

ERIA Discussion Paper Series

AEC Blueprint Implementation Performance and Challenges: Non-Tariff Measures and Non-Tariff Barriers

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Abstract: *ASEAN has successfully reduced tariffs but not non-tariff measures (NTMs). Efforts to reduce NTMs always hit the debate surrounding justification of application of the measures. Efficiency of implementation of the measures adds to another issue in the agenda to reduce NTMs regardless the debate, and this is the topic addressed by this paper. It examines whether the extent of NTMs affects the operation of firms in doing business, utilizing a small sample of survey conducted at firm level in all ASEAN member states (AMSs). The results showed that significant costs are borne by implementation of NTMs in practice. The higher the cost to implement the measures, the higher the production cost, and this is added to the price of output. The results indicated that procedures and transparency in the process to acquire licenses, permits, and certificates of exporting/importing are the critical factors. This calls for the need of regulatory reform as the way to tackle the issue. The results also suggest the need to improve the availability and the quality of testing facilities which are found to be lacking in many AMSs. These policy recommendations are critical to increase the participation of small and medium enterprises in regional trade, utilizing many preferential measures offered by the ASEAN Economic Community.*

Keywords: Non-tariff measures (NTMs), ASEAN Economic Community (AEC), firm-level survey

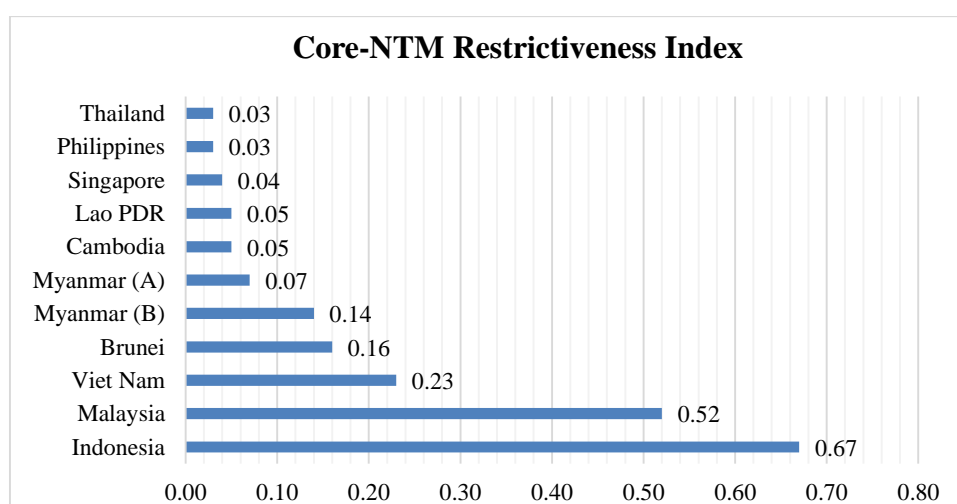
JEL Classification: F14, F15, F61

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1. Introduction

Non-tariff measures (NTMs) are one of the sources of remaining frictions that impede trade in goods within ASEAN member states (AMSs). ASEAN has successfully reduced tariff but not NTMs. Looking at this issue from the country perspective, efforts to reduce non-tariff barriers always hit the debate which argues that NTMs applied by a country (or a member state) are always justifiable and are, therefore, not barriers. This could be true for some NTMs. Regardless, even when one NTM can be justified, there is the other issue of efficiency in its implementation. The exercise on NTMs in Phase 4 of the NTM study addresses this issue. Specifically, it aims at examining whether the extent of NTMs affect the operation of firms in doing trade.

Figure 1: Core-NTM Restrictiveness Index, ASEAN Members



Note: Myanmar (A) assumes no multiple exchange rates while Myanmar (B) includes the incidence of multiple exchange rates in sectors as reported to the ASEAN Secretariat. An alternative to Myanmar (B) is to set the restrictiveness index to 1.0 on the assumption that ultimately all goods are affected by foreign exchange rationing in the country.

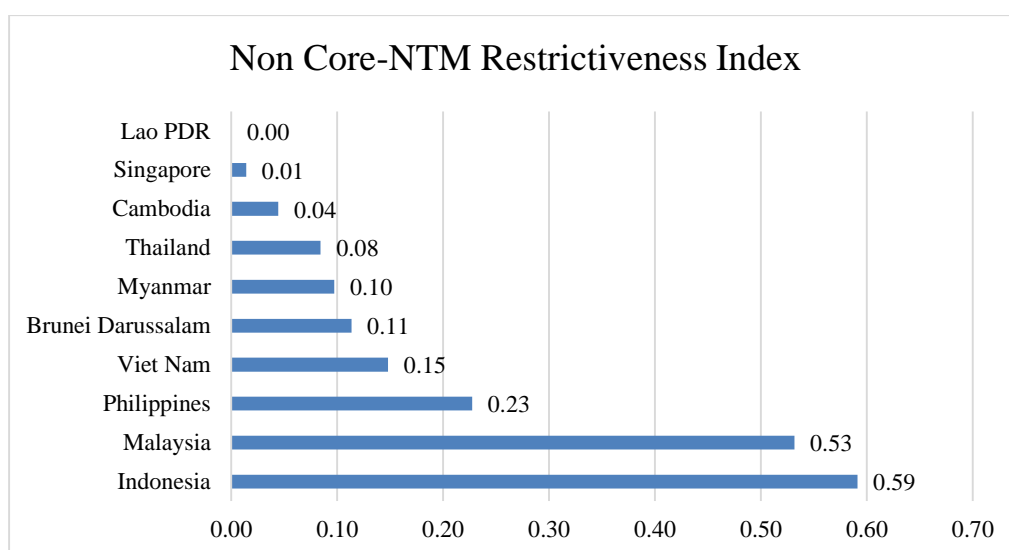
Source: ERIA (2012).

NTM incidence is high for some AMSs. To illustrate, **Figure 1** shows that the core-NTMs Restrictiveness Index (an index that measures both the prevalence and coverage

rate of core-NTM) is high for some AMSs (Intal, et al., 2011).² The incidence of core-NTMs is particularly high in Indonesia and Malaysia, relatively high in Viet Nam, and quite moderately in Brunei Darussalam and Myanmar.

Figure 2 presents the restrictiveness index of non-core NTMs, which consists mostly of technical barriers to trade (TBT). There is also large variation in the restrictiveness of non-core NTMs across the member states. Very high non-core NTM restrictiveness index is observed for Malaysia and Indonesia, while a moderately high index is observed for Brunei Darussalam, Viet Nam, and the Philippines.

Figure 2: Non-Core NTM Restrictiveness Index, ASEAN Members



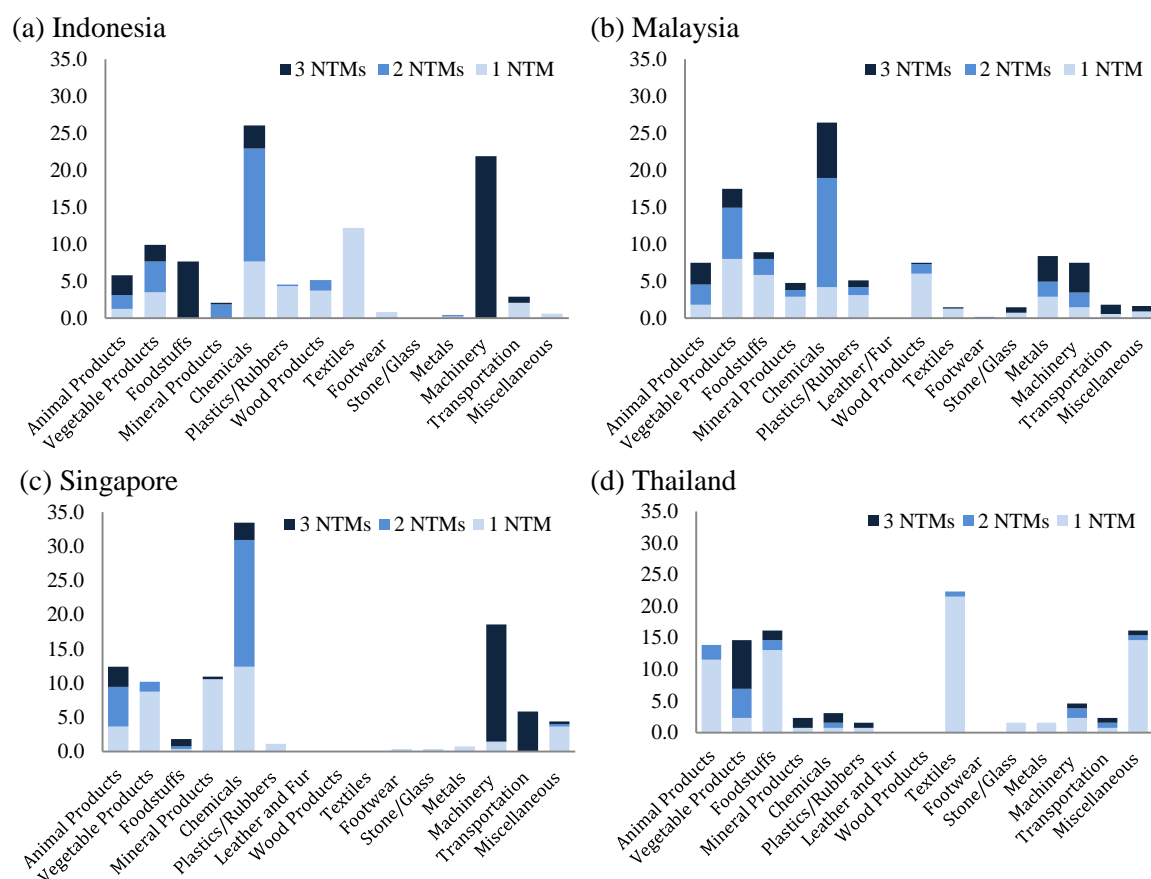
Source: ERIA’s staff calculation based on NTM Database from the ASEAN Secretariat.

There are also different patterns of types of NTMs applied by AMSs, as illustrated by **Figure 3** which draws the incidence of multiple use of NTMs. In **Figure 3**, as Cadot, Munadi, and Ing (2013, p.16) summarized for several AMSs, for example, Indonesia and Singapore use heavy combinations of measures (two or three NTMs at a time) in the machinery sector while Malaysia and Thailand do not. Malaysia, Indonesia, and Singapore use heavy combinations of measures in the chemical sector, whereas other

² Core-NTMs are measures that are potentially restrictive and are, therefore, the ones more likely to be non-tariff barriers.

countries do not. Meanwhile, Thailand covers a substantial proportion of products with NTMs (about 20 percent) in the textile sector, whereas other countries do not.

Figure 3: Incidence of Multiple NTMs, by Country and Sector



Source: Cadot, *et al.* (2013).

2. Methodology

The study on NTMs in this project aims to draw information on how costly it is for a firm to comply with all requirements to meet NTMs. To achieve this objective, it designed a firm-level survey aimed at drawing the relevant information. Specifically, the survey aims at identifying the key NTMs that prevent companies from increasing cross-border sales and examining the impact of these NTMs on prices, cost of production, and output.

The survey also asks the firms to write the potential solution according to the knowledge they have about the underlying issues with the implementation of the NTMs. The NTMs covered by the survey/study focus on sanitary and phytosanitary (SPS), TBT, and non-automatic measures.

Each country research team surveyed five firms as respondents. The time limit to conduct the study and financial resource motivated the decision on this sample size per country. The survey was conducted through a face-to-face in-depth interview with representatives of the firm, and the type of firms considered by this study are importers/traders or manufactures/exporters. The type of goods therefore include not only final goods but also intermediate inputs for production.

3. Results

This section presents the results of the survey and, whenever possible, draws general key points of inference drawn from the results.

Annex Table A1 presents the NTMs faced by respondents and issues surrounding the implementation of the measures. Issues surrounding the NTMs faced by respondents are related to procedures or requirements for product certification or for acquiring an import or export license. The latter includes issues such as excessive documents required by officials, long time for document processing, and no clear information provided by officials (see the last column on the reasons for the issues). In some countries, there is an issue of lack of facility infrastructure, including its capacity, in meeting the standards required by the exporting destination country (see especially the issues for NTMs faced by Indonesian exporters).

It is worth noting that there do not seem to be many issues with respondents from Malaysia in meeting the NTMs applied by this country (except perhaps the one on excessive documents required by the Standards and Industrial Research Institute of Malaysia. This suggests that relatively efficient mechanisms and procedures for NTMs are in place in Malaysia. This translates to low cost of acquiring permits or licenses for

imported goods sold in Malaysia, which is indeed shown in the column of compliance cost both in terms of fees paid and processing time.

Implementation of NTMs creates additional cost to importers or manufacturers. The responses indicate that the impact—or the cost—is higher for NTMs that are complicated and not transparent in their procedure to acquire the licenses or require excessive documents. NTMs also create high costs when no testing facilities are capable to meet the requirements set by the standards of export destination countries. In other words a positive relationship exists between the complex nature of NTMs and the cost to satisfy them. All these can be inferred from the responses of firms in many AMSs, including Indonesia, the Philippines, Singapore, and Thailand.

However, applications of some NTMs require only low or moderate cost for firms (either or both in terms of time spent or fees paid in processing the application). Examples of these are evident for the application of some NTMs in Brunei Darussalam, Cambodia, Lao PDR, the Philippines, and Viet Nam. While low in terms of the cost paid, firms facing these NTMs still consider the measures to impose inefficiency for firms in doing trade. This indicates that the cost could even be lowered to minimize the cost of trade.

Annex Table A2 presents the impact of the NTM cost on output, especially on the cost of production or price of the output. It also suggests a negative relationship between the cost of applying NTMs and output. Respondents reported that a significant value of cost is added to their production cost or product price for those NTMs that are costly to meet. The increase in price will likely be transmitted to reduce output given a demand schedule of the product. Annex Table A2 clearly shows the responses of Indonesian exporters as well as those from Singapore or Thailand who sell their goods to other ASEAN countries (see the responses recorded in Annex Table A2 in connection with those recorded in Annex Table A1).

An important key point drawn from the results is the ability of large firms to absorb the cost of NTMs even if it is high/costly. This is inferred from cases in which there is only marginal or even no change in the cost or price of a product despite the moderate or high cost to meet the NTM. Firms may be forced to absorb many of the costs to meet the NTM because they want to maintain the price competitiveness of the products. Thus, in some cases, the high cost to meet an NTM is not always passed on to consumers. This strategy, however, could likely only be done by multinationals or large companies

because of large economies of scale and the ability to reallocate profit or loss from their operation in many countries. Small and medium-sized enterprises (SMEs) are unlikely to apply this strategy because their trade destination countries tend to be either only one or very limited.

This message is presented by the cross tabulation between the impact of NTMs on production cost (Table V.1) by size of respondents.³ The cross tabulation shows that the impact of NTMs is higher for medium-sized firms, by comparing the ratio between the number of respondents that reported significant impact of NTMs to the number of respondents that reported no change in production cost across the different sizes of respondents; that is, three medium-sized respondents reported significant increase in production costs for every respondent who reported no change in production cost. This ratio is much lower for small and large firms. Thus, according to the survey done by this study, the impact of NTMs is highest for medium-sized firms. The low impact on small firms can be explained by the fact that many small firms are not exporters.

Table 1: Impact of NTMs on Production Cost, by Company Size

Company size	Impact on Production Cost					Ratio (e)/(c)
	Decrease (significant) (a)	Decrease (marginal) (b)	No change (c)	Increase (marginal) (d)	Increase (significant) (e)	
Small	0	0	6	4	5	0.83
Medium	0	0	3	7	8	2.67
Large	0	0	1	1	1	1

Source: Adapted from ERIA Questionnaire on NTMs.

The ability of some firms to absorb the cost of NTMs suggests that economies of scale in complying with or meeting the requirement of NTMs exist. While it is not an issue for large or multinational firms, it is definitely an issue for SMEs. As widely known, the ASEAN Economic Community aims at fostering the growth of SMEs while directing SMEs to participate in cross-border trade within ASEAN. In addition, it is also well known that SMEs are not able to have this scale effect in exporting. Thus, unless the cost

³ The cross tabulation defines the size of the respondents by number of employees; small, medium, and large refer to firms with employees less than 100, between 100 and 500, and more than 500, respectively.

to service NTMs is reduced, SMEs are not likely to actively participate in cross-border trade. It is probably why, in general, there are no SMEs among the respondents of the study (the more detailed survey results ERIA received stated that all respondents can be categorized as large firms).

4. Summary and Policy Implication

NTMs are currently one of the sources of remaining frictions that impede trade in goods among AMSs. ASEAN has successfully reduced tariffs but not NTMs. Looking at this issue from the country perspective, efforts to reduce non-tariff barriers always hit the debate which argues that NTMs applied by a country (or a member state) are always justifiable and therefore are not barriers. This could be true for some NTMs. Regardless, even when one NTM can be justified, there is the other issue of efficiency in its implementation. The exercise on NTMs in phase IV of the NTM study addresses this issue.

The results showed that there could be significant costs borne by the implementation of NTMs in practice. While variation in the impact of NTMs (on production cost and output) exists, there seems to be a positive relationship between costly efforts to meet all NTM requirements and production costs—that is, the higher the NTM cost, the higher the production cost, and the change in production cost to be transferred to the price of output. Costly NTMs likely increase the price of the products. The results indicated that procedures and transparency in the process to acquire licenses, permits, and certificates for exporting /importing are the critical factors. The lack of quantity or quality of testing facilities was also found to contribute to higher NTM cost.

The results create several implications for policy. The first is for AMSs to review their NTM procedures and then attempt to simplify these procedures. This requires regulatory reforms and bureaucratic reform to some extent in some member states. It is important to note that regulatory reform to reduce the cost of NTMs likely spill over to the reforms in other areas of regulatory framework of a country which in turn will help increase the overall efficiency in doing business. Thus, efforts that may have started from

the trade side may at the end have a greater effect in improving the competitiveness of a country.

The results suggest the importance of increasing the number of testing facilities and improving the quality of these facilities at the same time. In this respect, improvement is not only for hard infrastructure but also for soft infrastructure. Especially important is to upgrade the knowledge and skill of the people running the facilities. Considering that building modern testing facilities may not be cheap, the member states could consider involving the private sector to play more role on this. This means allowing the investment regime to be favourable for foreign investors to build and run modern testing facilities.

Having to service NTMs at the lowest possible cost has significant effects because it provides SMEs more incentive to participate in international trade. As discussed, there is scale effect for paying the expensive NTM cost. Reducing NTM cost, therefore, will reduce the economies of scale in paying the cost, which means higher potential benefit that SMEs can get from exporting.

Another implication is the importance for ASEAN to focus more on product standards and conformity. Having more or less the same standards applied among the member states is useful to reduce the fixed cost to issue certificates for goods traded within ASEAN.

References

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Annex Table A1: NTMs, Issues of Implementation, and Compliance Cost of NTMs

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
Brunei Darussalam	Firm 1	B15 - Registration requirement for importers for TBT reasons B14 -Permit / Approval	Short	Low	1. Inefficient registration procedures 2. May delay project as products may be replaced	Excessive documentation requirement Arbitrariness or inconsistency in implementation Non-transparency
	Firm 2	B83 - Certification requirement B81 - Product registration requirement	Moderate	Low	Excessive documentation to obtain certificate from respective industry standards	Excessive documentation requirement Arbitrariness or inconsistency in implementation Non-transparency
	Firm 3	A83 - Certification requirement (Halal) A22 - Restricted use of certain substances in foods & feeds & their contact materials (alcohol content)	Moderate	Low	1. All packaged and canned food and beverages must have proper labeling. 2. Alcoholic contents are restricted; traces of alcohol or pork contents must be segregated and classified under “Non-Halal”. 3. Licenses to import or sell tobacco and cigarettes are tightly regulated.	Excessive documentation Testing or other services Non-transparency Lack of infrastructure in the country Arbitrariness or inconsistency in implementation

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
		A31 - Labelling requirements				
	Firm 4	B83 - Certification requirement B81 - Product registration requirement	Moderate	Low	<p>1. Import of used cars from Japan or other ASEAN countries requires special approvals from Land Transport (Ministry of Communications) prior to importation.</p> <p>2. The application can only be applied through authorized companies. License to import used cars is granted by Land Transport, subject to a series of conditions such as availability of workshops, storage, parts supplies, and financial status.</p> <p>3. The used cars must not be more than three years old from the date of registration. However, if the application is fixed with confirmed buyer, then the car must not be more than five years old.</p> <p>4. However, there are changes to import approval regularly without advance notice.</p>	Discriminatory behaviour Non-transparency, Arbitrariness or inconsistency in implementation Excessive documentation requirement
Cambodia	Firm 1	A14 - Special authorization requirement for SPS reasons	Long	Low	<p>Need to get many approvals from relevant agencies in Cambodia</p> <p>*Excessive documentation</p> <p>*Need to pay unofficial fees</p>	Non-transparency (inadequate) information on laws/regulations Excessive documentation requirement

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
						Unusually high fees and charges for stamps
	Firm 2	A14 - Special authorization requirement for SPS reasons	Long	High	Unofficial fee charged, no transparency	Non-transparency Excessive documentation requirement Unusually high fees and charges for stamps
	Firm 3	A14 - Special authorization requirement for SPS reasons	Moderate	Moderate	Need to get approvals from importing countries, such as standard certification, quarantine	Lack of infrastructure in the country Unusually high fees and charges for stamps
	Firm 4	A14 - Special authorization requirement for SPS reasons	Moderate	Moderate	Need to get many approvals from relevant agencies in Cambodia Official fees are not high, but unofficial fees are high.	Non-transparency (inadequate) information on laws/regulation Unusually high fees and charges for stamps
	Firm 5	A14 - Special authorization requirement for SPS reasons	Moderate	Moderate	Need to get many approvals from relevant agencies in Cambodia Excessive documentation Need to pay unofficial fees	Excessive documentation requirement

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
						Unusually high fees and charges for stamps
	Firm 6	A14 - Special authorization requirement for SPS reasons	Long	High	Need to get approvals from importing countries such as standard certification, quarantine Excessive documentation Need to pay unofficial fees	Lack of infrastructure in the country Unusually high fees and charges for stamps Testing or other services Non-transparency
Indonesia	Firm 1	B81 - Product registration requirement	Long	Low	Time inefficiency in the newly launched online registration system of Ministry of Health	Lack of infrastructure in the country Excessive documentation requirement Non-transparency (inadequate information on laws/regulation)
		B33 - Packaging requirements B42 - TBT regulations on transport & storage	Short	Moderate	Additional and stricter packaging requirement bears more cost to the importer.	Lack of infrastructure in the country Testing or other services

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
	Firm 2	B83 - Certification requirement	Short	Moderate	Not difficult to comply with The company is subsidiary of parent company from Japan which is already well informed about each country's requirements.	Testing or other services
		B21 - Tolerance limits for residues of or contamination by certain substances	Long	High	Inefficient in time and procedure	Lack of infrastructure in the country
		B83 - Certification requirement	Short	Moderate	Not difficult to comply with. The company is subsidiary of parent company from Japan which is already well informed about each country's requirements.	Excessive documentation requirement
		B82 - Testing requirement	Moderate	High	Not difficult to comply with. The company is subsidiary of parent company from Japan which is already well informed about each country's requirements.	
	Firm 3	B21 - Tolerance limits for residues of or contamination by certain substances	Short	Moderate	Inadequate physical infrastructure that leads to longer transport time from the palm oil plantation to oil processing plant, as well as non-fully ripened palm tree because of less economic issues for small palm farmers. This reduces the FFA and beta-carotene content.	Lack of infrastructure in the country Arbitrariness or inconsistency in implementation

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
		B83 - Certification requirement	Long	High	The need for management control of palm oil processing by considering the principle of social and environmental sustainability to get the certification from RSPO and ISPO.	Arbitrariness or inconsistency in implementation Excessive documentation requirement
		P5 - Export taxes & charges	N/A	N/A	Progressive tax is applied to the exported products of CPO and its derivation depends on the degree/stage of process of the exported item (the higher tax level is applied for exports of raw materials/upstream products, while the lower one is applied for exports of processed palm oil/downstream products)	N/A
	Firm 4	A14 - Special authorization requirement for SPS reasons	Moderate	Low	Not difficult to comply with since the company is one of the major producers in Indonesia which has economies of scale in terms of product.	Lack of infrastructure in the country Excessive documentation requirement
	Firm 5	E2 - Quotas		Low	Importer needs to comply with quota imposed by Ministry of Trade (MoT) regarding imports of alcoholic beverages. It really needs adequate lobbying ability by the importers to determine the appropriate quota.	Arbitrariness or inconsistency in implementation Excessive documentation requirement

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
		B15 - Registration requirement for importers for TBT reasons	Long	High	Importers must obtain agency from overseas suppliers; obtain import license from MoT; register to BPOM to obtain import licenses and import number for alcoholic beverages. This process is very burdensome in terms of time and cost.	Excessive documentation requirement Arbitrariness or inconsistency in implementation
		B14 - Authorization requirement for TBT reasons	Moderate	Low	Every time an importer wants to import (usually about four times/year), he has to acquire another license for import (SKI) from BPOM. Approval is needed from BPOM before importation is allowed. To require SKI, the importer needs to submit some documents (ML certificate, LOA, COA, Spec Product, Inv, PL, and BL). This process usually takes three to four days and only five items are allowed to be registered each day.	Excessive documentation requirement Arbitrariness or inconsistency in implementation
Lao PDR	Firm 1	A82 - SPS (Testing requirement).	Short	Moderate	Testing is required for importation. However, there is only one testing lab. In addition, some small traders can escape the system, thus, resulting in cost competitiveness.	Discriminatory behaviour Arbitrariness or inconsistency in implementation Testing or other services Lack of infrastructure in the country
	Firm 2	B14 - Authorization	Short	Low	Lao Ministry of Health is not aware of the new rules on the technical certificate, thus,	Arbitrariness or inconsistency in implementation

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
		requirement for TBT reasons.			processing documents and release of goods incur some delays.	Discriminatory behaviour Testing or other services Lack of infrastructure in the country
	Firm 3	B15 - Registration requirement for importers for TBT reasons	Long	Moderate	The import registration requirement from the Ministry of Health is arbitrary/inconsistent and takes longer.	Arbitrariness or inconsistency in implementation
Malaysia	Firm 1	B15 - Registration requirement for importers for TBT reasons B21 - Tolerance limits for residues of or contamination by certain substances B22 - Restricted use of certain substances B31 - Labelling requirements B49 - Production or	Short	Low	Not difficult to comply with (Company and product registration and notification fees are less than RM500)	-

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
		post-production requirements				
		B82 - Testing requirement				
		B851 - Origin of materials & parts				
		B852 - Processing history				
	Firm 2	B83 - Certification requirement	Moderate	Moderate	Moderate cost of processing registration and evaluation fees for the certification Processing of registration and evaluation fees costs less than RM200. If the evaluation is incomplete, the company has to pay an additional RM100 for re-evaluation fees.	Excessive documentation requirement Testing or other services Arbitrariness or inconsistency in implementation
	Firm 3	A22 - Restricted use of certain substances in foods & feeds & their contact materials	Short	Low	The company has no difficulties to comply with the regulation.	-
		A31 - Labelling requirements				
		A32 - Marking requirements				

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
		A33 - Packaging requirements				
	Firm 4	B31 - Labelling requirements	Short	Low	<p>*Many documents have to be submitted to both the Standards and Industrial Research Institute of Malaysia and the Royal Malaysia Customs Department.</p> <p>*Burdensome testing requirement.</p> <p>*Inconsistency in tax regulation</p>	<p>Excessive documentation requirement</p> <p>Testing or other services</p> <p>Arbitrariness or inconsistency in implementation</p>
Myanmar	Firm 1	A14 - Special authorization requirement for SPS reasons	Short	Low	<p>*Slight difficulties in the transparency of information in laws and regulation</p> <p>*Voltage instability in electricity could cause damage products</p> <p>*Lack of testing facilities</p>	<p>Non-transparency (inadequate information on laws/regulations)</p> <p>Lack of infrastructure in the country</p> <p>Testing or other services</p>
		A51 - Cold/heat treatment				
		P5 - Export taxes & charges	Short	Moderate	<p>Complexity in product testing</p> <p>Lack of high quality of infrastructure</p> <p>Disclosure of necessary and related information on laws and regulations is important to reduce unnecessary procedures</p>	<p>Testing or other services</p> <p>Lack of infrastructure in the country</p> <p>Non-transparency (inadequate</p>

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
						information on laws/regulations)
	Firm 2	B14 - Authorization requirement for TBT reasons	Moderate	Moderate	Rules and regulations change frequently	Non-transparency (inadequate information on laws/regulations)
			Moderate	Moderate	Too many documentation requirements and excessive waiting time for approval	Excessive documentation requirement Testing or other services
	Firm 3	A14 - Special authorization requirement for SPS reasons	Long	Moderate	Insufficient laboratory facilities to test FDA	Lack of infrastructure in the country Non-transparency (inadequate information on laws / regulation) Testing or other services Excessive documentation requirement Unusually high fees and charges for stamps

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
	Firm 4	B15 - Registration requirement for importers for TBT reasons	Long	High	Inefficient process at port that takes time Insufficient laboratory facilities to test FDA	Lack of infrastructure in the country Testing or other services Unusually high fees and charges for stamps
	Firm 5	A14 - Special authorization requirement for SPS reasons	Moderate	Moderate	Too many documentation requirements High fees and charges result in higher product price Lack of high quality of port infrastructure might delay the delivery process.	Excessive documentation requirement Unusually high fees and charges for stamps Lack of infrastructure in the country Arbitrariness or inconsistency in implementation
		P6 - Export technical measures	Moderate	Moderate	Too many documentation requirements Difficulties in transportation and quality control High fees and charges result in higher product price.	Excessive documentation requirement Lack of infrastructure in the country Unusually high fees and charges for stamps

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
	Firm 6	B15 - Registration requirement for importers for TBT reasons	Short	Low		Lack of infrastructure in the country
	Firm 7	B15 - Registration requirement for importers for TBT reasons	Short	Low	Low cost process for product registration and notification fees	Lack of infrastructure in the country Excessive documentation requirement
Philippines	Firm 1	B15 - Registration requirement for importers for TBT reasons B22 - Restricted use of certain substances	Short	Low	Redundant and excessive documentation Manual application and it has to be at the Central Office	Arbitrariness or inconsistency in implementation Non-transparency Excessive documentation requirement
	Firm 2	B15 - Registration requirement for importers for TBT reasons	Long	Low	Redundant and excessive documentation.	Lack of infrastructure in the country Excessive documentation requirement Arbitrariness or inconsistency in implementation

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
	Firm 3	B15 - Registration requirement for importers for TBT reasons B22 - Restricted use of certain substances	Moderate to Long	Low	The requirements are doable, however, the same should also apply to finished leather goods, particularly the quarantine requirement. Manual application, and it has to be at the Philippine Drug Enforcement Agency Central Office in Manila	Arbitrariness or inconsistency in implementation Excessive documentation requirement Discriminatory behaviour
	Firm 4	B15 - Registration requirement for importers for TBT reasons B14 - Authorization requirement for TBT reasons B22 - Restricted use of certain substances	Long	Low to moderate.	Redundant, excessive, and irrelevant since the country has a total log ban policy EU Illegal Timber Regulation Redundant and excessive documentation	Excessive documentation requirement Lack of infrastructure in the country Arbitrariness or inconsistency in implementation
	Firm 5	B15 - Registration requirement for importers for TBT reasons A85 - Traceability requirements A851 - Origin of materials & parts	Moderate to Long	Low	License/accreditation of Philippine vessel, and EU Cut Certification Importation of whole round tuna from Indonesia is not allowed under the Indonesian trade/import regulation law.	Excessive documentation requirement Arbitrariness or inconsistency in implementation Discriminatory behaviour

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
		E3 - Prohibitions other than for SPS or TBT reasons				
Singapore	Firm 1	B31 - Labelling requirements B32 - Marking requirements B33 - Packaging requirements	Moderate	Moderate	No major difficulties as long as standards and rules are adhered to	Lack of infrastructure in the country Non-transparency (inadequate information on laws/regulation) Arbitrariness or inconsistency in implementation
	Firm 2	B31 - Labelling requirements B32 - Marking requirements B33 - Packaging requirements	Moderate	Moderate		Lack of infrastructure in the country Non-transparency (inadequate information on laws/regulation) Arbitrariness or inconsistency in implementation

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
	Firm 3	B31 - Labelling requirements B6 - Product identity requirement	Moderate	Moderate	Cost, delay, non-transparency	Non-transparency (inadequate information on laws/regulation) Excessive documentation requirement Unusually high fees and charges for stamps Testing or other services Lack of infrastructure in the country Arbitrariness or inconsistency in implementation
		B31 - Labelling requirements	Moderate	Moderate		
Thailand	Firm 1	B14 - Authorization requirement for TBT reasons B7 - Product-quality or performance requirement B82 - Testing requirement B83 - Certification	Short to Long	Low	Inefficiency in the implementation of this measure	Arbitrariness or inconsistency in implementation

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
		requirement B84 - Inspection requirement B81 - Product registration requirement				
	Firm 2	E1 - Non- automatic import-licensing procedures other than authorizations for SPS or TBT reasons	Long	Low	Inefficiency in the implementation of this measure	Arbitrariness or inconsistency in implementation
	Firm 3	B31 - Labelling requirements B82 - Testing requirement B83 - Certification requirement B6 - Product identity requirement B82 - Testing requirement B83 -	Short	Low	Inefficiency in the implementation of this measure	Arbitrariness or inconsistency in implementation

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
		Certification requirement				
	Firm 4	P6 - Export technical measures	Short	Low	Inefficiency in the implementation of this measure	Arbitrariness or inconsistency in implementation
	Firm 5	P6 - Export technical measures B7 - Product-quality or performance requirement B82 - Testing requirement B83 - Certification requirement	Short	Low	Inefficiency in the implementation of this measure Discriminatory behaviour	Arbitrariness or inconsistency in implementation
Viet Nam	Firm 1	E1 - Non-automatic import-licensing procedures other than authorizations for SPS or TBT reasons	Moderate	Low	Excessive documentation to obtain certificate of authorization or the certificate of assurance and maintenance Management inconsistency	Excessive documentation requirement Non-transparency (inadequate information on laws/regulations)

Country	Firm	NTM	Compliance Cost		Issues	Reasoning
			Processing time	Paid fees		
	Firm 2	A21 - Tolerance limits for residues of or contamination by certain (non-microbiological) substances	Long	High	The export to US market is temporarily terminated and there are some doubts from other exporting partner, i.e., EU.	Testing or other services Lack of infrastructure in the country
	Firm 3	B22 - Restricted use of certain substances	Moderate	Moderate	The export products were returned with impact of higher cost. Lack of controlling agency, information on export market, and guidance of managerial agency	Lack of infrastructure in the country Testing or other services

Source: ERIA Survey on NTMs (2014).

Annex Table A2: Impact of NTMs on Output

Country	Firm	NTM	Impact on	
			Cost	Price
Brunei Darussalam	Firm 1	B15 - Registration requirement for importers for TBT reasons B14 -Permit/Approval	No change	No change
	Firm 2	B83 - Certification requirement B81 - Product registration requirement	Increase (marginal)	Increase (marginal)
	Firm 3	A83 - Certification requirement (Halal) A22 - Restricted use of certain substances in foods & feeds & their contact materials (alcohol content) A31 - Labelling requirements	Increase (marginal)	Increase (marginal)
	Firm 4	B83 - Certification requirement B81 - Product registration requirement	Increase (marginal)	Increase (marginal)
Cambodia	Firm 1	A14 - Special authorization requirement for SPS reasons	Increase (marginal)	Increase (marginal)
	Firm 2	A14 - Special authorization requirement for SPS reasons	Increase (marginal)	Increase (marginal)
	Firm 3	A14 - Special authorization requirement for SPS reasons	Increase (marginal)	Increase (marginal)
	Firm 4	A14 - Special authorization requirement for SPS reasons	Increase (significant)	Increase (significant)
	Firm 5	A14 - Special authorization requirement for SPS reasons	Increase (significant)	Increase (significant)
	Firm 6	A14 - Special authorization requirement for SPS reasons	Increase (significant)	Increase (significant)
Indonesia	Firm 1	B81 - Product registration requirement	No change	No change
		B33 - Packaging requirements B42 - TBT regulations on transport & storage	Increase (significant)	Increase (significant)
	Firm 2	B83 - Certification requirement	Increase (marginal)	Increase (marginal)
		B21 - Tolerance limits for residues of or contamination by certain substances	Increase (significant)	Increase (marginal)
		B83 - Certification requirement B82 - Testing requirement	Increase (marginal)	Increase (significant)
	Firm 3	B21 - Tolerance limits for residues of or contamination by certain substances	Increase (significant)	Increase (significant)

Country	Firm	NTM	Impact on	
			Cost	Price
		B83 - Certification requirement	Increase (marginal)	Increase (marginal)
		P5 - Export taxes & charges	No change	No change
	Firm 4	A14 - Special authorization requirement for SPS reasons	No change	No change
	Firm 5	E2 - Quotas	No change	No change
		B15 - Registration requirement for importers for TBT reasons	Increase (significant)	Increase (significant)
		B14 - Authorization requirement for TBT reasons	Increase (significant)	Increase (significant)
Lao PDR	Firm 1	A82 - SPS (Testing requirement)	N/A	Marginal increase
	Firm 2	B14 - Authorization requirement for TBT reasons	N/A	Marginal increase
	Firm 3	B15 - Registration requirement for importers for TBT reasons	Marginal increase	No change
Malaysia	Firm 1	B15 - Registration requirement for importers for TBT reasons	N/A	No change
		B21 - Tolerance limits for residues of or contamination by certain substances		
		B22 - Restricted use of certain substances		
		B31 - Labelling requirements		
		B49 - Production or post-production requirements, nes		
		B82 - Testing requirement		
		B851 - Origin of materials & parts		
		B852 - Processing history		
	Firm 2	B83 - Certification requirement	Decrease (marginal)	Decrease (marginal)
	Firm 3	A22 - Restricted use of certain substances in foods & feeds & their contact materials	N/A	No change
		A31 - Labelling requirements		
A32 - Marking requirements				
A33 - Packaging requirements				
Firm 4	B31 - Labelling requirements	Decrease (marginal)	Decrease (marginal)	
Myanmar	Firm 1	A14 - Special authorization requirement for SPS reasons	Increase (significant)	Increase (significant)
		A51 - Cold/heat treatment		

Country	Firm	NTM	Impact on	
			Cost	Price
		P5 - Export taxes & charges	Increase (significant)	Increase (significant)
	Firm 2	B14 - Authorization requirement for TBT reasons	No change	No change
	Firm 3	A14 - Special authorization requirement for SPS reasons		
	Firm 4	B15 - Registration requirement for importers for TBT reasons		
	Firm 5	A14 - Special authorization requirement for SPS reasons	Increase (significant)	Increase (significant)
		P6 - Export technical measures	Increase (marginal)	Increase (marginal)
	Firm 6	B15 - Registration requirement for importers for TBT reasons	No change	No change
	Firm 7	B15 - Registration requirement for importers for TBT reasons	No change	No change
Philippines	Firm 1	B15 - Registration requirement for importers for TBT reasons B22 - Restricted use of certain substances	Increase (significant)	Increase (marginal), sometimes no change
	Firm 2	B15 - Registration requirement for importers for TBT reasons	Increase (significant)	Increase (marginal), sometimes no change
	Firm 3	B15 - Registration requirement for importers for TBT reasons B22 - Restricted use of certain substances	Increase (significant)	Increase (marginal), sometimes no change
	Firm 4	B15 - Registration requirement for importers for TBT reasons B14 - Authorization requirement for TBT reasons B22 - Restricted use of certain substances	Increase (significant)	Increase (marginal), sometimes no change
	Firm 5	B15 - Registration requirement for importers for TBT reasons A85 - Traceability requirements A851 - Origin of materials & parts E3 - Prohibitions other than for SPS or TBT reasons	No change to Increase (significant)	Increase (marginal), sometimes no change

Country	Firm	NTM	Impact on	
			Cost	Price
Singapore	Firm 1	B31 - Labelling requirements B32 - Marking requirements B33 - Packaging requirements	Decrease (marginal)	Decrease (marginal)
	Firm 2	B31 - Labelling requirements B32 - Marking requirements B33 - Packaging requirements	Decrease (marginal)	Decrease (marginal)
	Firm 3	B31 - Labelling requirements B6 - Product identity requirement	Increase (marginal)	Increase (marginal)
		B31 - Labelling requirements	Increase (marginal)	Increase (marginal)
Thailand	Firm 1	B14 - Authorization requirement for TBT reasons B7 - Product-quality or performance requirement B82 - Testing requirement B83 - Certification requirement B84 - Inspection requirement B81 - Product registration requirement	Increase (marginal)	Increase (marginal)
	Firm 2	E1 - Non-automatic import-licensing procedures other than authorizations for SPS or TBT reasons	Increase (marginal)	Increase (marginal)
	Firm 3	B31 - Labelling requirements B82 - Testing requirement B83 - Certification requirement B6 - Product identity requirement B82 - Testing requirement B83 - Certification requirement	Increase (significant)	Increase (marginal)
	Firm 4	P6 - Export technical measures	Increase (marginal)	Increase (marginal)
	Firm 5	P6 - Export technical measures B7 - Product-quality or performance requirement B82 - Testing requirement B83 - Certification requirement	Increase (marginal)	Increase (marginal)
			Increase (marginal)	Increase (marginal)
Viet Nam	Firm 1	E1 - Non-automatic import-licensing procedures other than authorizations for SPS or TBT reasons	N/A	No change
	Firm 2	A21 - Tolerance limits for residues of or contamination by certain (non- microbiological) substances	N/A	N/A

Country	Firm	NTM	Impact on	
			Cost	Price
	Firm 3	B22 - Restricted use of certain substances	N/A	N/A

Source: ERIA Survey on NTMs (2014).

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