Asia-Pacific
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Non-Tariff Measures Affecting Small and Medium Enterprises in the Asia-Pacific Region

Small and Medium Enterprises Working Group

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Executive Summary

It is widely recognized that the participation of small and medium enterprises (SMEs) in global trade will significantly help realize the APEC's goal of inclusive growth, job creation and poverty eradication. This study zeroes in on the important hurdle faced by SMEs in non-tariff measures (NTMs). While these trade-related regulations address legitimate public interest, NTMs can become trade barriers, either because these are overly complicated or the way these are implemented is difficult particularly for SMEs to comply with.

The problem of NTMs as trade barriers adversely affects all exporters, large or small. But its trade deterrent effect is particularly stronger for the latter. Using trade cost estimates of Economic and Social Commission for Asia and the Pacific (ESCAP) and the World Bank, the paper shows that agricultural exports are significantly more costly compared to manufacturing products. Given the widely-shared information that SMEs relative to large enterprises (LEs) converge their respective business activities in producing agricultural products, or in fresh and processed food industries, it may be claimed that SMEs differentially face higher trade costs as LEs with respect to complying with NTMs – a disadvantage that adds on to the lack of scale economies of SME exports.

This paper does not have time series data on what SMEs export. Regrettably, present studies – and admittedly this is one of them -- rely on results from ad hoc surveys or anecdotal information. It cannot be over-emphasized that one very important reform that APEC economies can institutionalize is to mainstream the collection of trade data of these companies, in order for APEC to better understand SMEs and know how to better help them internationalize.

NTMs have the potential of raising trade costs, particularly to SME exporters. This may be due to the inefficient administration of such measures at the border. The problem may also be in the way governments set their trade regulations. There are international standards, but economies may go beyond them, justifying the departure as responding to perceived economy-specific risks to public health or other legitimate concerns. The proliferation of private voluntary standards in situations where voluntary standards compliant trade accounts for a large market share adds a significant layer of complexity to the problem that SMEs may already find overbearing.

One idea put forward is a standards union based on international standards and the mutual recognition of respective domestic certification systems. Private sector exporters have noted how average trade costs of SMEs exports due to NTMs increase if standards vary widely from market to market. These trade costs can go down with a standards union. In global value chains, which cater to markets involving consumers who demand to get the right information on trade, particularly on fresh and processed food items, one may understand why economies may depart from basic international standards. Further research

needs to be done in documenting the net benefit to the world community of a standards union -- which helps SMEs reduce trade costs – relative to segmenting markets to better inform consumers, which unfortunately raises the cost of complying on the part of SMEs.

If harmonizing standards and technical regulations to the level helpful to SME internationalization is not desirable for selected group of agricultural, fresh or processed food products, the differential trade cost that SMEs may face relative to LEs, may call for special trade policies responsive to the agenda of promoting SME internationalization. The APEC Leaders, in the Boracay Action Agenda, have already floated one idea on *de minimis* policies in packaging and labeling requirements. Research needs to catch up in order to enlighten trade negotiations on the direction of appropriate policy reform and on how to properly implement the proposal.

Special and differential treatment of developing economies is one of the basic principles of the world trading system, and it was conceived in order to advance the development of lower income economies. It is opportune that trade negotiations, either under the auspices of the WTO or preferential trade agreements, go into measures that address the special status of SMEs as they participate in the global trading system – their lack of scale economies.

How to deal with the risk of NTMs as trade barriers has long been in the agenda of the multilateral and preferential trade agreements. From the Tokyo to the Uruguay Rounds of trade negotiations, the GATT then looked at the rules on how trade remedies and other NTMs need to be applied in a way that does not restrict trade or circumvent the reforms already agreed upon by the trading community. The APEC economies may go through a similar exercise to look at how these disciplines need to be adjusted to take into consideration the special status not just of developing economies, but also of SMEs with respect to their objective of promoting the internationalization of their businesses. Multilateral as well as preferential trade agreements have provisions on the proper application of NTMs. Are there new concerns that are not addressed yet by these agreements which make the NTMs become the 'invisible trade barriers'? The SMEs may want to know.

Whatever the state or quality of NTM regulations or on how these are to be complied with, the importance of disseminating information thereof to SMEs has always been underscored to reduce trade cost. It is pointed out that the participation of SMEs in global value chains can reduce their internationalization cost and facilitate their compliance with NTMs.

1. Introduction

The potential role of small and medium enterprises (SMEs) in capturing gains from trade, generating jobs, accelerating growth, and eliminating poverty in their respective economies is well noted in APEC.[1] There has nonetheless been little progress to realize such role. Only about 34% of global trade may be traced to SMEs among APEC

[1] As early as 1994, the APEC gave central focus for SME activities in the Asia Pacific region by creating the Policy Level Group to help SMEs improve their competitiveness and facilitate their internationalization. The APEC SMEWG was established in 2001, institutionalizing the SME development agenda in APEC.

economies.[2,3] Besides the relatively high start up and operating cost of their businesses within borders, trade barriers bar SMEs from going international. With limited capacity for scale economies, SMEs face high average trade cost compared with large enterprises, which constrains their trade participation.

This paper looks at non-tariff measures (NTMs) affecting SMEs in the Asia-Pacific region. While import duties have substantially decreased over the years all over the world and particularly in the region, exporters and importers face increasing use worldwide of non-tariff measures. UNCTAD (2009) defines NTMs as "policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both." According to ITC (2015, p.1), NTMs are "a wide range of requirements and regulations other than customs tariffs, which economies apply on imports and exports of goods." Private voluntary standards, which have proliferated over the last two decades, have added a layer of complexity to the growing concern of NTMs.

NTMs have the potential of raising trade costs, particularly to SME exporters. This may be due to overly complex requirements of exports allowed by governments into their respective economies, which make it more difficult to comply with. The inefficient administration of such measures by partners at the border has the potential of raising these costs. It is important to note that exporting economies may also be the source of export barriers, when they make it unnecessarily difficult for their exporters to comply with export-related regulations. However, such departures from the proper exercise of regulatory powers to promote public interest by importing or exporting economies affect both large and SME exporters, but particularly the latter.

This paper pursues the matter as to whether SMEs differentially face higher trade costs with respect to complying with NTMs because of size. There is already a fairly large body of studies that look at other components of trade costs that SMEs face, such as the cost of doing business; inefficiencies in transporting products; information cost on export opportunities and on applicable NTMs; compliance costs on trade regulations; or simply the presence of unnecessary or outdated regulations. The differential trade cost that SMEs face, if there is, may validate calls for differential trade policies to promote SME internationalization. In pursuing the matter, the paper examines the types of merchandise that SMEs are presently exporting and the NTMs that affect these exports.

Recent Export Performance of the APEC economies

The merchandise exports of the 21 APEC economies in 2014 are shown in Figure 1. China tops the list with an export value reaching US$2.3 trillion. The United States is second with US$1.6 trillion. The top third performers have values ranging from US$497.8 billion (Russian Federation) to China's value. The middle third exported in 2014 from US$472.9 billion (Canada) to US$227.6 billion (Thailand). The export values of the lowest third come down from US$150.5 billion (Viet Nam) to Papua New Guinea's US$5.7 billion.

[2] In Zhang (2013). The ITC and WTO (2014) showed estimates of SME shares to direct exports ranging from 38-40% (India); 60% (China); 20% (Viet Nam); and to 46% (Thailand), citing Tambunan (2009). The same reported that about 20% of SME direct exports covers their indirect exports.

[3] At the time the APEC SMEWG Strategic Plan of Action (SPAN) was adopted in 2002, the baseline estimate then of SME share in exports in the region was 35%.

Figure 1. Merchandise Export Values of the 21 APEC Economies, 1995 and 2014 in bln. US $

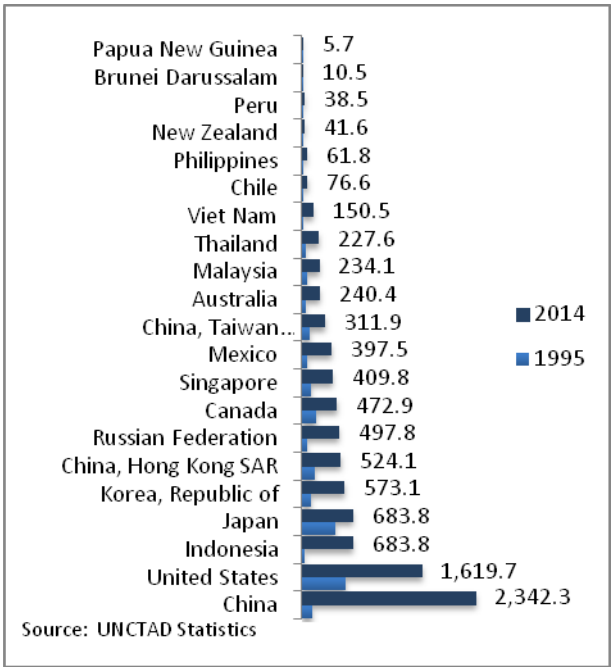
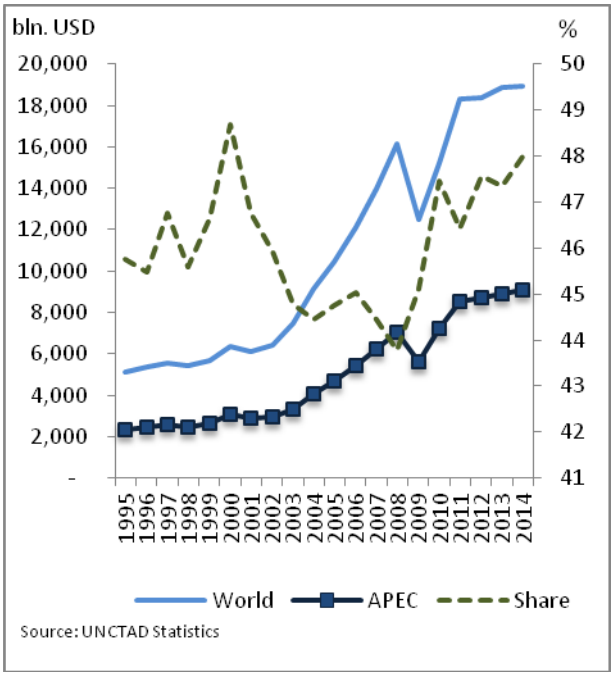


Figure 2. Share of APEC Economies in World Exports, 1995-2014



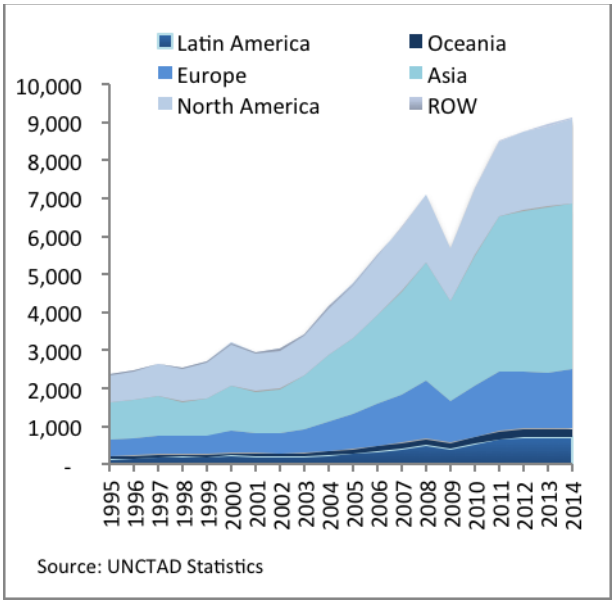
The distribution is lopsided. The top seven economies account for 72% of all the merchandise exports of the region in 2014. The middle group (Canada to Thailand) has nearly 24%, while the remaining 4% of total value is contributed by the seven economies with the poorest performance.

Figure 1 also shows the respective export values of these economies in 1995 for comparison. Viet Nam topped the list of economies with high export growth. Its 2014 value is 27.6 times that of 1995. China and Indonesia are roughly tied with 15.7 and 15, respectively. The lowest export expansion is Japan's. The export values of other developed economies tend to expand the slowest.

The share of APEC in the world's merchandise exports has been significant (Figure 2). The estimate had declined from as high as 49% in 2000 to 44% in 2008. After the global economic crisis in 2008, the share of the region in overall exports went up to the latest figure of 48%. The world's export value increased more sharply since 2001, while the expansion of APEC exports was weaker, resulting in the decline of the region's share in overall exports.

In 2014, 48% of APEC's exports went to Asia, up from only 42% in 1995 (Figure 3). The increase has been sharp since the turn of this century. North America is the second largest destination,

Figure 3. Destination of APEC's exports, 1995 to 2014



particularly the United States. It used to claim 31% in 1995, but in 2014 its share dropped to 24%. The remaining third of APEC's exports are allocated to Latin America (8%), Europe (17%), Oceania (2%) and the rest of the world.

2. What SMEs Are and Export

How APEC economies define SMEs varies. The criteria these economies use include the number of employees, sales, assets, and capital investment. Zhang (2013) noted that 14 economies use two to three criteria in defining SMEs. These are the number of employees, revenues per year, asset values, and capital investments. Except for Papua New Guinea and Peru, all APEC economies use the number of employees employed by the business establishment. Table 1 shows Zhang's list of criteria used by APEC economies in defining SMEs.

Table 1. Criteria Used in APEC Economies' Definition of SME

Economy	Sector	Number of Employees	Annual Sales/ Revenues	Assets	Capital/ Investments	Total Number of Criteria
Australia		□				1
Brunei Darussalam		□				1
Canada	□	□	□			3
Chile		□	□			2
China		□	□			2
Hong Kong, China	□	□				2
Indonesia		□	□	□		3
Japan	□	□			□	3
Korea	□	□	□		□	4
Malaysia	□	□	□			3
Mexico	□	□	□			3
New Zealand		□				1
Papua New Guinea					□	1
Peru			□			1
Philippines		□		□		2
Russia		□	□			2
Singapore		□		□		2
Chinese Taipei	□	□	□		□	4
Thailand	□	□		□		3
United States	□	□	□			3
Viet Nam	□	□			□	3
Number of Economies Using the Criteria	10	19	11	4	5	

Source: Zhang (2013)

But even by this most common criterion of number of employees, the economies have different thresholds as to what comprise micro, small or medium establishments. Complicating the matter further, Zhang reports that in some economies each sub-category of SMEs has a different number of workers for thresholds by economic sector. Then there are economies that do not have sub-categories of SMEs. The United States defines an SME as one employing less than 500 workers. Singapore, like the US, has only this category of SMEs, but its threshold employment is only up to 200 workers.

The mode threshold employment in defining medium enterprises among APEC economies is 100. The US, Canada and China, however, are far higher than this, i.e., at 500 workers or more. China's medium enterprises are those that employ up to 1,000 workers.

Annual gross revenue of business establishments is another criterion used in defining an SME by 11 of the APEC economies. By this criterion, the classification of SMEs becomes even more non-comparable because of the use of local currency in defining the threshold value. Another value-related difficulty is the criterion of the establishment's asset, which likewise uses local currencies. The same problem arises for the level of capital investments in starting the business. But even if the values are translated into a common currency the heterogeneity turns out to be wide enough as to render comparison difficult. The US has the threshold revenue of US$7 million. Only about half of this amount corresponds to how Indonesia defines its medium enterprise. Mexico has about twice the threshold annual sales of the US for medium enterprises.[4]

It is apparent that some more work needs to be done to come up with a common regional definition of SMEs in APEC (Zhang, 2013). However, in other institutions, the following definition framework using employment as the criterion had surfaced. IFC (2012) defines medium enterprises as those having employees from 51 to 300; small, 11 to 50; and micro enterprises, 10 employees or less. The corresponding figures for EU's definition are 250, 50 and 10 employees, respectively. Given the modal threshold for medium enterprises in APEC at 100, APEC economies' definitions of SMEs are not way above these numbers. This would even be more obvious if we combine with this information on the distribution of sub-categories of SMEs among APEC economies (Zhang, 2013).

Despite the diversity, it is clear that small size characterizes SMEs, at least among APEC economies. Based on the data from Zhang (2013) for APEC economies, the mean share of micro enterprises to the total registered SMEs in APEC is 81%. Medium enterprises comprise only about 1% for most economies, with the highest observed at nearly 4% for Australia. Small enterprises take up the difference, which is 18%. With the number of small and micro enterprises at 99% of all registered SMEs, SMEs employ, on average, in the vicinity of 17 employees at the most.

SMEs Exports

What products do SMEs export? Without the actual data that statistical authorities gather on a regular basis, one can infer the answer from other pieces of information. A few studies answer the question by looking at the sectors where majority of SMEs do business. The SMEs in Africa, Caribbean, and the Pacific (ACP) tend to be found in services sectors such as wholesale and retail trade, auxiliary transport activities, hotels and restaurants, and other services (ITC and WTO, 2014). The report observes that large enterprises are in textiles, food products and beverages, and chemical and chemical products.

Khan and Khalique (2014) provide contrasting information about whether SMEs are primarily producing goods or services. In Malaysia, 90% of all its SMEs are in services. The

[4] The same challenge of reaching a common definition of SMEs got noted in other parts of the world. "The term 'SME' encompasses a broad spectrum of definitions which vary between country and region." (ITC and WTO (2014), p. 2)

remaining 10% is in manufacturing (5.9%), agriculture (1%), construction (3%), and mining and quarrying (0.1%). In Pakistan however, most of its SMEs (98%) are in manufacturing. [5]

The data on Canada is just for exporting SMEs, and apparently the majority of these SMEs export goods more than they do services or both. Majority of the SMEs export goods (49%), followed by services (39%), while the remaining 12% are in the form of both goods and services (Seens, 2015). The proportions of SMEs selling goods are much higher by sector, i.e., in agriculture and manufacturing, 85% and 82%, respectively. Even SMEs in services industries are reported to export goods only, i.e., retail trade (76 %), wholesale trade (75%) and other services (69%). Only the SMEs in transportation and warehousing (75%) and professional, scientific and technical services (74%) exported services. The SMEs, which export both goods and services, are in knowledge-based industries (27%) as well as in wholesale trade and manufacturing sectors (16%).

Data from the United States is consistent with the above finding for Canada. Based on the 2013 Small Business Exporting Survey in the United States, 52% of all exporting SMEs export goods; 18% services; and 30% both goods and services.

Zhang (2013) noted that about 10 APEC economies have used economic sector as a criterion in defining SMEs. Table 2 shows the 10 economies and the industries they declared SMEs are in. It is unclear from Table 2 why certain industries are excluded in defining an SME. For example, the definition of SMEs in Chinese Taipei excludes services. In the case of Malaysia, agriculture is not in this list; but in Khan and Khalique (2014), the sector is included, albeit only 1% of all business establishments comprise SMEs in agriculture.

Table 2. Economic Sectors as Criteria in Defining SMEs

Economy	Category	Sector
Canada	SMEs	Goods; Services
Japan	SMEs	Manufacturing; Construction; Transportation; Wholesale Trade; Service Industry; Retail Trade
Korea	SMEs	Manufacturing; Mining; Construction; Transportation; Selected Retail; ICT; Tourism; Entertainment; Selected Extraction; Professional Services; Selected Wholesale; Environmental Services; Other Sectors
Malaysia	SMEs	Manufacturing; Services and other sectors
Mexico	SMEs	Industry; Trade; Services
HK-China	SMEs	Manufacturing; Non-manufacturing
Chinese Taipei	Micro	All goods
	SMEs	Manufacturing; Construction; Mining; Quarrying; Other Sectors
Thailand	SMEs	Manufacturing; Services; Wholesale; Retail
United States	SMEs	Most Manufacturing and Mining Industries; Non-manufacturing

[5] The same data in Khan and Khalique (2014; Figure 2.7) may indicate that SMEs dominate the LEs in all industries based on the number of establishments.

Viet Nam	Micro	Agriculture; Forestry and Fishery; Industry and Construction; Commerce and services
	SMEs	Agriculture; Forestry and Fishery; Industry and Construction; Commerce and Services

Source: Zhang (2013)

The agglomeration of SMEs in a given industry may not be a good indicator of their exports. The basket of SME exports may not readily be fished out from the sectors where most SMEs converge because the products of these sectors could be non-tradable. In addition, the decision to export or internationalize one's business depends upon several hurdles that normally SMEs may not easily go over given their small size compared to large enterprises.

In a recent workshop organized by the Philippines and the APEC SME Working Group in Atlanta in the United States, and Iloilo in the Philippines, the organizers focused on agriculture, handicrafts and processed foods.[6] The following sectoral data shows the performance of APEC SME exports: food and live animals, beverages and tobacco, crude materials (inedible) except fuels; animal and vegetable oils; manufactured products; and miscellaneous manufactured products.[7]

Table 3. APEC Exports to the World, All and Selected SME Products, 1995-2014 (in billion USD)

Year	All Exports	Selected SME Exports	Share (%)
1995	2,344	905	39
1996	2,435	924	38
1997	2,605	973	37
1998	2,491	918	37
1999	2,637	937	36
2000	3,106	1,053	34
2001	2,870	997	35
2002	2,957	1,021	35
2003	3,357	1,143	34
2004	4,076	1,381	34
2005	4,680	1,567	33
2006	5,456	1,839	34
2007	6,225	2,131	34
2008	7,065	2,379	34
2009	5,646	1,942	34
2010	7,234	2,452	34

[6] The two workshops were conducted in June 8-9, 2015 in Atlanta, and September 21-22, 2015 in Iloilo City. Both had the theme on Workshop on Facilitating SME Trade through Better Understanding of Non-Tariff Measures in the Asia Pacific Region for the Agriculture, Food Processing and Handicrafts Sectors.

[7] We refer these exports as SME exports in the rest of the study. It should be pointed out that this list is not exhaustive of the exports of SMEs. As shown in Table 2 and in some of the research cited above, services are being exported by SMEs. Even in goods, SMEs are found to be exporting other manufactured goods such as automotive parts. On the other hand, the data covers as well the exports of LEs in agriculture, processed foods, and handicrafts.

2011	8,505	2,932	34
2012	8,742	3,008	34
2013	8,927	3,082	35
2014	9,096	3,202	35
Average			35

Source: UNCTAD Statistics

Table 3 shows the value of APEC economies' exports to the world in all products from 1995 to 2014 as well as in selected products deemed to be the likely exports of SMEs in the APEC region. It is interesting to note that the average share of SME exports to total from 1995 to 2014 is 35%. The average estimate corresponds closely with the 34%, which is the average share of SME exports to total (Zhang, 2013), as indicated above.

Figure 4. Exports of SMEs in the APEC Region, 1995 - 2014 (in billion USD)

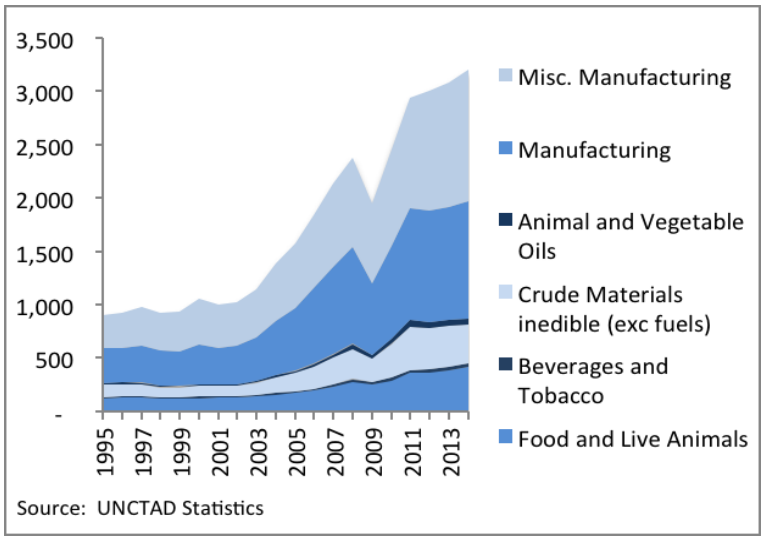
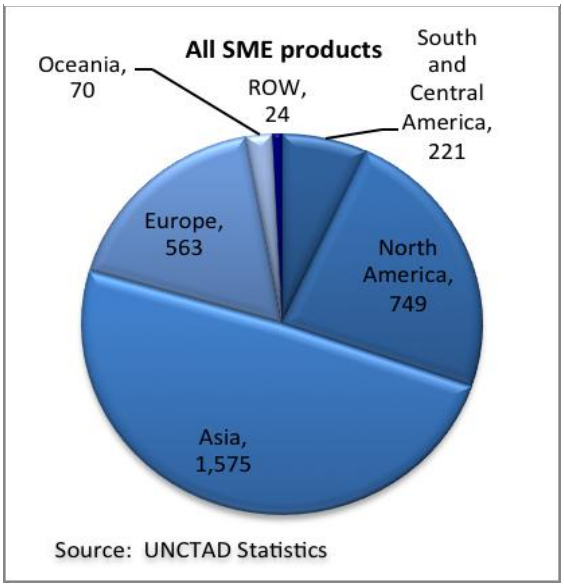


Figure 4 shows the plot of the component exports, which this study takes as attributable to SMEs. The total value of these exports reached US$3.202 trillion or about 35% of all exports of APEC in the year. About 38% of the total value comes from miscellaneous manufactured articles. The manufactured goods group follows closely with 34.3%. Food and live animals exports account for 13.1%, while crude materials account for 11.3%. Animal and vegetable oils and fats, and beverages and tobacco share the remaining nearly 3% of the total.

Figure 5. Destination of SME Exports from the APEC Economies, 2014 (in billion USD)



The largest market of these SME exports from the APEC region in 2014 is Asia, 49.2% (Figure 5). North America and Europe are the second and third regional markets of

APEC's SME exports, 23.4% and 17.6%, respectively. South and Central America is a distant fourth, accounting for 6.9%. Oceania and the rest of the world share the remaining nearly 3%. Table 5 shows the composition and destination of SME exports from the APEC economies.

Table 4. Composition and Destination of SME Exports Coming from the APEC Economies, 2014 (in billion USD)

	World	South and Central America	North America	Asia	Europe	Oceania	ROW
Food and live animals	419	37	112	200	52	12	6
-- % Share	100.0	8.8	26.8	47.6	12.4	2.9	1.5
Beverages and tobacco	35	2	9	18	5	2	0
-- % Share	100.0	4.9	24.6	49.4	15.5	4.7	0.9
Animal and vegetable oils and fats	53	2	6	28	11	1	5
-- % Share	100.0	4.1	11.6	53.1	19.9	1.1	10.2
Crude materials (inedible) except fuel	363	17	42	254	46	2	1
-- % Share	100.0	4.8	11.6	70.0	12.7	0.6	0.3
Manufactured Goods	1,098	92	251	545	181	26	4
-- % Share	100.0	8.4	22.9	49.6	16.5	2.3	0.3
Misc. manufactured articles	1,232	71	329	530	268	27	7
-- % Share	100.0	5.7	26.7	43.0	21.8	2.2	0.5
All SME products	3,202	221	749	1,575	563	70	24
-- % Share	100.0	6.9	23.4	49.2	17.6	2.2	0.7

Source: UNCTAD Statistics

Intra-APEC Exports in SME Products

The intra-APEC export activity in SME products is strong in 2014 (Figure 6). The value of the intra-regional exports in SME products in the region reaches two-thirds of the region's exports of the same products to the world. Crude materials and food and live animals have the highest intra-export share, 71% and 76%, respectively. The rest of the SME product categories going to the region have at least 41% share. Animal and vegetable oils and fats have the lowest intra-regional export activity. Except for this, the intra-APEC SME exports are at least 62% of total APEC exports in these products.

It is increasingly recognized that SMEs which export are the ones that are more successful, have higher revenue growth, employ more workers, and are generally more innovative and productive. Yet there are several barriers preventing SMEs to internationalize, with trade barriers being among the more important ones. In the following section, the study looks at NTMs as potentially being the more important trade measures in the current period that tariff barriers have already been significantly reduced.

3. NTMs and SME Exports

Trade barriers, until the turn of the century, have largely been in the form of import tariffs. As price-based restrictions on imports, these restrictions influence prices of imported products and import substitutes in a relatively predictable manner. Over the years, trade agreements have reduced tariff barriers. Average tariff rates had declined from 19.9% and

6.7% in 1995 to 7.4% and 2.4% in 2008, respectively (Basu, S.R., Kuwahara, H. and Dumesnil, F., 2012). Despite this, tariff peaks on key commodities, particularly in agriculture, have remained to be a concern. These and tariff escalation can reduce exports, export diversification, and thus economic growth (ITC, 2010). However, the growing proliferation of non-tariff measures has concealed the importance of these tariff-related concerns.

Are NTMs trade barriers per se which trade agreements need to eliminate? The NTMs may generally be regarded as trade-related regulations intended to address legitimate public-interest concerns. The WTO (2012) views these measures as "often first-best policies to correct market failures." Policy makers, for example, may decide to accord monopoly rights in importing food to a government corporation to attain food security. There are potential public-interest issues that cross-border trade flows may generate, and some or the majority of these measures are designed to mitigate the adverse consequences of trade-related concerns. The sanitary and phyto-sanitary (SPS) measures or technical barriers to trade (TBTs), give consumers the information they need about traded products, and in so doing encourage demand for the latter. The NTMs such as trademarks, labeling requirements and other disclosed information or SPS measures, which assure consumers of the quality and safety of the product they import, reduce uncertainty and thus increase demand for imports. It is from this lens that NTMs promote trade (Thilmany and Barrett, 1997; APEC 2014).

There are NTMs, however, which have overly strict requirements making them difficult to comply with, and/or are administered in a way that also makes compliance overly costly. This group of NTMs has assumed protectionist or discriminatory intent, and thus may legitimately be called the 'invisible barriers to trade' (ITC, 2010). For example, the actions of the food import monopolist could favor domestic producers rather than simply ensuring food security. The WTO sees that strong potential for these measures to be used to distort trade flows is strong, making it difficult to distinguish "legitimate" NTMs from protectionist NTBs.

NTMs have been in the trade policy arena for a long period of time, but the tariff restrictions in the past may have overshadowed the urgency of reforming the use of such measures. Increasingly after the Uruguay Round and the surge of preferential trade agreements since the 1990s, the NTMs have increasingly caught the attention of policy makers as having the potential of becoming the mainstream sources of price distortions at the border (Draganov, 2012). These regulations are vulnerable to abuse particularly when importing economies see the need to protect domestic industries particularly in times of an economic crisis, or succumb to political pressures to favor domestic producers in these times when tariff bindings are already low.

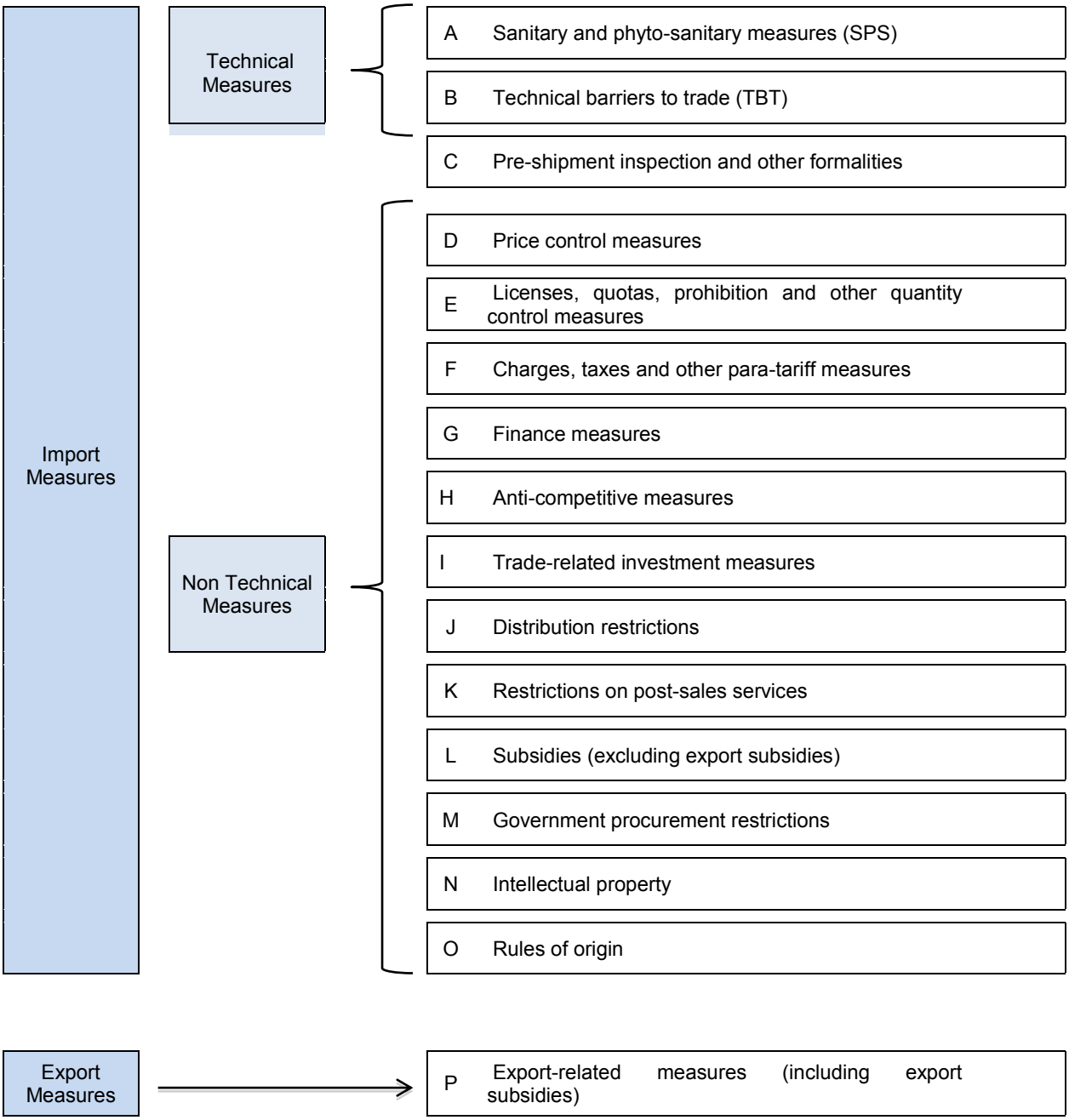
UNCTAD (2010) distinguished NTBs from NTMs as measures, other than ordinary customs duties, designed and implemented to curtail the flow of imports and/or accord price advantage to local producers. In contrast, the NTMs may be legitimate technical regulations, and may stay as such, if compliance costs with these measures are kept to their necessary minimum and both local and imported products are treated similarly by the regulation. But if authorities apply the latter arbitrarily to give artificial advantage to local over imported products, then NTMs may be no different from NTBs.

In 2009, UNCTAD adopted and updated classification of NTMs. They cover three categories, namely technical, non-technical measures and export-related regulations (Figure 7). Technical measures are regulations and mandatory product standards applicable to the

imported commodity, which need to be complied with before authorities at the border allow its shipment to be released for commercial distribution locally.

The updated classification of NTMs adopted in 2009 responded to two distinct needs. First is that the system needs to be suited for collecting information on the NTM. The experts recognized the need for more categories of NTMs to facilitate data collection. For example, technical measures are sub-divided into SPS, TBTs and pre-shipment inspection measures. New categories were added in the classification system, e.g., export measures, trade-related investment measures, distribution restrictions, restrictions on post-sales services, subsidies, measures related to intellectual property rights, and rules of origin.

Figure 6. Classification of Non-Tariff Measures



Source: UNCTAD Secretariat

The list of more specific NTMs has grown through the years. Table 5 shows the current version of the list. Among the more populated categories of NTMs are the SPS measures, technical barriers to trade, price control measures, quantitative measures, and finance measures.

Table 5. Specific Non-Tariff Measures

A000 SANITARY AND PHYTO-SANITARY MEASURES	A100 Prohibitions or restriction of products or substances for SPS reasons; A110 Temporary geographic prohibition for SPS reasons; A120 Geographical restrictions on eligibility; A130 Systems approach; A150 Registration requirements for importers; A190 Prohibitions or restrictions of products or substances because of SPS reasons not elsewhere specified (n.e.s.); A200 Tolerance limits for residues and restricted use of substances; A210 Tolerance limits for residues of or contamination by certain substances; A220 Restricted use of certain substances in foods and feed; A300 Labeling, marking and packaging requirements; A310 Labeling requirements; A320 Marking requirements; A330 Packaging requirements; A400 Hygienic requirements; A410 Microbiological criteria on the final product; A420 Hygienic practices during production; A490 Hygienic requirements n.e.s.; A500 Treatment for elimination of plant and animal pests and disease-causing organisms in the final product (e.g. post-harvest treatment); A510 Cold/heat treatment; A520 Irradiation; A530 Fumigation; A590 Treatment for elimination of plant and animal pests and disease-causing organisms in the final product n.e.s.; A600 Other requirements on production or post-production processes; A610 Plant growth processes; A620 Animal raising or catching processes; A800 Conformity assessment related to SPS; A810 Product registration requirement; A820 Testing requirement; A830 Certification requirement; A840 Inspection requirement; A850 Traceability information requirements; A851 Origin of materials and parts; A852 Processing history; A853 Distribution and location of products after delivery; A859 Traceability requirements, n.e.s.; A860 Quarantine requirements; A890 Conformity assessment related to SPS n.e.s.; A900 SPS measures n.e.s.
B000 TECHNICAL BARRIERS TO TRADE	B100 Prohibitions or restrictions on products or substances for TBT reasons (e.g. environment, security); B110 Prohibition for TBT reasons; B140 Authorization requirement for TBT reasons; B150 Registration requirement for importers for TBT reasons; B190 Prohibitions or restrictions of products or substances because of TBT reasons n.e.s.; B200 Tolerance limits for residues and restricted use of substances; B210 Tolerance limits for residues of or contamination by certain substances; B220 Restricted use of certain substances; B300 Labeling, marking and packaging requirements; B310 Labeling requirements; B320 Marking requirements; B330 Packaging requirements; B400 Production or post-production requirements; B410 TBT regulations on production processes; B420 TBT regulations on transport and storage; B490 Production or post-production requirements n.e.s.; B500 Regulation on genetically modified organisms (GMO) (for reasons other than food safety) and other foreign species; B600 Product identity requirement; B700 Product quality or performance requirement; B800 Conformity assessment related to TBT; B810 Product registration requirement; B820 Testing requirement; B830 Certification requirement; B840 Inspection requirement; B850 Traceability information requirements; B851 Origin of materials and parts; B852 Processing history; B853 Distribution and location of products after delivery; B859 Traceability requirements n.e.s.; B890 Conformity assessment related to TBT measures n.e.s.; B900 TBT measures n.e.s.
C000 PRE-SHIPMENT INSPECTION AND OTHER FORMALITIES	C100 Pre-shipment inspection; C200 Direct consignment requirement;C300 Requirement to pass through a specified customs port;C400 Import monitoring and surveillance requirements and other automatic licensing measures;C900 Other formalities n.e.s.
D000 PRICE CONTROL MEASURES	D100 Administrative pricing; D110 Minimum import prices; D120 Reference prices and other price controls; D190 Administrative pricing n.e.s.; D200 Voluntary export price restraints (VEPRs); D300 Variable charges; D310 Variable levies; D320 Variable components; D390 Variable charges n.e.s; D400 Anti-dumping measures;D410 Anti-dumping investigations;D420 Anti-dumping duties;D430 Price undertakings; D500 Countervailing measures;D510 Countervailing investigations; D520 Countervailing duties; D530 Price undertakings; D600 Safeguard duties; D700 Seasonal duties; D900 Price control measures n.e.s.

E000 LICENSES, QUOTAS, PROHIBITIONS AND OTHER QUANTITY CONTROL MEASURES	; E100 Non-automatic license; E110 License with no specific ex-ante criteria; E120 License for specified use; E130 License linked with local production; E140 License combined with or replaced by special import authorization; E180 License for non-economic reasons; E181 License for religious, moral or cultural reasons; E182 License for political reasons; E190 Non-automatic licensing n.e.s.; E200 Quotas; E210 Global quotas; E211 Unallocated quotas; E212 Quotas allocated to exporting economies; E220 Bilateral quotas; E230 Seasonal quotas; E240 Quotas linked with purchase of local goods; E250 Quotas linked with domestic production; E270 Tariff rate quotas; E280 Quotas for non-economic reasons; E281 Quotas for religious, moral or cultural reasons; E282 Quota for political reasons; E289 Quotas for non-economic reasons n.e.s.; E290 Quotas n.e.s.; E300 Prohibitions; E310 Total prohibition (not for SPS or TBT reasons); E320 Suspension of issuance of licenses; E330 Seasonal prohibition; E340 Temporary prohibition; E350 Prohibition of importation in bulk; E360 Prohibition of products infringing patents or intellectual property rights; E380 Prohibition for non-economic reasons; E381 Prohibition for religious, moral or cultural reasons; E382 Prohibition for political reasons (embargo); E389 Prohibition for non-economic reasons n.e.s.; E390 Prohibitions n.e.s.; E400 Quantitative safeguard measures; E500 Export restraint arrangement; E510 Voluntary export restraint arrangements (VERs); E511 Quota agreement; E512 Consultation agreement; E513 Administrative cooperation agreement; E590 Export restraint arrangements n.e.s.; E900 Quantity control measures n.e.s.
F000 CHARGES, TAXES AND OTHER PARA-TARIFF MEASURES	F100 Customs surcharges; F340 Consular invoice fee; F350 Statistical tax; F360 Tax on transport facilities; F390 Additional charges n.e.s.;F400 Internal taxes and charges levied on imports; F410 General sales taxes; F420 Excise taxes; F430 Taxes and charges for sensitive product categories; F490 Internal taxes and charges levied on imports n.e.s.; F500 Decreed customs valuations; F900 Para-tariff measures n.e.s
G000 FINANCE MEASURES	G100 Advance payment requirement; G110 Advance import deposit; G120 Cash margin requirement; G130 Advance payment of customs duties; G140 Refundable deposits for sensitive product categories; G190 Advance payment requirements n.e.s.; G200 Multiple exchange rates; G300 Regulation on official foreign exchange allocation; G310 Prohibition of foreign exchange allocation; G320 Bank authorization; G330 License linked with non-official foreign exchange; G331 External foreign exchange; G332 Importer's own foreign exchange; G339 License linked with non-official foreign exchange n.e.s.; G390 Regulation on official foreign exchange allocation n.e.s.; G400 Regulations concerning terms of payment for imports; G900 Finance measures n.e.s.
H000 ANTI-COMPETITIVE MEASURES	H100 Restrictive import channel; H110 State trading administration, for importing; H120 Sole importing agency; H130 Importation reserved for selected importers; H190 Single channel for imports n.e.s.; H200 Compulsory domestic service; H210 Compulsory domestic insurance; H220 Compulsory domestic transport; H290 Compulsory domestic service n.e.s.; H900 Anti-competitive measures n.e.s.
I000 TRADE-RELATED INVESTMENT MEASURES	I100 Local content measures; I200 Trade-balancing measures; I900 Trade-related investment measures n.e.s
K000 RESTRICTION ON POST-SALES SERVICES*	J100 Geographical restriction; J200 Restriction on re-sellers
K000	RESTRICTION ON POST-SALES SERVICES
L000	SUBSIDIES (excluding export subsidies under P700)
M000	GOVERNMENT PROCUREMENT RESTRICTIONS
N000	INTELLECTUAL PROPERTY
O000	RULES OF ORIGIN
P000 EXPORT-RELATED MEASURES	P100 Export license, quota, prohibition and other quantitative restrictions; P110 Export prohibition; P120 Export quotas; P130 Licensing or permit requirements to export; P140 Export registration requirements; P190 Export quantitative restrictions n.e.s.; P200 State trading administration; P300 Export price control measures; P400 Measures on re-export; P500 Export taxes and charges; P600 Export technical measures; P610 Inspection requirement; P620 Certification required by the exporting economy; P690 Export technical measures n.e.s.; P700 Export subsidies; P900 Export measures n.e.s.

Source: UNCTAD Secretariat

Voluntary Standards

Over the past two decades, voluntary standards have proliferated (ITC, 2010). These differ from the NTMs which governments require exporters to be compliant with.

Voluntary standards are not mandated by any trade regulation, but if exporters decide to sell to a subset of buyers of these products in destination economies, who happen to require these standards the former have to comply. Voluntary standards are applied to meet growing demands of consumers particularly in developed economies for more complete information on the products they import. These measures likewise are used to protect social rights, protect the environment, and promote other development results. Mimouni (2015) had argued that the proliferation per se of these standards is not the problem. Rather it is the degree of their restrictiveness, and the difficulty of complying with them.

But are they NTMs as well? It depends on how much of the market these voluntary standards cover. As they are, they segment markets by offering to distinct group of customers catering to products with characteristics beyond the generic characteristics and safety standards, which governments require. By the definition of NTMs, they have the potential of influencing prices of imported products including their close generic substitutes, and accordingly they are. The more these standards cover the entire market of differentiated and closely substitutable products, the stronger their influence on prices. ITC (2010) reports an account in 2009 by Webber and Labaste, who documented that the Global G.A.P. compliant food retailing chains in Europe account for 76% of fresh fruit and vegetable sales and 70% to 90% of fresh-produce imports from Africa.

NTMs Affecting SME Exports

Table 6 shows a list of NTMs affecting agriculture, food and handicrafts. The information was gathered from the WTO's Integrated Trade Intelligence Portal (I-TIP). WTO members populate this database through their notification obligations on the NTMs that they are enforcing or initiating. There are 25,000 measures in I-TIP, but some of these are tariff measures. The purpose of the database is to give information on trade policy measures. I-TIP covers both tariff and non-tariff measures affecting trade in goods as well as information on trade in services, trade in government procurement markets, regional trade agreements and the accession commitments of WTO members. The database presently covers the following categories of NTMs: TBTs, SPS measures, trade remedies, special agricultural safeguards, quantitative restrictions and state trading enterprises.

The majority of the NTMs applied by APEC economies and the EU cover SPS and TBTs. Of the 6,220 measures applied by various economies and the EU for imports of agricultural, food and handicrafts, 4,655 measures or nearly 75% of total are SPS measures (Table 6). These are applied to agricultural imports. Technical barriers to trade follow with 797 measures or 12.81% of total. Together SPS and TBTs account for nearly 88% of total. Tariff quotas are third with 6.45% followed by special safeguards applicable to agricultural imports having a share of nearly 5% of total. The three trade remedies, safeguards, countervailing duties and anti-dumping duties are roughly 1%. APEC (2014) shows that antidumping, SPS, and TBT measures around the world are the ones mostly affecting APEC economies. Among the most affected sectors are meats, fruits and nuts, chemicals, iron and steel, plastic, and textiles.

The information in the I-TIP database comes from the WTO requiring its members to notify NTMs. Presently, these information are required (Richtering, 2015): notification requirement, interagency NTM classification code; member reporting/implementing NTM; partner(s) affected [MFN or economy-specific]; product descriptions and (if available) HS

codes; measure description (in brief, as provided); keywords (for SPS and TBT); dates / timeline; and initiation, in force, withdrawal.

Table 6. NTMs Applied by APEC Economies on SME exports

NTM	Number	%
Sanitary and phyto-sanitary measures	4,655	74.84
Technical barriers to trade	797	12.81
Quantitative restrictions	401	6.45
Special safeguards	303	4.87
Anti dumping duties	32	0.51
Safeguards	26	0.42
Countervailing duties	6	0.10
Total	6,220	100.00

Source: WTO ITIP

Some of the measures in Table 6 are just initiated rather than in force. About 1,896 measures are currently in force. The rest of the 6,220 are initiated (Table 7). When a WTO member introduces a stricter SPS standard, it has to notify the WTO about its plans. The members are given approximately thirty days to comment on these plans. Such notification produces in the database a measure that is under initiation. Whether the member notifies the WTO that it is starting to enforce the standard or does not pursue the plan further in light of the comments of other members, the notified measure remains in the database as under initiation.[1] In Table 7, 30% of what I-TIP reports are NTMs that are in force. The rest are not implemented yet, or may already be in force without the corresponding notification.

Table 7. Implementation and Coverage of NTMs on SME Exports in APEC

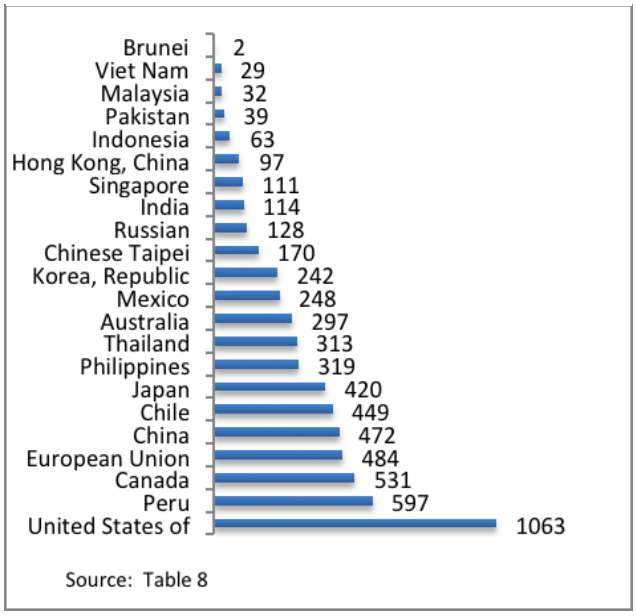
Status of	Number	%
In force	1,896	30.48
Initiation	4,324	69.52
Applied to:	Number	%
All WTO members		
Bilateral	5,648	90.80
All members	572	9.20

Source: WTO I-TIP

The other piece of information in Table 7 is whether the measure is applicable to trading partners under a preferential trade agreement. Nearly 90% of documented NTMs are preferential. It may indicate that departures from international standards or provisions in WTO agreements on NTM disciplines are mostly in the context of members having agreed to do so in the context of preferential trade agreements. This makes sense if TBTs and SPS measures dominate the NTMs documented in the I-TIP database.

[1] The other problem is that the member may not notify at all the WTO, and so there is an NTM that is applied but is not in the database of I-TIP.

Figure 7. NTMs Affecting SME Exports, by APEC Economies and Selected Trading Partners



The United States has applied the most number of NTMs, 1,063 measures or 17% of total (Figure 8). Table 8 shows the list of NTMs by APEC economies. Applying an NTM may indicate several things. An economy with a very good governance capacity quickly addresses trade-related issues with significant public interest, applies the appropriate regulations to address them, and notifies the WTO about them. On the other hand, an economy that has low incidence of NTMs may not have any need for such NTMs or their capacity to regulate trade-related issues is lower compared with others, and in the end, issues remain unresolved. All developed economies cited in Figure 8 tend to have the larger number of NTMs, but two developing economies are among them, Peru and Chile.

Table 8. NTMs affecting SME exports, by APEC economy and selected trading partner

Economy	Measures	Economy	Measures
United States of America	1063	**Mexico**	248
Sanitary and Phyto-sanitary	571	Sanitary and Phyto-sanitary	228
Technical Barriers to Trade	290	Technical Barriers to Trade	16
Special Safeguards	164	Anti dumping	4
Quantitative Restrictions	30	**Korea, Republic of**	242
Safeguards	5	Sanitary and Phyto-sanitary	162
Anti dumping	3	Special Safeguards	37
Peru	597	Technical Barriers to Trade	27
Sanitary and Phyto-sanitary	579	Quantitative Restrictions	13
Technical Barriers to Trade	18	Safeguards	3
Canada	531	**Chinese Taipei**	170
Sanitary and Phyto-sanitary	472	Sanitary and Phyto-sanitary	136
Technical Barriers to Trade	43	Special Safeguards	18
Quantitative Restrictions	12	Technical Barriers to Trade	8
Anti dumping	3	Quantitative Restrictions	7
Safeguards	1	Anti dumping	1
European Union	484	**Russian Federation**	128
Sanitary and Phyto-sanitary	402	Sanitary and Phyto-sanitary	96
Technical Barriers to Trade	42	Quantitative Restrictions	32
Special Safeguards	26	**India**	114
Anti dumping	6	Sanitary and Phyto-	59

		sanitary	
Countervailing	4	Quantitative Restrictions	50
Quantitative Restrictions	4	Technical Barriers to Trade	4
China	472	Safeguards	1
Sanitary and Phyto-sanitary	373	**Singapore**	111
Technical Barriers to Trade	85	Quantitative Restrictions	65
Quantitative Restrictions	10	Sanitary and Phyto-sanitary	45
Anti dumping	2	Technical Barriers to Trade	1
Countervailing	2	**Hong Kong, China**	97
Chile	449	Quantitative Restrictions	72
Sanitary and Phyto-sanitary	430	Sanitary and Phyto-sanitary	25
Safeguards	8	**Indonesia**	63
Technical Barriers to Trade	7	Sanitary and Phyto-sanitary	51
Anti dumping	4	Technical Barriers to Trade	8
Japan	420	Safeguards	3
Sanitary and Phyto-sanitary	261	Anti dumping	1
Technical Barriers to Trade	81	**Pakistan**	39
Special Safeguards	51	Technical Barriers to Trade	38
Quantitative Restrictions	27	Sanitary and Phyto-sanitary	1
Philippines	319	**Malaysia**	32
Sanitary and Phyto-sanitary	286	Sanitary and Phyto-sanitary	26
Technical Barriers to Trade	16	Technical Barriers to Trade	6
Special Safeguards	7	**Viet Nam**	29
Quantitative Restrictions	7	Sanitary and Phyto-sanitary	27
Safeguards	2	Technical Barriers to Trade	1
Anti dumping	1	Safeguards	1
Thailand	313	**Brunei Darussalam**	2
Sanitary and Phyto-sanitary	193	Sanitary and Phyto-sanitary	2
Technical Barriers to Trade	102	**Grand Total**	6220
Quantitative Restrictions	18	Source: WTO ITIP	
Australia	297		
Sanitary and Phyto-sanitary	230		
Quantitative Restrictions	54		
Anti dumping	7		
Technical Barriers to Trade	4		
Safeguards	2		

Peru tops the list with 579 SPS measures reported in the WTO (Figure 9). The US, Canada, Chile and the EU follow. In the case of TBTs, the US is top in the list with 290 measures out of a total 797 measures. There are economies that do not have any data on TBTs, e.g., Brunei Darussalam and Russian Federation (Figure 10).

Figure 9. SPS Measures Affecting SME Exports, By APEC Economies and Selected Trading Partners

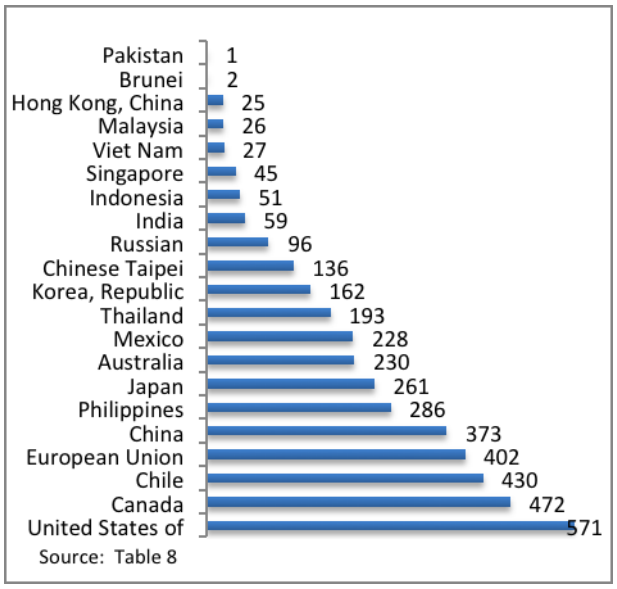
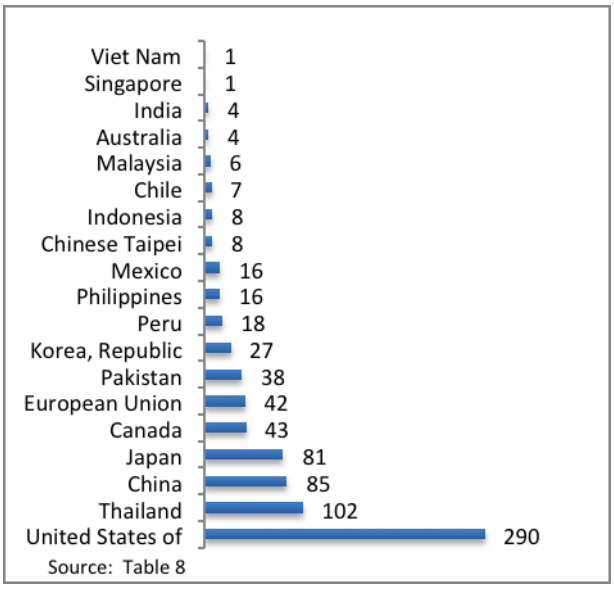


Figure 10. TBT Measures Affecting SME Exports, By APEC Economies and Selected Trading Partners



ITC Business Survey Data

Data collected from business surveys and official data sources confirm the importance of SPS and TBT measures (Figure 11). The ITC has been collecting official data on NTMs and conducting business surveys on NTMs. The surveys' objectives are to improve the transparency of non-tariff measures (import and export regulations/procedures and voluntary standards), as well as to identify private sector's perception of how NTMs are being implemented.[2] Currently, the ITC reports that it had completed the survey in about 26 economies, and is currently doing the same in another 37 economies, including the 28 member states of the European Union.

From the business surveys of ITC, nearly half of agricultural trade involving what businessmen say are burdensome NTM are applied with TBTs. These measures include product standards, labeling, and process compliant or safety certificates. Next in complexity are the SPS requirements, i.e., 22% of the agricultural trade with burdensome NTMs. The TBTs and SPS together make up 70% of the NTMs, which pose to be a significant obstacle to trade. Eleven percent of the burdensome NTMs are getting rules of origin certificates, which are important to avail of trade preferences. Nearly 20% of burdensome NTMs are comprised of pre-shipment inspection, quantitative import controls, finance charges, para-tariffs, and other import-related measures.

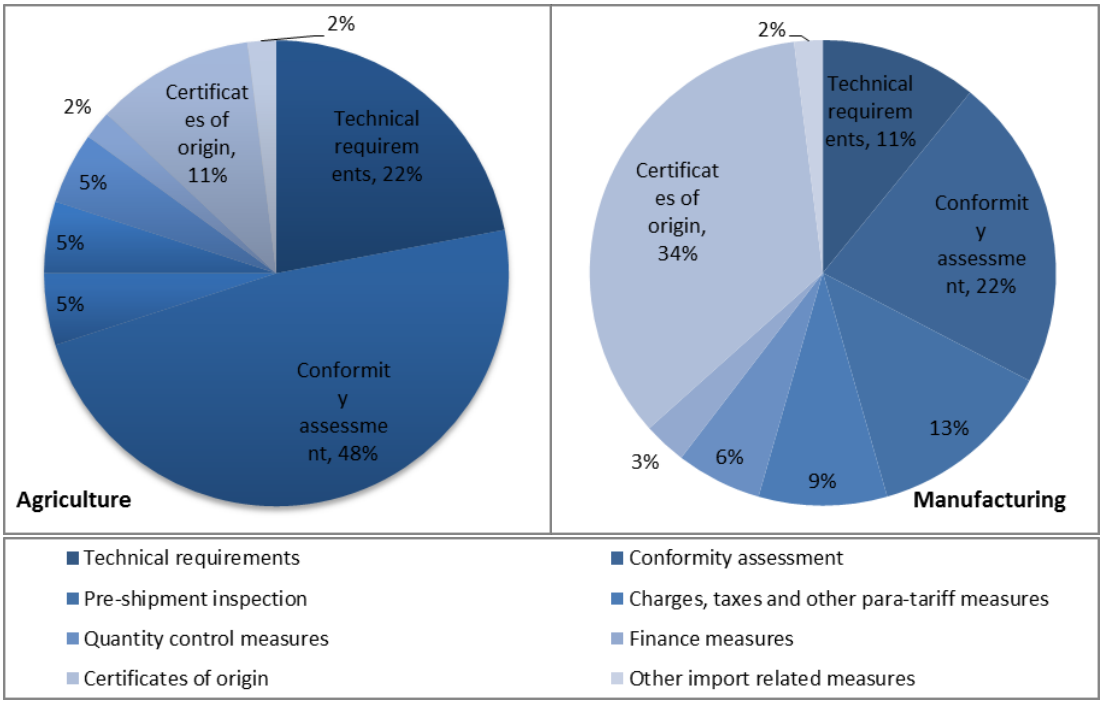
In manufacturing, getting certificates for rules of origin make up to be the largest headache of over a third of the importers. The TBTs come second with only 22%. As

[2] See http://www.intracen.org/itc/market-info-tools/non-tariff-measures/business-surveys/#methodology.

expected, SPS measures do not pose to be a concern for manufacturing. Technical requirements are burdensome to only 11% of the manufacturing trade affected by NTMs.

Mimouni (2015) reported that in three APEC economies in Southeast Asia, namely Indonesia, the Philippines, and Thailand, three categories of NTMs namely sanitary and phyto-sanitary requirements, technical barriers to trade, and rules of origin certificates account for at least 88% of the burdensome NTMs affecting exports. Indonesia and the Philippines have similar ranking: SPS, followed by TBTs then rules of origin certificates. For Thailand, rules of origin come first, followed by TBTs and SPS.

Figure 11. Non-tariff measures affecting agricultural and manufactured products, by types of measures



Source. Mimouni, M. (2015) citing data from the International Trade Commission NTM business surveys.

The results of the business survey from three APEC economies, namely the Philippines, Thailand and Indonesia, confirm that processed foods and agricultural products are those most affected by NTMs (Figure 12). Of about 13 two-digit industries, NTM coverage ratios of these export industries in all three APEC economies in Southeast Asia, taken together, runs from about 53 to 55% (Mimouni, 2015). The results indicate nearly 70% of the Philippine exports in processed food items are affected by NTMs. The NTM coverage ratio is nearly 60% for Thailand. In Indonesia, it is fresh food and agro-based products that have the highest vulnerability to NTMs.

Figure 12. Share of industry in burdensome NTMs in Indonesia, the Philippines and Thailand, % of all NTM cases, by sector

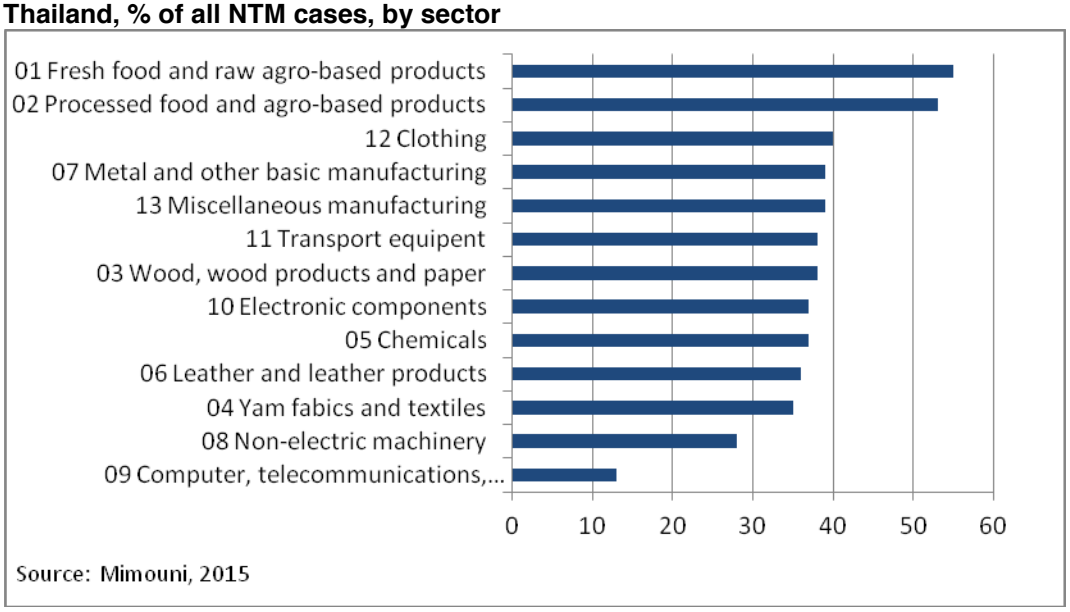
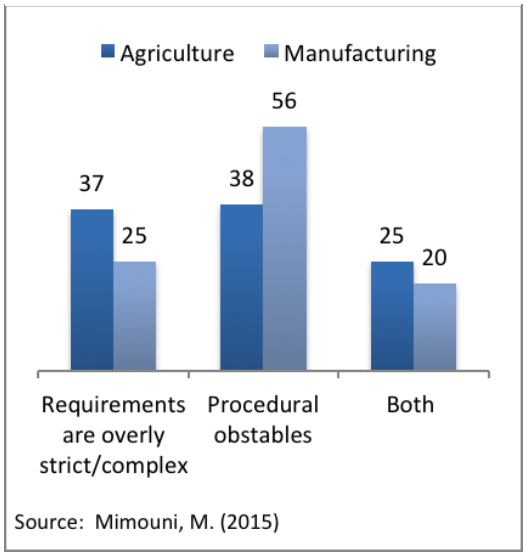


Figure 13. Reasons making NTMs burdensome for exporters, by sector



The trade cost imposed by NTMs is attributed to the requirements being overly strict or complicated, which make it difficult to comply with. Alternatively, the NTMs may have several procedural obstacles. The way these NTMs are administered by the appropriate authorities is done inefficiently, or both. In agriculture, the list of requirements and procedural obstacles are statistically tied at 37% (Figure 13). There are those which responded that both are sources of why NTMs in agriculture are burdensome. However, in manufacturing it is procedural obstacles that are the biggest source of the burden, 56%. Requirements are a far second, 25%.

ITC classified these procedural obstacles into eight categories. First are the administrative burdens related to the regulations themselves (Table 9). An example of this source is having numerous administrative windows involved in the granting of import permits, or regulations that overlap with each other. Second is a general lack of transparency or poor dissemination of information about requirements and on how to comply with these. Third, the regulator's decisions are arbitrary such as on the valuation or classification of imported products. Fourth, it takes a long time to go through the business process because of delays on the part of the administrator or the process itself needs to be streamlined. Fifth, charges and fees are beyond what are reasonable to pay for the administrative cost of implementing the regulation. Sixth and seventh are the lack of facilities needed for testing or storing of products, which meet regulations, and the lack of international accreditation of these facilities. The last are all other procedural obstacles.

Table 9. Procedural obstacles in the complying with NTMs

A	Administrative burdens related to regulations	A1. Large number of different documents A2. Documentation is difficult to fill out A3. Difficulties with translation of documents from or into other languages A4. Numerous administrative windows/organizations involved, redundant documents
B	Information/ transparency issues	B1. Information on selected regulation is not adequately published and disseminated B2. No due notice for changes in selected regulation and related procedures B3. Selected regulation changes frequently B4. Requirements and processes differ from information published
C	Discriminating behavior of officials	C1. Arbitrary behavior of officials regarding classification and valuation of the reported product C2. Arbitrary behavior of officials with regards to the reported regulation
D	Time constraints	D1. Delay related to reported regulation D2. Deadlines set for completion of requirements are too short
E	Informal or unusually high payment	E1. Unusually high fees and charges for reported certificate/regulation E2. Informal payment, e.g. bribes for reported certificate/regulation
F	Lack of sector-specific facilities	F1. Limited/inappropriate facilities for testing F2. Limited/inappropriate facilities for sector-specific transport and storage, e.g. cold storage, refrigerated trucks F3. Other limited/inappropriate facilities, related to reported certificate/regulation
G	Lack of recognition/ accreditation	G1. Facilities lacking international accreditation/recognition G2. Other problems with international recognition, e.g. lack of recognition of domestic certificates
H	Other	H1. Other procedural obstacles, please specify

Source: International Trade Centre

In a recently conducted survey on labeling and packaging rules of APEC economies (the Philippines, 2016), all respondents surveyed have specific laws/regulations that provide them mandate to implement requirements for packaging and labeling requirements. The results noted the diversity of information indicated in the labels of pre-packaged food products. Labels were written in domestic or English languages. Majority of the respondents require translation of selected information into their respective domestic languages. Websites are available to access relevant laws/regulations, guides/frequently asked questions/questions and answers, and contact points to place queries. All respondents allow the use of stickers or removable materials subject to varied rules by economy on the use of such materials.

Mimouni (2015) noted that exporters from the three economies find regulations on food safety and conformity assessment of the EU strict. In particular, exporters of processed seafood products need to comply with the tolerance limit of chemical substances and show Hazard Analysis Critical Control Points (HACCP) certificate attesting the safety and quality standards of their respective companies. They find these difficult to comply with. A related

complaint is the lack of information regarding quality and safety requirements in processed food exports in several economies, such as South Africa, Nepal, Korea, Papua New Guinea, Bangladesh, and Nigeria. Thirdly, the testing requirement in several economies is overly costly. This is the case for fresh food exports. These economies, such as the United States and members of the European Union, require that the testing and inspections be done in the economy, i.e., they do not recognize domestic certifications in economies of origin.

4. Effects of NTMs and Trade Costs

A study by PECC (2000) concluded that broadly defined NTMs will continue to be a growing problem for APEC. It further states that the important barriers are the ones which are more difficult to define. It specifically identifies product standards, conformance assessment procedures, SPS measures, customs procedure, differing regulatory structures, and rules of origin as the important barriers. Likewise, PECC (2000) points out that the APEC region contains three of the largest four traditional users of anti-dumping measures.

De Dios (2006) identified the NTMs affecting trade in goods among ASEAN members in the nine priority goods sectors.[3] The NTMs that pervade in fisheries and agro-based, automotive, and ICT sectors are non-automatic licensing, prohibitions, and technical regulations; for healthcare, non-automatic licensing, prohibitions, technical regulations. Both ASEAN NTM database and UNCTAD's Trade Analysis Information System (TRAINS) indicate that NTMs are imposed in all nine priority sectors.

In a study on the effects of NTMs on Philippine agriculture exports, Pasadilla (2007) revealed that 6.6% of Philippine agricultural exports to the EU are affected by the EU's NTMs. The corresponding figures for China, Japan, and Korea are 5.3%, 21.7%, and 1.96%, respectively. The most prevalent NTMs affecting Philippine agricultural products in the EU are prior surveillance requirements, testing for authorization, product characteristics, and labeling requirements; for China, authorization requirements, testing, inspection, and quarantine requirements; for Japan, tariff quotas, variable charges, SPS measures (labeling, health certification, and manufacturing process certification); and for Korea, tariff quotas, quarantine restrictions, and clearance inspections. Pasadilla (2006) likewise indicates that NTMs are responsible for the sluggish progress in intra-ASEAN trade in agriculture.

Mimouni (2015) also noted how developed economies account for the largest number (i.e., 38%) of NTM cases on agricultural exports of the Philippines, Indonesia and Thailand. This is followed by NTMs that are applied in the home economy (27%) and by regional trading partners (19%). Other developing economies are responsible for only 17% of NTMs applied on agricultural exports of the three APEC economies. In manufactured exports including processed foods, regional trading partners (29%) and developed economies (30%) are statistically tied as the largest source of NTMs. Home economy NTMs are 27% of all cases followed by developing economies with 14%.

Using a simple differentiated product model that specifies a direct relationship between NTMs and retail prices and estimating the model using an instrumental variables approach to incorporate the endogeneity of NTMs, Dean, Feinberg, Signoret, Ferrantino,

[3] These nine priority goods sectors are agro-based, wood-based, textiles and apparel, healthcare, rubber-based, automotive, electronics, and information and communication technology (ICT).

and Ludema (2006) showed that NTMs pushed prices above upward by 73% to 205% in fruits and vegetables, 82% to 109% in bovine meat, and 93% to 112% in processed food in five ASEAN economies, namely Indonesia, Malaysia, Philippines, Singapore, and Thailand.

Ando (2005) compared trends among the APEC economies and found that developed economies implement NTMs to protect domestic industries and rely significantly on technical measures. In most APEC economies, agriculture and food processing are heavily protected by NTMs such as technical measures used by developed economies, while developing economies protect their food processing sector using such NTMs as price control and quantity control measures.

Kee, Nicita, and Olarrega (2009) developed a measure of trade restrictiveness that is well grounded in trade theory and accounts for different forms of trade protection. They found that the ad valorem tariff equivalent (AVE) of core NTMs increases with GDP per capita. They define core NTMs as composed of the following: price control measures, quantity restrictions, monopolistic measures, and technical regulations. Their findings also indicate that trade restrictiveness of NTMs in developed economies is more evident, and that tariffs and NTMs reinforce (rather than substitute) for each other.

Using a global computable general equilibrium (CGE) model, Cororaton and Orden (2014) found that the trade effects on the Trans-Pacific Partnership (TPP) economies of the reduction in tariffs dominate the effects of the reduction in NTMs. It was only in the ninth year in their simulations that the NTM reduction effects exceeded the tariff reduction effects. The reduction in the trade barriers resulted in trade creation within the TPP. Orden, Beghin, and Henry (2012) also found evidence that NTMs may lead to trade-diversion effects because exporters will shift to markets with less stricter NTMs.

Although NTMs have adverse economic consequences, their effects are generally less transparent compared to the effects of tariffs. Measuring NTMs' economic impact is likewise difficult because it is hard to measure and there is a lack of comprehensive data to measure a particular NTM. Besides, each NTM may affect a particular good in a different way (APEC, 2014). Nevertheless, attempts were made to measure the economic impact of NTMs. Kee, Nicita, and Olarreaga (2009) indicated that NTMs added, on average, 87% to the restrictiveness imposed by tariffs. Dean, Feinbenrg, Signoret, Ferrantino, and Ludema (2006) found that NTM price premia was 44% in fruits and vegetables, 54% in bovine meats, 41% in processed food, and 50% in apparel. Anders and Caswell (2009) found that developed economies and larger seafood exporters in developing economies have an easier capacity to comply with the introduction of a food safety and quality management system such as HACCP for seafood exports.

The effect of NTMs differs depending on the sector. Moenius (2004) found that the implementation of economy-specific standards hampered trade in non-manufacturing industries but improved trade in manufacturing industries. He surmises that economy-specific standards of the importing economy offer valuable information for adapting the product to that market. It is probably more costly to gather information for agricultural goods than for manufacturing goods. The impact of NTMs may also be different in two products with similar purposes. Furthermore, Moenius (2006) suggested that electrical products benefit more from (both domestic and international) standardization than manufactured products on average. Disdier and Marette (2010) analyzed food safety standards in the

import of crustaceans and found that the lower the maximum residual limits of chrolamphenicol (antibiotic) allowed by the importing economy, the lower the imports.

Using a non-linear panel data gravity model, Schlueter, Wieck, and Heckelei (2009) analyzed the trade effects of different regulatory measures that are imposed in the meat sector in order to achieve a desired level of SPS health in an economy. Their analysis revealed that pest/disease prevention, microbiological testing for zoonoses, setting of residual levels, and control of production lead to positive impacts on trade flows whereas processing restrictions and treatment and distribution requirements have the opposite effects. These results contrast with the findings of Disdier, Fontagne, and Mimouni (2008). They analyzed the structure of SPS and TBT measures in agricultural trade using a log-linear fixed effects gravity model, and they found that SPS and TBT measures significantly reduced developing economies' meat exports to OECD economies, but do not affect trade between OECD members.

Finally, ITC (2015) provided microeconomic evidence on the role and importance of NTMs as obstacles to trade. The findings of ITC's NTM survey (conducted in 23 economies, covering all major export sectors and more than 11,500 companies) revealed that up to half of the firms are affected by NTMs. SMEs are mostly (57%) affected because they have less capacity to overcome fixed or variable export costs. Agro-food sector companies are impacted by SPS measures, especially certification or quality control; processed food is the second most impacted sector, while NTM-related trade obstacles play a limited role in consumer electronics. Developed economies are perceived as more NTM-restrictive markets for agricultural products; the opposite is the case for manufactured products, perhaps due to the integration of exports in the global production networks. The NTM survey results also revealed that at least 26% of reported problems encountered by companies correspond to measures and procedural obstacles imposed by the home economy on their exporting companies, such as lengthy procedures, corruption and high charges, and red tape (ITC, 2015).

Trade Cost

As mentioned above, the NTMs on the SME exports of agricultural products, processed food items and handicrafts raise trade cost. This cost may rise because NTMs are just overly strict or complicated, or the business procedures followed in administering these regulations are difficult to comply with. Trade costs are more than the cost of complying with NTMs, but NTMs and the way these are implemented have significant role in shaping trade costs.

Anderson and Wincoop (2004) broadly defined trade cost to cover the expenses or value foregone required in getting a product from the producer to the final user. This includes cost incurred in transporting the product, complying with applicable laws and regulations, gathering trade related information, contract-related cost, converting currencies, local distribution, and losses attributed to trade policy barriers and inefficiencies in administration of regulations. From this broad definition, three categories may be identified in the measurement of trade cost. One is the value forgone by society because of policy barriers to trade. The second comprises transport and distribution costs, while the third category is compliance cost with trade related regulations, which matter most when cargoes are cleared by customs at the border, and this is where NTMs play an important role.

Trade costs reduce the level of trade of an economy. How much higher the final user has to pay for the product because of trade costs? In two estimates both for developed economies, they can reach 900% (Feenstra, 1998), and 170% (Anderson and Wincoop, 2004) of the production cost of the traded product. Given the substantially high additional expenses, transactions may be forgone. Anderson and Wincoop (2002) estimates that trade costs can reach as high as 10% of the economy's gross domestic product.

Tables 10 and 11 show estimates of trade costs for agricultural and manufactured products, respectively. The estimates are in percent of export values at international prices. The numbers were obtained from a dataset of international trade costs maintained by ESCAP and the World Bank. In Table 10, the trade costs of agricultural products range from a low of 45.9% to a high of 572.9%. The lowest rate is for agricultural exports of Canada to the United States. The highest trade cost applies for the same exports of the Russian Federation to Singapore. The simple average trade cost faced by typical agricultural exports of APEC economies is 206.7%. On the other hand, among the APEC economies in the Table, the United States faces the lowest average trade cost of its agricultural exports going into the rest of the APEC region. Brunei Darussalam has the highest average trade cost facing its agricultural exports to APEC economies.

In Table 11, the trade costs of manufactured exports have a low rate of 26.8% (China's exports to Hong Kong, China) and a high of 808.6% (Brunei Darussalam's exports to the Russian Federation). The average trade cost is 124.4%. On average, Viet Nam faces the lowest trade cost of its manufactured exports going to the APEC region, while Brunei Darussalam has the highest average trade cost on its manufactured exports, 249.2%.

Figure 11 compares the average trade costs of agricultural and intra-manufactured exports of APEC economies. The trade cost on agricultural products, on average, is 1.7 higher than that of manufactured exports. The highest divergence occurs for trade costs of Malaysia, i.e., its agricultural exports face 2.3 times that of manufactured exports. On the other hand, Canada has closest to parity trade costs of its agricultural and manufactured exports, 1.2.

Table 10. Trade costs of agricultural products in selected APEC economies (%)

Exporters \ Importers	Australia	Brunei Darussalam	Canada	Chile	China	Hong Kong SAR, China	Indonesia	Japan	Korea, Rep.	Malaysia	Mexico	New Zealand	Peru	Philippines	Russian Federation	Singapore	Thailand	United States	Viet Nam
Australia		374.9	188.4	268.2	131.2	170.5	126.2	177.4	155.4	155.3	330.5	92.4	306.7	165.1	362.4		156.1	151.8	96.8
Brunei Darussalam	374.9				329.2	375.6	290.8		540.5	161.4				503.3		248.4	382.2		572.1
Canada	188.4			119.6	132.3	145.7	122.4	147.3	157.7	146.8	95.5	184.5	116.7	153.8	245.6	165.1	145.5	45.9	173.4
Chile	268.2		119.6		166.7		236.2	224.2	198.9	251.1	170.8	201.6	134.3	225.0	476.0	244.1	312.8	96.2	217.3
China	131.2	329.2	132.3	166.7		159.3	139.3	172.5	161.0	119.8	237.1	183.0	269.9	167.5	146.1		103.2	111.6	109.5
Hong Kong SAR, China	170.5	375.6	145.7		159.3		234.9	153.4	145.9	172.4		241.5		199.2	397.0	143.0	227.1	127.1	207.8
Indonesia	126.2	290.8	122.4	236.2	139.3	234.9		185.1	195.3	136.0	256.7	247.0	303.1	197.9	192.8	112.1	171.8	98.9	155.7
Japan	177.4		147.3	224.2	172.5	153.4	185.1		118.9	200.5	345.5	172.8	285.4	177.3	269.8	181.3		121.5	153.2
Korea, Rep.	155.4	540.5	157.7	198.9	161.0	145.9	195.3	118.9		177.7	344.4	185.0	367.1	166.7	189.7	174.2	136.3	116.1	158.2
Malaysia	155.3	161.4	146.8	251.1	119.8	172.4	136.0	200.5	177.7		265.1	200.0	292.3	194.5	263.7	76.5	108.2	142.6	120.5
Mexico	330.5		95.5	170.8	237.1		256.7	345.5	344.4	265.1		269.8	190.4	299.5	237.0	271.8	286.3	51.2	175.0
New Zealand	92.4		184.5	201.6	183.0	241.5	247.0	172.8	185.0	200.0	269.8		259.9	219.9	569.7	177.8	196.7	149.6	198.3
Peru	306.7		116.7	134.3	269.9		303.1	285.4	367.1	292.3	190.4	259.9		373.8	185.7	369.9	295.1	103.7	266.9
Philippines	165.1	503.3	153.8	225.0	167.5	199.2	197.9	177.3	166.7	194.5	299.5	219.9	373.8		219.0	142.1	175.1	131.4	179.2
Russian Federation	362.4		245.6	476.0	146.1	397.0	192.8	269.8	189.7	263.7	237.0	569.7	185.7	219.0		572.9	244.5	220.9	182.5
Singapore	133.6	248.4	165.1	244.1	159.5	143.0	112.1	181.3	174.2	76.5	271.8	177.8	369.9	142.1	572.9		120.6	141.7	129.8
Thailand	156.1	382.2	145.5	312.8	103.2	227.1	171.8	142.8	136.3	108.2	286.3	196.7	295.1	175.1	244.5			112.0	126.4
United States	151.8		45.9	96.2	111.6	127.1	98.9	121.5	116.1	142.6	51.2	149.6	103.7	131.4	220.9	141.7	112.0		105.8
Viet Nam	96.8	572.1	173.4	217.3	109.5	207.8	155.7	153.2	158.2	120.5	175.0	198.3	266.9	179.2	182.5	129.8	126.4	105.8	

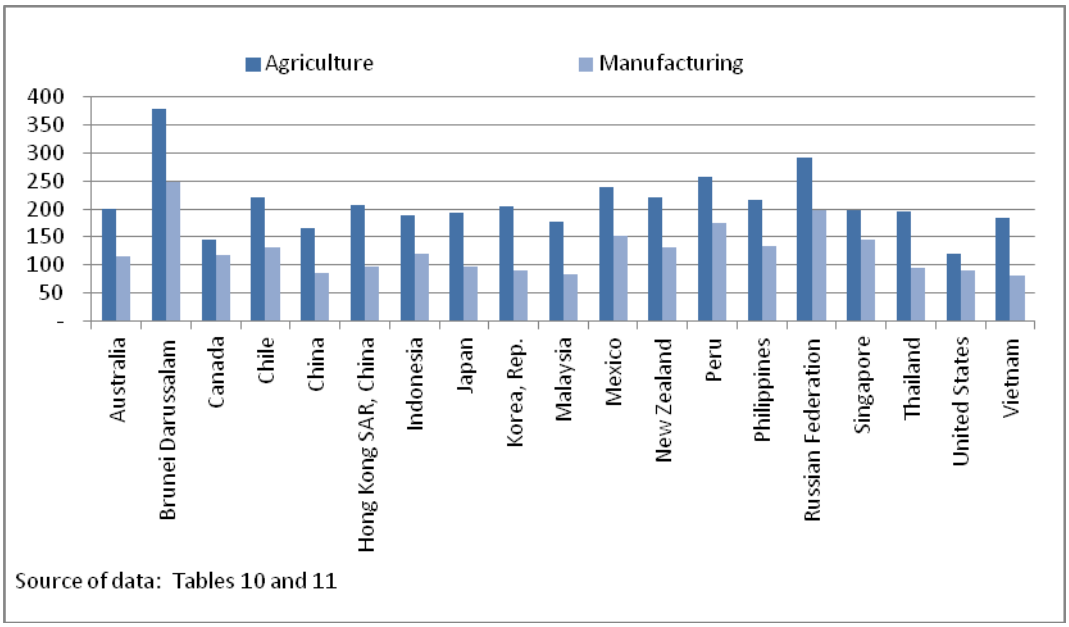
Source: ESCAP and the World Bank

Table 11. Trade costs of manufactured products in selected APEC economies (%)

Exporters \ Importers	Australia	Brunei Darussalam	Canada	Chile	China	Hong Kong SAR, China	Indonesia	Japan	Korea, Rep.	Malaysia	Mexico	New Zealand	Peru	Philippines	Russian Federation	Singapore	Thailand	United States	Viet Nam
Australia		227.9	124.7	126.5	79.9	85.1	108.3	87.3	83.9	64.7	157.0	50.5	203.5	121.5	206.9	112.9	71.9	92.4	75.1
Brunei Darussalam	227.9				185.2	199.4	201.4	233.4	176.1	83.3	480.9			221.0	808.6	138.3	157.3	215.8	159.5
Canada	124.7			103.2	94.2	99.1	152.9	103.6	106.9	109.3	82.3	130.4	112.9	151.0	164.8	182.0	126.5	30.5	115.7
Chile	126.5		103.2		75.1	149.6	179.0	100.3	86.3	126.6	91.3	176.2	69.5	211.7	177.0	249.9	123.2	75.0	99.0
China	79.9	185.2	94.2	75.1		26.8	97.3	62.7	53.9	53.1	110.7	112.2	115.7	94.4	93.2	109.4	75.3	70.0	56.0
Hong Kong SAR, China	85.1	199.4	99.1	149.6	26.8		113.6	73.2	49.1	47.4	135.8	112.1	182.0	67.0	172.0	73.3	48.3	69.7	42.4
Indonesia	108.3	201.4	152.9	179.0	97.3	113.6		92.0	94.3	54.1	189.9	128.7	115.5	164.6	96.2		76.5	120.7	73.4
Japan	87.3	233.4	103.6	100.3	62.7	73.2	92.0		63.4	59.6	119.7	107.1	151.6	80.8	114.2	119.4	61.8	74.5	51.4
Korea, Rep.	83.9	176.1	106.9	86.3	53.9	49.1	94.3	63.4		64.0	114.3	113.1	150.2	84.9	93.6	100.4	84.3	72.7	45.9
Malaysia	64.7	83.3	109.3	126.6	53.1	47.4	54.1	59.6	64.0		131.8	84.2	204.4	74.8	142.6	51.9	39.4	66.6	38.4
Mexico	157.0	480.9	82.3	91.3	110.7	135.8	189.9	119.7	114.3	131.8		164.4	124.4	185.7	165.4	207.2	130.1	35.0	125.2
New Zealand	50.5		130.4	176.2	112.2	112.1	128.7	107.1	113.1	84.2	164.4		200.7	147.3	228.8	149.2	107.5	109.6	116.2
Peru	203.5		112.9	69.5	115.7	182.0	209.1	151.6	150.2	204.4	124.4	200.7		275.8	207.6	367.7	179.5	92.9	131.3
Philippines	121.5	221.0	151.0	211.7	94.4	67.0	115.5	80.8	84.9	74.8	185.7	147.3	275.8		231.9	115.7	79.1	95.5	63.2
Russian Federation	206.9	808.6	164.8	177.0	93.2	172.0	164.6	114.2	93.6	142.6	165.4	228.8	207.6	231.9		227.0	138.1	118.6	91.0
Singapore	112.9	138.3	182.0	249.9	109.4	73.3	96.2	119.4	100.4	51.9	207.2	149.2	367.7	115.7	227.0		95.0	123.4	83.7
Thailand	71.9	157.3	126.5	123.2	75.3	48.3	76.5	61.8	84.3	39.4	130.1	107.5	179.5	79.1	138.1	95.0		88.0	46.3
United States	92.4	215.8	30.5	75.0	70.0	69.7	120.7	74.5	72.7	66.6	35.0	109.6		95.5	118.6	123.4	88.0		64.0
Viet Nam	75.1	159.5	115.7	99.0	56.0	42.4	73.4	51.4	45.9	38.4	125.2	116.2	131.3	63.2	91.0	83.7	46.3	64.0	

Source: ESCAP and the World Bank

Figure 14. Trade costs faced by intra-exports of agricultural and manufactured products from APEC economies (%)



5. Concluding remarks

It is widely recognized that the participation of small and medium enterprises in global trade, increasing their rate of internationalization from the current 34%, will have a tremendous contribution to realizing APEC's goal of inclusive growth, generating jobs and eliminating poverty. This study highlighted an important hurdle faced by SMEs in NTMs. These trade-related regulations address legitimate public interest but these are vulnerable to abuse and become non-tariff barriers to trade. They can become overly complicated or how some of these are implemented can make compliance, particularly for SMEs, more difficult compared with LEs.

This research does not use a time series data on what SMEs export. It calls as SME exports products of APEC economies in agriculture, processed foods, and handicrafts – the sectors that the SME working group of APEC focused on in the two workshops it conducted in 2015.[11] The data used comes from COMTRADE, and certainly LEs also contributed to the data. Regrettably, this is where research on the trade performance of SMEs continues to be handicapped. However, the problem goes beyond this. It notes that even within the APEC community the definition of SMEs varies by economy, as well as the criteria used in defining them. Naturally, it becomes even more opaque if one asks what small business companies succeed to internationalize or what they sell in the global market. Conducting surveys partly addresses the need for data. But if the policy direction is to encourage SMEs to internationalize, the data collection on trade performance of SMEs has got to be regularly done.

It cannot be over-emphasized that one very important reform that APEC economies can institutionalize is to mainstream the collection of trade data of these companies. How these economies may define their SMEs may continue to vary—and that may be because

[11] See footnote 7 above.

the economies in APEC themselves differ in levels of development, but this is not the limiting weakness of the system. What is important is to track the participation of these SMEs however these are defined in global trade. APEC hangs on to the statistics that only about 34% of global trade may be traced to SMEs among APEC economies. The world does not know how this has changed through time. Since APEC economies highly value the importance of the internationalization of SMEs, the proposal to mainstream the collection of relevant information and data on the trade performance of SMEs needs to be acted upon.

This paper looked at NTMs affecting SMEs in the Asia-Pacific region on exports of agricultural products, processed food items, and handicrafts. While import duties have substantially decreased over the years all over the world and particularly in the region, exporters and importers face increasing use worldwide of NTMs. There is growing understanding that in the next half a century, the world trade negotiators have their work cut out in finding ways how to deal with NTMs in a way that they do not become trade barriers and accordingly circumvent earlier gains in trade liberalization and facilitation. This is important for global trade, but even more so for the agenda of growing small business corporations and helping them internationalize.

NTMs have the potential of raising trade costs, particularly to SME exporters. This may be due to the inefficient administration of such measures by partners at the border. It is important to note that exporting economies may also be the source of export barriers of their own SMEs when they make it unnecessarily difficult for their exporters to comply with export-related regulations. Such departures from the proper exercise of regulatory powers by importing or exporting economies adversely affect both large and SME exporters, but particularly the latter.

The problem may even be in the way governments set their trade regulations. There are international standards, but economies may go beyond them, justifying the departure as responding to perceived economy-specific risks to public health or other legitimate concerns. The proliferation of private voluntary standards in situations where voluntary standards compliant trade accounts for a large market share adds a significant layer of complexity to the problem that SMEs may already find overbearing. The private sector calls for a standards union based on international standards and the mutual recognition of respective national certification systems (Dela Paz, 2015). To facilitate the expansion of SME participation in global trade, the standards union approach is advisable. One can imagine how average trade costs would have to increase for an SME exporter if it has to worry varying packaging and labeling rules, just to mention a few of the NTMs.

Admittedly there are valid points of making standards stricter or differentiated. In global value chains, which cater to a market involving consumers who are active in trying to get the right information on traded products, particularly on fresh and processed food items, one may understand the need for the departure from basic international standards. And as few studies have noted, these may have even positive effects on trade. However, further research needs to be done in documenting the net benefit to the world community of a standards union -- which helps SMEs reduce trade costs – relative to segmenting markets to better inform or generate a diversity of products for consumers, which unfortunately raises the cost of complying with NTMs to SMEs.

This paper documented how trade costs can be higher for agricultural products compared to manufacturing using data from the ESCAP and the World Bank. Given the

compelling information that SMEs relative to large enterprises converge their respective business activities in agriculture, fresh or processed food products, it may be claimed that SMEs differentially face higher trade costs with respect to complying with NTMs. This disadvantage adds to the limited scale economies in SME exports.

The idea of having a standards union for agricultural products, either using international standards or MRAs on domestic certification systems, may even be urgent. This can bring down the trade costs in agricultural and fresh and processed food exports. There is already a fairly large body of studies that look at other components of trade costs that SMEs face, such as the cost of doing business; inefficiencies in transporting products; and information cost on export opportunities. More research on NTM compliance costs of SMEs may need to be done.

The differential trade cost that SMEs may face relative to LEs may call for special trade policies responsive to the agenda of promoting SME internationalization. Special and differential treatment of developing economies is one of the basic principles in the world trading system, and it was conceived in order to advance the development of the latter. It is high time that trade negotiations go into measures that address the special status of SMEs as they participate in the global trading system. Research needs to catch up in order to enlighten trade negotiations on the direction of policy reform. There was already one idea floated by the Philippines in 2015 on *de minimis* policies in packaging and labeling requirements.[12] Research is needed as to how to properly implement the proposal.

How to deal with the risk of NTMs as trade barriers has long been in the agenda of the multilateral and preferential trade agreements. From the Tokyo to the Uruguay Round of trade negotiations, the GATT then looked at the rules on how trade remedies and other NTMs need to be applied in a way that does not restrict trade or circumvent the reforms already agreed upon by the trading community. The APEC economies may go through a similar exercise to look at how these disciplines need to be adjusted to take into consideration the special status not just of developing economies, but also of SME exporters with respect to their objective of promoting the internationalization of SMEs. The multilateral as well as preferential trade agreements have chapters on the proper application of NTMs. Are there new concerns that are not addressed yet by these agreements which make the NTMs become 'invisible trade barriers'? The SMEs may want to know.

Whatever the state or quality of NTM regulations or on how these are to be complied with, the importance of disseminating information thereof to SMEs has always been underscored. In both workshops conducted by the APEC SMEWG in Atlanta in the United States and in Iloilo in the Philippines, participants have highlighted transparency and the need of using technology to facilitate information dissemination (Harsh, 2015; Leong, 2015). Upon the recommendation of the Ministers In Charge of SMEs at their 22nd Meeting in Iloilo in the Philippines, the APEC Leaders supported the Iloilo Initiative of Growing Global MSMEs, which enjoins the Philippines to initiate the program and shepherd it to becoming a mainstream source of information not only on market opportunities for SMEs but more

[12] See Action 2 of the Boracay Action Agenda to Globalize MSMEs. The APEC Economic Leaders adopted the BAA in paragraph 3b of the APEC Economic Leaders Declaration, Manila 2015. Building Inclusive Economies, Building A Better World: A Vision for an Asia-Pacific Community.

importantly on NTMs and how to deal with them.[13] Finally, it should be pointed out that the participation of SMEs in global value chains can be useful in bringing down their internationalization costs (e.g., see Giovannetti,G., Marvasi, E. and Sanfilippo, M., 2014).

[13] See the APEC Iloilo Initiative: Growing Global MSMEs. The APEC Economic Leaders supported the Initiative in Paragraph 3c of the APEC Economic Leaders Declaration, Manila 2015. Building Inclusive Economies, Building A Better World: A Vision for an Asia-Pacific Community.

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