly in 2018 (Figure 10.7): 55.6% of export value was subject to NTMs in 2018, smaller than in 2015 (56.8%). The coverage ratios classified by HS 2-digit group generally changed modestly over the studied period, except for animal products (HS 01-05) as coverage ratio of the group was drastically reduced from 97.5% in 2015 to 42.8% in 2018. Unsurprisingly, the products with a high frequency index also had a high coverage ratio, such as vegetable products (HS 06-15), minerals (HS 25-26), and chemicals (HS 28-38). Of the export value of textiles and clothes, only 2.6% was subject to NTMs, and the figure for plastics and rubber (HS 39-40) was just 1.0%.

**Figure 10.7: Coverage Ratio of Exports, Viet Nam, 2015 and 2018**



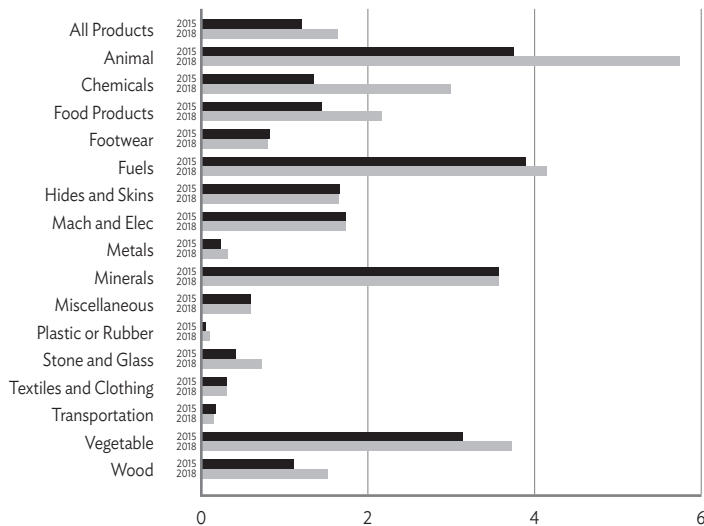
Source: Viet Nam's NTM database (2018).

Some products had a high frequency index but a small coverage ratio, indicating less restrictive effects of NTMs on exports of such products. For instance, 76.3% of product lines of exported fuels (HS 27) were subject to NTMs, but such NTMs affected only 23.2% of export value under this category in 2018. In contrast, trade effects of NTMs on mechanical appliances and electrical machinery and equipment may potentially have been larger, as 94.4% of the export value of this group was subject to NTMs whilst NTMs are relevant to only 82.9% of product lines of this group.

The frequency indices and coverage ratios above do not take into account whether more than one NTM was applied to the same product. In the database, a large number of products were subject to more than one regulatory measure. For example, a product could be subject to a sanitary standard as well as a technical measure on quality, and finally to licensing. The more NTMs applied to the same product, the greater the potential trade effect on that product. Thus, we use the prevalence score to document the average number of NTMs affecting a certain traded product.

On average, all exports were subject to 1.6 NTMs in 2018, which is modestly higher than for 2015 (1.2) (Figure 10.8). Animal products (HS 01-05) were subject to the largest number of NTMs (5.7 in 2018 and 3.7 in 2015). Other product categories with a large number of NTMs were fuels (4.2), vegetable (3.7), minerals (3.6), and chemicals (3.0). The average number of NTMs imposed on most other product groups varied only slightly in 2015–2018, except for animal products and chemicals (increased by 2 and 1.6 NTMs on the average over the 2015–2018 period).

**Figure 10.8: Prevalence Score of Exports, Viet Nam, 2015 and 2018**



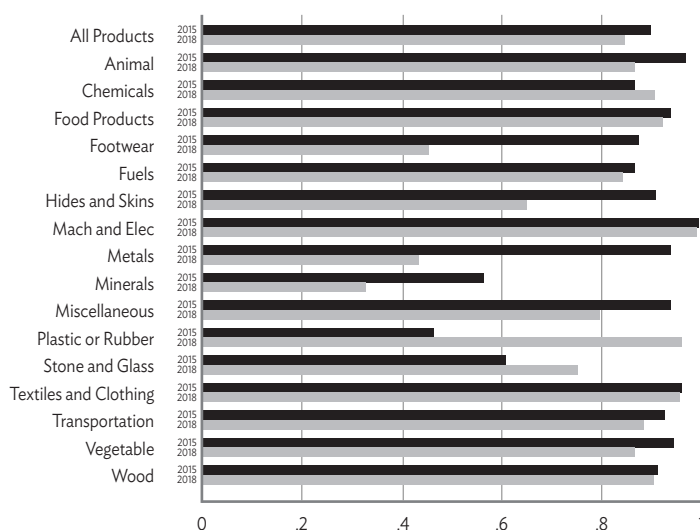
Source: Viet Nam's NTM database (2018).

## 4.2 Imports

The frequency index of imports showed a more noticeable change across HS groups than that of exports (Figure 10.9). The frequency indices of various product groups decreased in 2018 from 2015, indicating that fewer product lines under those groups were subject to NTMs. Notably smaller frequency indices applied to metals (HS 72-83, from 94.2% to 43.5%), footwear (HS 64-67, from 87.8% to 45.8%), minerals (HS 25-26, from 56.4% to 32.9%), hides and skin (HS 41-43, from 91.1% to 64.8%). In contrast, the number of product lines subjected to at least one NTM of plastic and rubber group (HS 39-40) witnessed the big jump (from 46.6% to 96.6% in 2018), followed by stone and glass products (from 61.0% to 75.3% in 2018). In overall, 84.8% of all imported product lines were subject to at least one NTM in 2018, slightly lower than in 2015 (90.0%). The result can be partly explained by government efforts to simplify administrative requirements for business investment activities and to reduce sectoral inspection requirements fostered since 2014. For instance, the series of Resolution No. 19 and Resolution No. 02 in

2019 set targets to remove 50% of business conditions and 50% of products subject to specialised inspection. By 2018, many ministries and line ministries issued decrees to remove business conditions. In 2018, MOIT reduced conditions for trading gas and rice. Decree No. 15/2018/ND-CP, 2 February 2018, on regulating food safety, replaced Decree No. 38/2012/ND-CP, resulting in the significant reduction of shipments subject to food safety inspection. The inspection requirement for formaldehyde content or the requirement to declare chemical content was revised.

**Figure 10.9: Frequency Index of Imports, Viet Nam, 2015 and 2018**



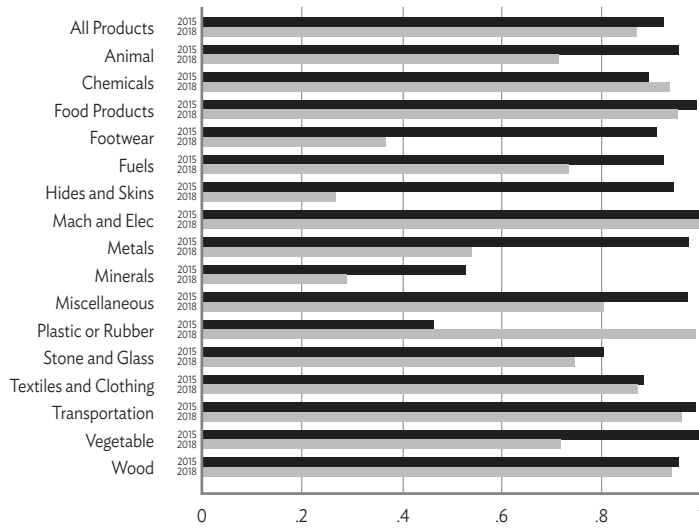
Source: Viet Nam's NTM database (2018).

In some groups, almost all imported product lines were subject to NTMs, including mechanical appliances and electrical machinery and equipment (99.4%), plastic and rubber (96.6%), textile and clothing (95.9%), food (92.5%), chemicals (90.6%), animal and vegetable products (nearly 87%). This might be attributed to efforts to protect animal and human health or to ensure the quality of consumer imports and/or inputs for domestic production and for export. But the large amount of imports subject to NTMs in 2018, including business conditions and specialised inspection requirements, indicated slower-than-expected progress in improving the business investment environment. The list of products subject to specialised inspection was expanded, whilst the regulations on specialised inspection and management of trading activities were numerous and overlapping.

Of import value, 87.0% was subject to NTMs in 2018, and 92.5% in 2015 (Figure 10.10). Hides and skin, footwear, and metals had a much smaller NTM coverage ratio in 2018 than in 2015. Although 64.8% of imported hides and skin (HS 41-43) were subject to NTMs,

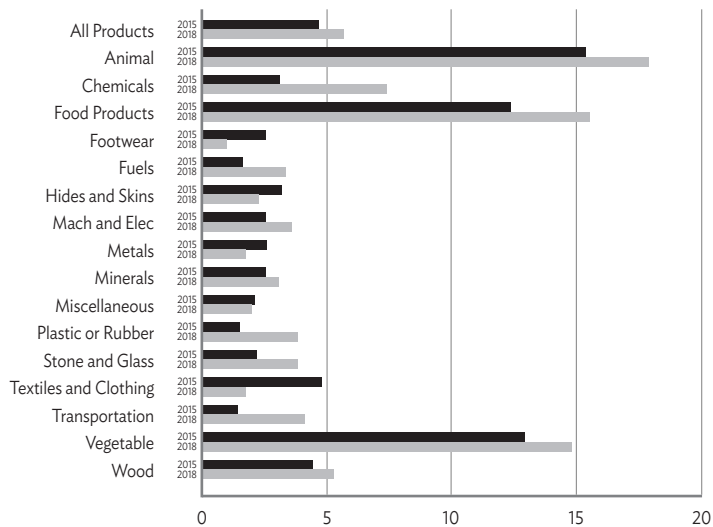
only 26.7% of import value was affected, indicating the modest trade effect of NTMs. Some other products groups had higher trade effects of NTMs, such as transportation products (HS 86-89), metals (HS 72-83), of which coverage ratio was exceeded the frequency index. In contrast, the coverage ratio of plastic and rubber (HS 39-40) increased from 46.3% to 99%. For product groups with high frequency indices (animal products, food, chemicals, plastic and rubber, amongst others), a significant share of import value was also subject to NTMs.

**Figure 10.10: Coverage Ratio of Imports, Viet Nam, 2015 and 2018**



Source: Viet Nam's NTM database (2018).

**Figure 10.11: Prevalence Score of Imports, Viet Nam, 2015 and 2018**



Source: Viet Nam's NTM database (2018).

The average number of NTMs imposed on imports was higher than for exports (Figure 10.11). On average, each import was subject to 5.8 NTMs in 2018, more than in 2015 (4.8). Animal products, vegetables, and food had the largest number of NTMs in 2018. NTMs on imported textile and clothing were significantly reduced, from 4.8 in 2015 to 1.8 in 2018. A range of product categories saw their prevalence scores increased in 2015–2018: animal products, from 15.4 to 18.0; food products, from 12.4 to 15.6; chemicals, from 3.2 to 7.4; transportation, from 1.5 to 4.1; amongst others.

Calculations of the frequency index, coverage ratio, and prevalence score have several limitations. First, partial coverage at HS 6-digit level is not considered. In the calculations for Viet Nam, 5,485 NTM-affected products were specified at the HS 8-digit level and represented some partial coverage of HS 6-digit products. Exclusions of NTMs with such partial indication then imply some underestimation of the coverage ratio and prevalence score for various product groups. Second, 9.33% of the coded NTM measures until 31 March 2018 affected only a subset of the world, whilst the trade data referred to Viet Nam's transactions with the world. Again, this led to an overestimation of the coverage ratio and prevalence score. Finally, some NTMs took effect only in a portion of 2015 and 2018 but were treated as applicable for the whole year. This also caused NTM indicators to be higher than actual incidence. While the above limitations work in opposite directions, identifying the net effects is no easy task.

## **5. Conclusions and Policy Recommendations**

Over the past three decades, Viet Nam has made continuous and comprehensive efforts to reform its trade policy in line with market-oriented institutional reforms and economic integration. Tariffs have generally been reduced sharply, especially since 2003, but the use of NTMs has exhibited major swings. Whilst NTBs were popular and even restrictive until the early 1990s, they were gradually replaced by tariffs in the late 1990s. Whilst NTMs were more subtle in the 2000s, they have received more attention and been issued more frequently since 2011. It was only with efforts to improve the business environment and reduce unnecessary regulatory burdens on business since 2014 that NTM regulations were streamlined in 2014–2018.

The update of NTMs until 2018 yielded several findings. First, the number of NTMs taking effect from 31 March 2015 to 31 March 2018 was a bit higher than that before 31 March 2015. SPS, TBT, and export-related measures, and non-automatic licensing, quotas, prohibition, and quality-control measures other than for SPS and TBT reasons accounted for most NTMs. From 31 March 2015 to 31 March 2018, the government accounted for the largest share of NTMs. The frequency, coverage, and prevalence of NTMs differed



across product categories, with animal products, vegetables, food products and chemical products generally having higher incidences.

From a business perspective, NTMs need to be streamlined. The high incidence of NTMs imposed on imports – indicated by the NTM indicators – suggests that there remains immense room for simplification, at least to avoid duplication and improve coordination of ministries to achieve public policy objectives. Lessons should be drawn from the replacement of Circular 37/2015/TT-BCT on controlling content of formaldehyde aromatic amines by MOIT, following months of complaints by textile and garment firms, which incurred repeated testing costs (with almost no evidence of non-compliance).

The increasing application of NTMs to exports may in various circumstances lead to controversy. Whilst Decree 36/2014/ND-CP could be justified on the grounds of ensuring quality standards of exported pangasius, it imposed an unnecessary regulatory burden on firms. For instance, the registration of export contracts does not help exporters, because pangasius export contracts are so numerous and the Viet Nam Pangasius Association is unable to handle registration. The fee for appraising commercial capacity is a cost to a firm. For instance, after the first six months of implementation, 200 enterprises had registered 15,000 contracts with a total volume of 500,000 tonnes (Nguyen, 2018).

To further streamline NTMs, Viet Nam should consider the following:

First, the trade effects of NTMs should be well documented and preferably disaggregated to the sectoral level. This will give more insights into the types of NTMs that are relevant or can be phased out. Given the complexity of regulations that might have NTM implications, analysing the trade effects can help avoid unnecessary burdens on trade. The need to document such trade efforts will induce further development of the statistical system, which is an ongoing need for developing countries, including Viet Nam, Cambodia, the Lao People's Democratic Republic, and Myanmar.

Second, the stock and flow of NTMs should be examined. A process of review and impact evaluation should be put in place for NTMs proposed for adoption, to ensure that their objectives are justified and that they will not overly restrict trade.

The National Assembly and the government will need to introduce regulatory impact assessment principles when designing rules and regulations. For example, the ministry or agency issuing a regulation, especially if it is projected to restrict trade, should communicate the rationale for the regulation; its objectives; the justification; WTO compliance; alternative measures considered and reasons they were dropped; affected groups, products, and industries; and the end date.

Efforts since 2014 to reduce the stock of regulations that affect production and business activities (including trade) may not have fully streamlined NTMs, because the focus was exclusively on reducing the number of regulations whilst leaving each ministerial authority to decide which ones to eliminate. Without justification of impacts and targeting of NTMs, the approach runs the risk of preserving regulations with significant NTM impacts whilst abolishing those with negligible impacts.

Third, Viet Nam needs to leverage efforts to upgrade its NTR, which would provide more consistent, transparent, and easily accessible information on NTMs. It may also help prepare the country to implement commitments under various international frameworks and the WTO TFA.

Fourth, Viet Nam should continue to apply NTMs equally to all partners and avoid imposing NTMs on imports from only certain countries and territories, except under special circumstances or for a short period. Using NTMs to discriminate against certain partners is likely to unfairly divert trade away from them and increase the administrative costs of managing NTMs.

Finally, Viet Nam should aim for better and more transparent justification of NTMs so they do not unnecessarily burden traders and businesses. In some cases, ex ante consultation might help collect insights from traders and businesses, which might improve the quality of regulations. If the business community considers NTMs to be legitimate, they will be more effective.

## **References**

Artuso, F. and A.D. Nguyen (2017), *Good Practices in Dealing with NTMs in the CLMV: How Can They Be Leveraged?* ERIA Research Project. Jakarta: Economic Research Institute for ASEAN and East Asia.

Central Institute for Economic Management (2015), *Impacts of FTAs and BITs on Viet Nam's Long-term Development Goals: Case Study of Food Processing and Electronics Sectors*. Funded by ActionAID International Viet Nam. In Vietnamese and English. Hanoi: CIEM and ActionAID International Viet Nam.

- Central Institute for Economic Management (2019), *Macroeconomic Report – Fourth Quarter and 2018*. In Vietnamese and English. Hanoi: Financial Publishing House.
- General Department of Customs of Viet Nam (2018), *Đánh giá văn bản quy phạm pháp luật quy định kiểm tra chuyên ngành xuất nhập khẩu* [Review of legal documents on sectoral inspection of import and export]. <https://vietnambiz.vn/coden-350-van-ban-quy-pham-luat-quy-dinh-kiem-tra-chuyen-nganh-109864.htm> (accessed 25 January 2019).
- General Statistics Office of Vietnam (GSO) (2018), *Số liệu thống kê Thương mại – giá cả* [Statistical Data on Trade and Price]. In Vietnamese. Hanoi: GSO. <https://www.gso.gov.vn/default.aspx?tabid=720> (accessed 15 January 2019).
- Government of Viet Nam (2019), *Hệ thống văn bản quy phạm pháp luật* [Database of Legal Normative Documents]. In Vietnamese. <http://vanban.chinhphu.vn/portal/page/portal/chinhphu/hethongvanban> (accessed 21 January 2019).
- Ministry of Planning and Investment (Viet Nam) (2019), 'Báo cáo tổng kết 5 năm thực hiện Nghị quyết 19/NQ-CP' [Report on the 5-year Implementation of Resolution 19/NQ-CP]. Report to the Government of Viet Nam. In Vietnamese.
- Nguyen, A.D. (2018), 'Case Study of Viet Nam on Traffic Light Score Methodology'. Paper for Mexico's APEC-funded project on Traffic Light Score Methodology No. EC 03 2017A.
- Nguyen, A.T. and T.P. Dang (2014), *Studies on Sanitary and Phyto-Sanitary Measures (SPS) and Technical Barriers to Trade (TBT) Faced by Vietnamese Exporters in Major Export Markets*. Hanoi: Multilateral Trade Assistance Project.
- Pacific Economic Cooperation Council (PECC) (2018), *State of the Region 2018–2019*. <https://www.pecc.org/resources/regional-cooperation/2584-state-of-the-region-2018-2019> (accessed 19 February 2019).
- Trade Map (2019), [http://www.trademap.org/Bilateral\\_TS.aspx](http://www.trademap.org/Bilateral_TS.aspx) (accessed 15 January 2019).

Truong D.T., T.T. Vo, T.G. Bui, V.C. Phan, T.D. Le, A.D. Nguyen, and S.A. Pham (2011), *Tác động của các cam kết mở cửa thị trường trong WTO và các hiệp định khu vực thương mại tự do đến hoạt động sản xuất, thương mại của Việt Nam và các biện pháp hoàn thiện cơ chế điều hành xuất nhập khẩu của Bộ Công Thương giai đoạn 2011–2015* [Impacts of Market Access Commitments under WTO and FTAs on Production and Business in Viet Nam and Measures on Managing Export and Import Activity of Ministry of Trade and Industry in 2011-2015 Period]. In Vietnamese. Hanoi: Multilateral Trade Assistance Project No. FTA-HOR FOLLOW-UP.

United Nations Commodity Trade Statistics Database (UN Comtrade) (2017), 'Metadata and Reference – Commodity list'. <https://comtrade.un.org/db/mr/rfCommoditiesList.aspx> (accessed 18 January 2019).

United Nations Conference on Trade and Development (UNCTAD) (2018), *NTM Classification*. Geneva: United Nation Conference on Trade and Development.

Viet Nam Chamber of Commerce and Industry (VCCI) (2018), *Báo cáo Dòng chảy pháp luật kinh doanh* [Report on Flows of Business Legal Regulations 2018]. In Vietnamese. <http://vibonline.com.vn/bao-cao-dong-chay-phap-luat-kinh-doanh-2018.html> (accessed on 22 January 2019)

Viet Nam Customs (2018), *Thống kê Hải quan* [Customs Statistical Data]. In Vietnamese. <https://www.customs.gov.vn/Lists/ThongKeHaiQuan/Default.aspx> (accessed 18 January 2019).

Vo, T.T. et. al. (2017), 'Trade in Value Added', in L. Y. Ying and F. Kimura (eds.), *Production Networks in Southeast Asia*. London: Routledge. <https://doi.org/10.4324/9781315406787>

Vo, T.T. and V.C. Nguyen (2016), 'Towards responsive regulation and regulatory coherence in ASEAN and East Asia: Deconstructing Effective and Efficient Regulatory Management Systems: Country Report for Vietnam', *ERIA Discussion Paper* ERIA-DP-2016-22. Jakarta: Economic Research Institute for ASEAN and East Asia.

- Vo, T.T., A.D. Nguyen, and T.H. Dinh (2013), *Enhancing Supply Chain Connectivity and Competitiveness of ASEAN Agricultural Products: Identifying Chokepoints and Opportunities for Improvement – Vietnam Country Report*. ERIA Research Project on Enhancing Supply Chain Connectivity and Competitiveness of ASEAN Agricultural Products: Identifying Chokepoints and Opportunities for Improvement, led by P. S. Intal, Jr. Jakarta: Economic Research Institute for ASEAN and East Asia.
- Vo T.T., A.D. Nguyen, and B.M. Tran (2016), 'Non-tariff Measures in Vietnam', in L.Y. Ing, S.F. Cordoba, and O. Cadot (eds.), *Non-tariff Measures in ASEAN*, ERIA Research Project 2015 No. 01. Jakarta: Economic Research Institute for ASEAN and East Asia.
- World Integrated Trade Solution (WITS) (2019), 'TRAINS database'. <http://wits.worldbank.org/WITS/WITS/Default-A.aspx?Page=Default> (accessed 20 January 2019).
- World Trade Organization I-TIP (WTO I-TIP) (2019), 'NTM Database'. <http://i-tip.wto.org/goods/default.aspx?language=en> (accessed 25 February 2019).