TRADE FACILITATION IN ASEAN MEMBERS - A FOCUS ON LOGISTICS POLICIES TOWARD ASEAN ECONOMIC COMMUNITY

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Acknowledgement

We would like to express our great thanks for the financial and academic support from WTI/SECO Project to start and accomplish this paper. Our special thanks go to Pierre Latrille who has provided us with invaluable comments and suggestions for improving the paper. We thank Tang Thi Thanh Thuy and Le Thi Thu for their academic assistance and information collection in the early stage of this paper.

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Introduction

Trade facilitation is similarly defined by many international organization as "the simplification and harmonization of international trade procedures covering the activities, practices and formalities involved in collecting, presenting, communicating and processing data and other information required for the movement of goods in international trade" (ADB and ESCAP, 2013).

The emergence of trade facilitation has been seen as a significant trade policy tool, which is characterized by reducing import tariffs and removing quotas. The issues related to trade facilitation have always raised critical discussions and negotiations about trade policies in both international and regional context. Recent studies (Layton, 2008; Shepherd and Wilson, 2008; ADB and ESCAP, 2013) identified that the reduction in trade transaction costs causing by better trade facilitation measures either at regional or national levels can significantly benefit all the economies including all the country members of the Association of Southeast Asian Nations(ASEAN), a planned single regional market.

There are a number of service sectors closely connected to trade that should be considered as part of trade facilitation. This paper will focus on logistics sector, which is commonly believed to have the closest connection to trade (ADB and ESCAP, 2013). It thus emphasizes different ways by which policy makers can approach reforms in logistics sector to maximizing the positive effect on trade flows, and reach harmonization with mutual benefits.

Logistics is simply defined as "the part of the supply chain process that plans, implements, and controls the efficient, effective flow and storage of goods, services, and related information from the point of origin to the point of consumption in order to meet consumers' requirements" (Desouza et al., 2007). ASEAN members have realized that in spite of customs improvement, "trade can still be impeded by a variety of other factors including the logistics system that is handling the flow of goods between the border and hinterland of origin or destination points" (Price, 2006).

Founded in 1967, ASEAN aims to promote regional economic growth, stability and peace, and to strengthen the cooperation between its members on other cultural, social, technical, and educational issues. ASEAN Community in its 2003 declaration has decided that the ASEAN Economic Community (AEC) will be the "realization of the end-goal of economic integration… to create a stable, prosperous and highly competitive ASEAN economic region in which there is a free flow of goods, services, investment and a freer flow of capital, equitable economic development and reduced poverty and socio-economic disparities" (ASEAN, 2003). Thus, logistics industry should be one of the priorities for ASEAN members. The members have committed to liberalize their logistics service sector by 2013. The vision for each ASEAN country is locally integrated and globally connected to increasing national competitive advantage and national welfare, toward the common goal of AEC expected to be in effect in 2015.

In ASEAN, logistics is of utmost importance in sustaining the competitive advantage of either a country or the whole region. Nevertheless, despite the initial development of national logistic policies in some member countries, there have not been any logistic policies to be developed in ASEAN-wide scale, not to mention the insufficient understanding of knowledge related to logistics and logistics policy in most ASEAN countries (Nathan Associates, 2007).

This paper studies the effectiveness of the implementation of trade facilitation measures in ASEAN member countries in comparison with these measures in other regional organizations. We evaluate trade facilitation performance and indicate trade facilitation priorities and needs that are different between ASEAN members. More specifically, we examine logistics-related costs in ASEAN and figure out how the current level of logistics-related costs could be a burden or an advantage for ASEAN countries. Then, we identify some critical barriers which have impacts on logistics services which are related to foreign investment, customs and mode-specific across ASEAN. Although most of the barriers are based on logistics unfriendly practice, "specific policy measures would help member countries to reduce the impact of these barriers to logistics services." (Gupta et al, 2011) The ultimate goal of this research is to propose implications and recommendations for harmonization of logistics policies in ASEAN countries toward AEC.

Studies on trade facilitation have been conducted for the Asia-Pacific in general. However, no such specific research has been conducted for ASEAN. Per se, this research aims to find out the factors that promote trade facilitation and assess several costs for logistics services in ASEAN. The research also examines the main inhibitors to trade liberalization in ASEAN, and hence, carries practical implications for ASEAN. The critical barriers to trade liberalization as examined in this paper are valuable for ASEAN for implementing and fine-tuning appropriate policies toward the AEC.

The paper will be organized as follows. Section 1 discusses the relevant literature on trade facilitation in ASEAN while section 2 mentions the economic impacts of trade facilitation on ASEAN members. Section 3 provides a deeper analysis and comparison between logistics policies of ASEAN members. Finally, in Section 4, the paper concludes with implications and recommendations for improving the harmonization of logistics policies toward ASEAN Economic Community.

1. Trade facilitation in ASEAN: The state of play

1.1. Trade facilitation definition

Trade facilitation is defined as the "plumbing of international trade" because it emphasizes on the transparent and efficient implementation of trade rules and regulations (ADB ESCAP, 2013). In general, trade facilitation includes measures that influence the transaction of goods from the sellers to the buyers, alongside the whole international supply chain.

Box 1.1: Various Definitions of Trade Facilitation

World Trade Organization (WTO): The simplification and harmonization of international trade procedures, where trade procedures are the activities, practices, and formalities involved in collecting, presenting, communicating, and processing data and other information required for the movement of goods in international trade.
World Customs Organization (WCO): The avoidance of unnecessary trade restrictiveness. This can be achieved by applying modern techniques and technologies, while improving the quality of controls in an internationally harmonized manner.
United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT): The simplification, standardization, and harmonization of procedures and associated information flows required to move goods from seller to buyer and to make payments.
International Chamber of Commerce (ICC): Improve the efficiency of the processes associated with trading in goods across national borders.
Organization for Economic Co-operation and Development (OECD): The simplification and standardization of procedures and associated information flows required to move goods internationally from seller to buyer and to pass payments in the other direction.
Asia–Pacific Economic Cooperation (APEC): The simplification and rationalization of customs and other administrative procedures that delay or increase the cost of moving goods across international borders.

Source: (ADB and ESCAP, 2013)

There have been various definitions of trade facilitation in international organizations and regional initiatives, focusing on different aspects, for example, the coordination between customs, quarantine, and other agencies.

Meanwhile, the WCO describes trade facilitation as one of its main missions, which is to improve the effectiveness and efficiency of customs administration by making customs procedures simpler. APEC's definition concentrates on at-the-border procedures and processes such as preparation of customs and trade documents, release of goods, and customs clearance procedures. The WTO defines the trade facilitation as "the administrative processes at the border, which are the concentration of trade negotiations in the WTO" (Dee, Findlay, and Pomfret, 2008).

The OECD and UN/CEFACT's definitions show a wider view to trade facilitation. It includes the international trade procedures, the connected information flows as well as the payment along the whole supply chain. The definitions also mention about some behind-the-border measures, for example the e-commerce, product standards, conformity assessment measures, and logistics services. UN/CEFACT's definition identifies that procedures are the practices and activities needed for the movement of products in cross borders transaction (ADB ESCAP, 2013). The flow of information includes both documents and data. The definition is originated from the Buy-Ship-Pay model of UN/CEFACT, which identifies three major processes in international trade. The Model of UN/CEFACT recommends the implementation of a total transaction approach; which causes both improved regulatory government and procedures and optimized business processes. From this perspective, trade facilitation comprises cross-border and other processes engaged in international trade.

In this paper, trade facilitation is defined as processes and policies that can diminish time, cost, and uncertainty in international transactions, excluding traditional trade tools, for example import quotas, tariffs and other non-tariff barriers. This paper revisits what distinguishes trade facilitation from other trade issues by pointing out four characteristics: (i) reducing risk and uncertainty in trade; (ii) effectively implementing trade-related laws and regulations; (iii) increasing transparency and predictability of trade rules and (iv) efficiently moving goods, associated services and information across borders (ADB ESCAP, 2013).

1.2. Benefits and costs of trade facilitation

1.2.1. Benefits of trade facilitation

Primarily, trade facilitation has benefited in terms of its trade transaction costs. Estimates of such costs vary considerably and these estimates are based on the proportion of direct and indirect costs. Direct costs are referred as the cost of dealing with regulations and preparing documentation and can also be the cost of finance and insurance, delivery goods from a factory to port, and international transport costs. Indirect costs are the opportunity costs when the flow of the goods is delayed. According to an estimation of the ADB and ESCAP (2013), these costs account for nearly 80% of total transaction costs in international trade.

In addition, the reduction in uncertainties of international trade and the decrease of private entities' participation are potential benefits associated with trade facilitation. Both governments and traders are capable of acquiring significant benefits from trade facilitation, as shown in Table 1.

Table 1: Trade facilitation benefits to governments and traders

Benefit to Government	Benefit to Trader
- Increased effectiveness of control methods - More efficient deployment of resources - Correct revenue yields - Improved trader compliance - Encouragement of foreign investment - Accelerated economic development	- Lower costs and reduced delays - Faster customs clearance and release through predictable official intervention - Simpler commercial framework for doing both domestic and international trade - Enhanced competitiveness

Source: Economic Commission for Europe (ECE), 2002.

According to ADB and ESCAP (2013), in the medium to long term, trade facilitation may have positive impacts on the (i) Improvement of trade competitiveness; (ii) the increase of foreign direct investment (FDI); (iii) the increase of participation of small and medium enterprises (SMEs) in international trade; and (iv) The improvement of economic growth prospects.

(i) *Improved trade competitiveness.* The WTO's system is rules-based so that it creates a fairplay field for every country which leads to the decrease in tariff rates as well as the elimination of many traditional nontariff barriers. Instead of depending on further tariff concessions to protect domestic markets, developing countries need to become more competitive for export.

National trade facilitation policies are necessary to develop a country's export competitiveness. Inefficient processes and procedures relating to trade causing delayed goods delivery could heavily damage export flows. Such inefficiencies may influence the capacity of exporters as well as producers to meet their foreign customers' "just-in-time" requirement. Consequently, their abilities to expand regional and global production networks have been constrained.

The trade facilitation performance in Asia and Pacific is below average. However, due to the reform of the customs and domestic regulations, Asia and Pacific are estimated to raise interregional trade by over $250 billion or about 21% (Wilson, Mann, and Otsuki 2003). More recent evaluation induces that Asian exports will increase by 11%–14% by cutting down direct export costs in Asia to OECD. Similarly, the interregional trade will increase by 7.5% ($148 billion) if the importer transparency of APEC members becomes closer to the average level of the region (Helble, Shepherd, and Wilson, 2009; Abe and Wilson, 2008).

(ii) *Improved foreign direct investment (FDI).* An important proportion of FDI in developing countries is production facilities where exporting goods are stored. Out of these production facilities, many firms need to find parts of their inputs from foreign countries. This makes foreign investors pay more attention to the country's effectiveness of trading goods and services before they decide to invest. Countries that facilitate trade have a tendency to attract more FDI and integrate more deeply into the global and regional production networks.

(iii) *Improved involvement of SMEs in international trade*. Almost all the SMEs do not have enough experience in doing international transaction. SMEs that are involved in international trade are discouraged by complicated regulations. By computerizing and automating trade procedures, the information technology services would be exceptionally useful for SMEs, and will motivate SMEs to increase international trade (Yue and Wilson, 2009).

(iv) *Improved economic growth prospects.* In general, a well-organized environment for trade would always accompany with lower production costs and reliable services. Recent studies shows that trade expansion that are attributable to trade facilitation may lead to growth of GDP per capita by around 2.5% in Asia and the Pacific countries (Duval and Utoktham, 2009). Overall, trade facilitation can create potential income at nearly2%–3% of the value of goods traded (ADB ESCAP, 2013).

1.2.2. Cost of implementing trade facilitation measures

Many developing countries see the costs of implementing trade facilitation, however evidence suggests otherwise. At first, government agencies could incur significant startup costs relevant to introduction and implementation of trade facilitation. However, by promoting transparency, accountability and erasing cumbersome administrative procedures, these reforms eventually diminish the expenditures from government and allow more productive use of capital resources. In fact, some costs could be transferred to the investors by charging for services provided.

ADB and ESCAP (2013) identified four fundamental types of cost when a country implements trade facilitation: (i) Institutional costs, (ii) Regulatory and legislative costs, (iii) Equipment and training costs, and (iv) Other costs. They are described as below:

(i) *Institutional costs*. In order to implement trade facilitation, government agencies that are involved in the making facilitation process needs to change their attitude. This may cause the introduction of new institutions or the restructuring of current one. As the result, new mechanisms are introduced to raise information exchanging and cooperation amongst other department relating to the process. "Implementing some trade facilitation measures may also involve the redeployment of staff to new trade support activities" (ADB ESCAP, 2013). Singapore is a good example as it has established the electronic trade documentation single window system. Comprehending and careful management of new methods will minimize the political consequence, and achieve suitable and far-reaching reforms of trade facilitation.

(ii) *Regulatory and legislative costs*. Many trade facilitation procedures require the modification of current legal system. The costs comprise the cost of harmonizing regulations with those of the trade partners in order to do the best practices and identify emerging problems such as the use of electronic documents.

(iii) *Equipment and training costs*. To implement trade facilitation, countries have to enhance the computerization and automation of the trade procedures. For several developing countries, it is too costly to set up these systems, particularly when taking into account the software and hardware updating and maintaining costs as well as the staff training cost. Nonetheless, constant improvements in knowledge management and IT have made computer systems increasingly affordable, making more funds available to invest in computer systems. Foreign aid has supported developing economies in this area; mostly since WTO applied trade facilitation negotiations in 2004 and the Aid for Trade plan in December 2005. Trade facilitation can be improved significantly without having to invest in a totally automated and computerized system. To accelerate the control and clearance at borders, various simple methods can be used such as simplifying rules, procedures and optimizing the use of the current infrastructure (ADB ESCAP, 2013).

(iv) *Other costs*. The significant reduction in customs revenue negatively influences the developing countries because government revenue comes mostly from those customs duties. Nevertheless, trade facilitation does not indicate losses of revenue. It is expected to raise trade flows and then offer further revenue collection. Moreover, thanks to the transparency of the procedures, corruption and revenue leakages will be possibly subdued. The WTO approves that the benefits from applying trade facilitation methods can offset all costs related to operating and monitoring them. This is perfectly true for the more advanced methods, such as risk management and electronic single window (ADB ESCAP, 2013).

1.3. Trade facilitation performance of ASEAN Members

The time and cost for imports and exports are different among ASEAN members. The World Bank's Ease of Trading across Borders Index in 2012, which provided data analysis and ranking to all ASEAN members, showed that Singapore was in the first position, while Laos ranked 161th out of 189 countries. Singapore is the only ASEAN country that consistently outperforms the developed countries in the OECD in spite of cheaper, faster and less complicated procedures related to imports and exports of several ASEAN countries compared with the average of the Pacific and East Asia countries (table 2). In the 1990s, ASEAN members paid limited attention to trade facilitation, but in the next decade they made more attention when realizing that non-tariff measures should be reduced in order to gain maximum benefits from tariff liberalization.

Table 2: Ease of trading across borders in ASEAN countries, 2012

Economy Name	**Rank**	**Documents to export (number)**	**Time to export (days)**	**Cost to export (US$ per container)**	**Documents to import (number)**	**Time to import (days)**	**Cost to import (US$ per container)**
Brunei Darussalam	39	5	19	705	5	15	770
Cambodia	114	8	22	795	9	24	930
Indonesia	54	4	17	615	8	23	660
Lao PDR	161	10	23	1,950	10	26	1,910
Malaysia	5	4	11	450	4	8	485
Myanmar	113	9	25	670	9	27	660
Philippines	42	6	15	585	7	14	660
Singapore	1	3	6	460	3	4	440
Thailand	24	5	14	595	5	13	760
Timor-Leste	92	6	28	750	7	26	755
Vietnam	65	5	21	610	8	21	600

Source: World Bank, Doing Business Report 2013

In August 2008, the ASEAN Trade Facilitation Work Programme (ATFWP) was adopted with the purpose of compiling various trade facilitation measures comprising customs' innovation, technical regulations, rules of origin simplification, and product standards harmonization. The program also comprises ASEAN's most noticeable effort for implementing trade facilitation: formation of the ASEAN Single Window (ASW).

ASEAN Single Window

The ASW has been deemed "the single most important initiative of customs that will ensure expeditious clearance of goods and reduce the cost of doing business in ASEAN" (ASEAN Economic Ministers, 2005).

In 2005, with the ASW Agreement, ASEAN dedicated to the formation of the ASW to accelerate customs' regulations with the involvement of the ASEAN-6 by 2008 and new Members by 2012. After that, in December 2006, the signing of the ASW Protocol enabled an effective application of the ASW. Individual ASEAN Members States are in the process of implementing their own National Single Windows. The agreement describes ASW as "the environment where National

Single Windows (NSWs) of Member Countries operate and integrate," and that "National Single Windows allows (i) a single submission of data and information; (ii) a single and synchronous processing of data and information; and (iii) a single decision-making point for customs' release and clearance" (ASEAN, 2005).

ASEAN members came to an agreement that the Brunei, Indonesia, Malaysia, the Philippines, Thailand, and Singapore would activate their NSWs sooner than 2008, while Cambodia, Vietnam, Laos, and Myanmar would finish the process by 2012. The accomplishment deadline for the ASW is 2015 (ASEAN, 2007). However, until March 2010 only Singapore activated an operational NSW. Meanwhile, five countries including Thailand, Brunei, Malaysia, the Philippines, and Indonesia have partly accomplished their NSWs. And at the same time, Vietnam has accomplished a National Single Window Master Plan and was conducting an "E-Customs" system expected to be a core component of the country's NSW. The remaining countries namely Myanmar, Cambodia, and Laos have achieved less improvement by 2010 (Le, 2010).

The ASW would allow customs agencies in ASEAN countries "to exchange information required for the ASEAN Customs Declaration Document (ACDD), certificates of origin for preferential trade agreements (PTAs), and other key documents for trading and transporting goods" (USITC, 2010). Customs information such as required documents in ACDD, certificates of origin for PTAs and other key documents for trading and transporting goods are enabled to exchange efficiently and timely by the ASW. A "federated approach" will be used in the ASW to allow the information interaction between customs agencies of ASEAN members but not store the information on a central server.

A study of U.S. International Trade Commission (2010) indicated that the private sector representatives in ASEAN were excited about the prospective of ASW to create substantial benefits for private enterprises in ASEAN countries.

However, opportunities always come with challenges. First, the ASEAN countries realized that the ASW and NSWs have processed its work very slowly. Delays to disagreements amongst ASEAN members are considered to be caused by the ASW's architecture instead of technical challenges. Some countries are afraid that ASW might compromise the confidence of traders' information and might weaken the ASEAN members' national competitive advantages which have been created by their own NSW's strength. Second, representatives from private sector were doubtful about if the ASW comprised the features that could make it really beneficial; for example "the ability to file an import declaration electronically from a point outside the country of importation, or the opportunity to register with an integrated trader database that would make traders eligible for expedited clearance throughout the region" (Hiebert, 2010). Finally, private sector would like to have more chances to have dialogues with the ASEAN Secretariat and ASEAN countries and to discuss more frequently via a dedicated body so that they can contribute their ideas for the ASW.

There are some evidences implying that these problems are being solved. Typical evidences are the introduction of the above-mentioned ASW Pilot Project and the accomplishment of the "ASEAN Data Model" identifying standard data elements for main trade documents which show that the working process on ASW is being speed up. Moreover, ASEAN countries are making more effort to build a legal framework for the ASW (Le, 2010). For instance, ASEAN countries approved a memorandum of understanding for data exchange in August 2009 within the ASW Pilot Project, offering a foundation to base comprehensive legal framework of the ASW (ASEAN, 2009). Regarding the participation of the representatives from the private sector, ASEAN Secretariat staff has made a great effort to exchange their viewpoints with the representatives from the private sector, evidenced by a negotiation in March 2010 with the ASEAN-US Business Council in Singapore. The engagement of the private and public sectors as well as the coherent demonstration of progress would be essential to maintaining the appreciation of the business community for ASW.

Trade facilitation activities sponsored by other entities

Members of ASEAN may join external trade facilitation programs other than the programs coordinated by ASEAN. Due to its limited budget, the ASEAN Secretariat offers small direct assistance for modernization customs agencies of its members. Such assistance is mostly sponsored by bilateral or multilateral donors, for instance the World Bank's Vietnam Customs Modernization Project and the U.S. Agency for International Development's Local Implementation of National Competitiveness for Economic Growth Program for the Philippines (USITC, 2010). Two most popular regional agreements are the Greater Mekong Sub-region (GMS) program and the GMS Cross-Border Transport Agreement (CBTA). The GSM has four participants: Myanmar, Thailand, Cambodia, and Vietnam. Its agenda comprises infrastructure improvements as well as facilitation of the international transport for both people and goods. Since 2010, establishment of the CBTA's single-stop procedures has not proceeded outside pilot applications at exclusive locations. However, the difficulties and risks of harmonizing regulations of country members and achieving agreements for procedures at the single-stop sites should be noted.

1.4. Trade cost reduction in ASEAN

In this part, the trade cost reduction in ASEAN during the period 2001- 2007 will be analyzed. This shorter time interval caused by data limitations, however as shown in table 3, the restriction brings it about to achieve results for seven members of ASEAN.

Table 3: Trade costs in ASEAN member states vis-à-vis the world, expressed as ad valorem equivalents (percent)

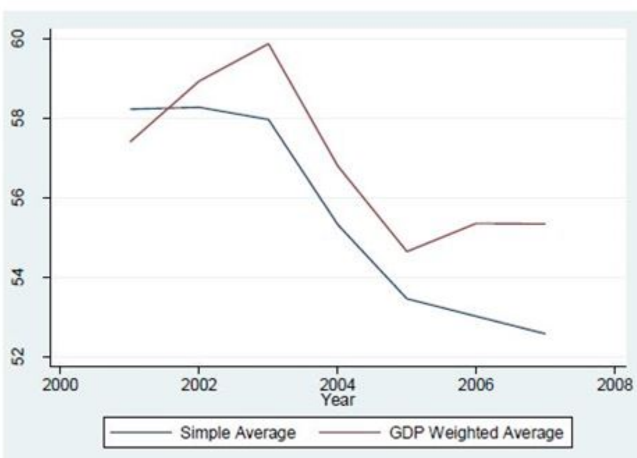
	2001	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*Absolute change (2001-2007)*
Brunei Darussalam	90.94	88.07	91.24	N/A	N/A	86.00	N/A	N/A

Indonesia	63.16	66.45	69.02	65.02	62.19	63.54	63.13	-0.03
Cambodia	98.36	93.01	94.21	90.24	N/A	N/A	N/A	N/A
Malaysia	21.95	23.93	21.97	N/A	N/A	N/A	21.30	-0.65
Philippines	57.31	55.72	56.65	56.75	58.32	58.72	61.46	4.15
Thailand	47.27	48.24	46.70	44.13	40.02	39.97	40.27	-7.00
Vietnam	65.14	62.67	59.46	55.38	53.30	49.83	45.44	-19.71

Source: Shepherd, 2010

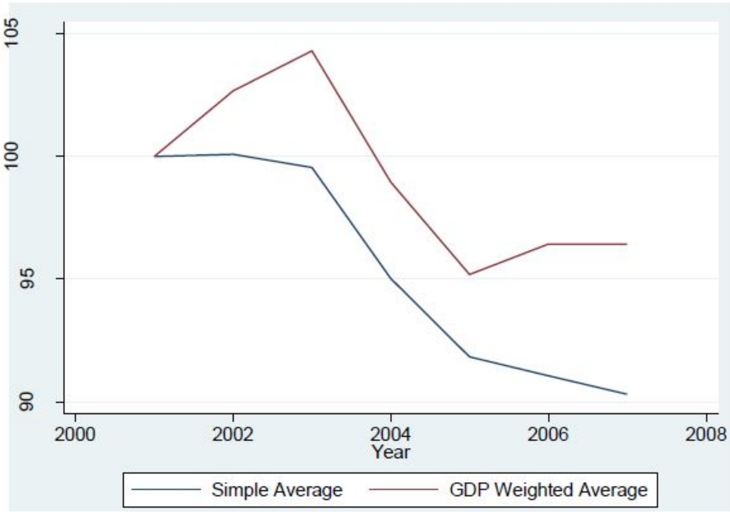
Only two out of the five countries over the sample period experienced decrease of more than five percent (Shepherd, 2010). Cambodia and Brunei also show signs of remarkable reductions, despite the availability of only some data. There seem to have more significant reductions in trade costs in terms of the regional averages as is shown by figure 1 and 2 (ad valorem equivalents) and (trade costs index, 2001=100) in comparison with the country numbers demonstrated in table 3. There was also a fall from 50 percent to 53 percent from 2001 to 2007 respectively in ad valorem equivalent trade costs in simple average terms, however this decline was only a mere figure from 57 percent to 55 percent on a GDP-weighted basis. (Shepherd, 2010)

Figure 1: ASEAN trade costs vis-à-vis the world in percent ad valorem equivalent terms, simple and GDP weighted averages



Source: Shepherd, 2010

Figure 2: Index of ASEAN trade cost vis-à-vis the world, simple and GDP weighted averages (2001=100)



Source: Shepherd, 2010

Yet, the calculation of these averages is consistently based on a sample over the time researched. There were only four countries that meet the requirements of data availability for all periods. Two out of the four, Thailand and Vietnam, have experienced a substantial reduction in the trade cost. Figures 3 and 4 therefore seem to exaggerate the degree of reduction in ASEAN trade costs.

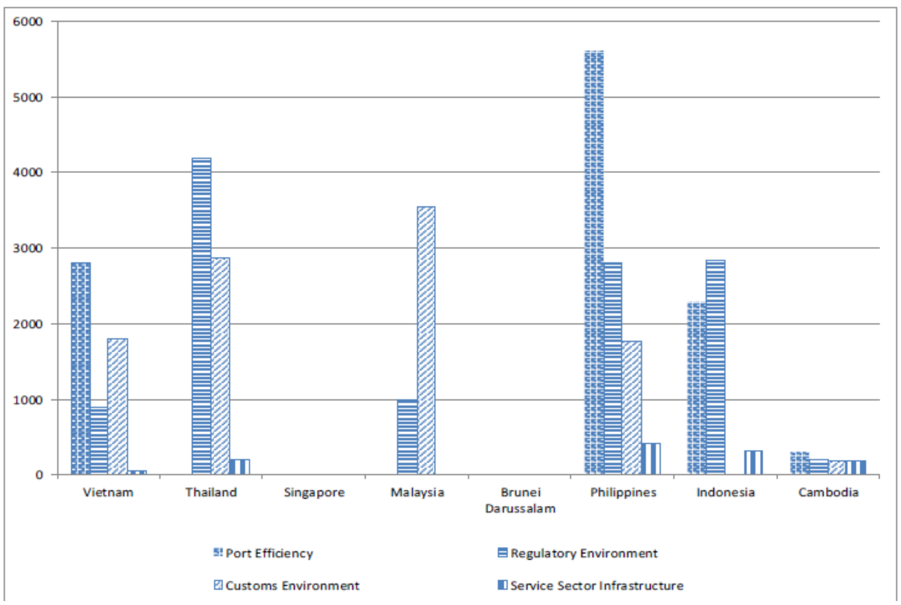
2. The economic impact of trade facilitation on ASEAN Members

Trade facilitation including *inter alia* regulatory environment relevant to customs procedures and border controls, port efficiency, and quality of infrastructure has an enormous impact on the economy. OECD in a report (2011) indicated three main impacts of improving trade facilitation to the economy, for example impact on trade flow, impact on government revenue, and impact on FDI. The next part will alternatively analyze in details the three impacts to ASEAN countries.

2.1. The impact on trade flow

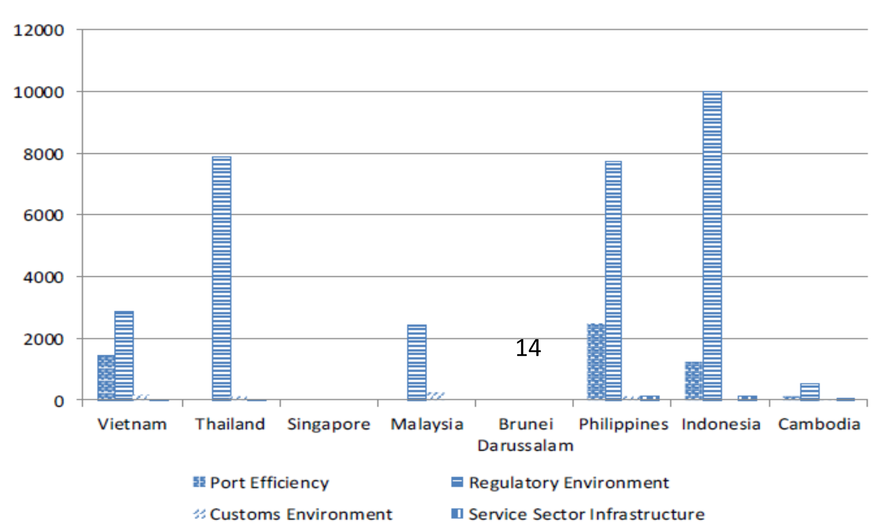
Trade facilitation significantly improves to trade flow by saving time and transport cost. By simplifying and clarifying customs procedures, border controls and port efficiency, time consumed to deliver international goods to domestic clients therefore declines. As a result, more transaction could be implemented and thereby eventually increasing trade flow. In a 2011 research paper, OECD introduced various quantitative estimates, which explored the strong link between trade facilitation and trade flows (Brooks and Stone, 2010). These quantitative results also reflected the result from business surveys: "inefficient movement of goods across borders is a serious impediment to trade and growth" (OECD, 2005). By improving efficiency of logistic service which comprises port clearance and quality of infrastructure, transactions cost derived from international trade sharply declined, thereby lowering the price of internationally traded goods. Consequently, cheaper goods stimulate demand from consumers, which helps enhance trade flows. Even with small reductions in trade transaction costs, this also translates into significantly increased trade (OECD, 2011). The strategic geographical location of ASEAN in global supply chain, from which many components produced have been exported to other regions responsible for the next production stage, necessarily requires efficiency of sea transportation. Additionally, most of competitive exports of the region are just in time products such as agricultural commodities, crude oil or seasonal products such as clothing, foot wear; therefore, time of delivery which is mainly decided by transport service and custom clearance in general and port efficiency in particular play an important role to determine scale of trade. The figure below indicates trade gain of ASEAN countries with alternative role of exporters and importers.

Figure 3: Trade gains of the ASEAN countries as exporter by own improvement



Source: Otsuki, 2011, p.34

Figure 4: Trade gains of the ASEAN countries as importer by own improvement



Source: Otsuki, 2011, p.35

As showed by the figures, port efficiency and customs environment are the two leading factors whose improvement contributed greatly to trade gain for the region in terms of export as expected. The degree of importance for the two factors varies country by country in the region. By contrast, that regulatory environment is the leading factor in terms of import demonstrated inadequacies of regulations related to international trade in the region. The reasons for the issue could come from legislative overlaps and corruption.

2.2. Impact on government revenue

"Trade facilitation is believed to have a growth promotion effect, not only by increasing trade flows but also because policy reforms and infrastructure development may help spur the internal economic growth of the country" (Otsuki, 2011).

Trade facilitation creates no incentive to smuggling activities since transaction costs originated from cumbersome customs procedures are significantly reduced, accompanied with low tariff rate. Furthermore, delays of internationally traded goods at border also impede trade flow, which indirectly reduce tariff collection. As a result, government revenue is expected to increase by implementing trade facilitation, including transparency, predictability and adequacy of customs ' procedures. This also helps mitigating smuggling activities and delayed time at border.

The reduction of fiscal revenue concomitant with trade facilitation might be a concern under some countries' stands. That concern should not be ignored. In trade facilitation, those areas with greater risk should be emphasized in terms of trading infrastructure. Human resource would be more effectively transferred to inspect risky consignments instead of being assigned to follow unnecessary paperwork. Furthermore, additional cost reductions can be attained as trade facilitation will enhance the efficiency of tariff collection and domestic economy. For example, that the use of EDI and computerization by Customs have raised duty collection in several countries including Bolivia which experienced 11 per cent increase of duty collection OECD (2001) reports that a new system applied in customs ' clearance help increased government revenue. For example, customs revenue from the Philippines, Sri Lanka and Panama rose by more than US$ 215 million, US$ 100 million and three percent respectively in spite of a 50 percent cut in tariff rates.

Customs is a monopolist system with its own power; hence, in some ASEAN members that maintain inadequate and ineffective customs system for a long time, it is more likely that costs exceed gains from this improvement. However, in the long run, effective and adequate system of customs will benefit the economy much more than reform costs by supporting the supply side.

2.3. Impact on foreign direct investment

Trade facilitation will lower the cost of spreading production across countries by utilizing their comparative advantages. Intra-regional FDI will increase, which then boosts regional trade, adding to the improvements of trade facilitation. For instance, Southeast Asia's electronics industry witnessed the boom of cross-border production networks in the 1990s. This phenomenon may be seen as a cycle of trade facilitation that support increased trade and economic growth.

According to Amiti and Javorcik (2008), the two most significant factors impacting entry decisions by international investors are accession to markets and suppliers. The influence of accessing to market and supplier on FDI decisions of investors was four times greater than that of production costs. ASEAN members own a strategic location and market of more than half billion of consumers; the ASEAN will be a favorite destination of the FDI inflow if it keeps changing continuously in trade facilitation. According to the research of Otsuki (2011), ASEAN's total gain from improving trade facilitation was estimated to be $99 billion and about 75% of the gain is the results of the region's own improvement (Otsuki, 2011).

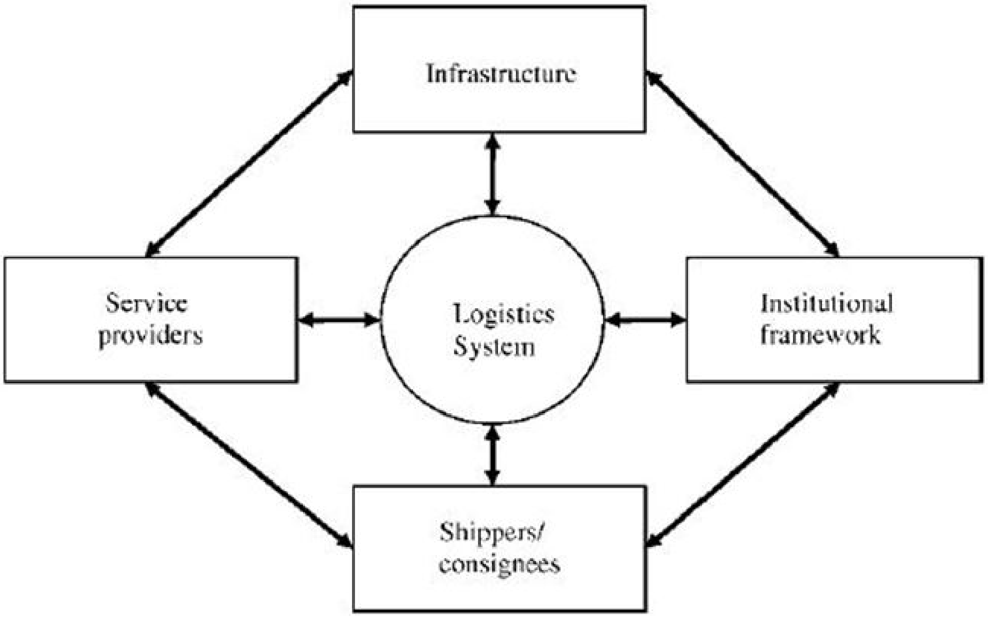
3. Logistics policies - a deeper analysis and comparison between ASEAN members

3.1. Overview of logistics services in ASEAN

Logistics is defined as "the part of the supply chain process that plans, implements, and controls the efficient, effective flow and storage of goods, services, and related information from the point of origin to the point of consumption in order to meet consumers' requirements" (De Souza et al., 2007). Although customs procedure could be improved, ASEAN members still perceive that trade is possibly constrained by other factors including the logistic system which is in charge of moving the flow of goods among destination points. In spite of customs improvement, trade of ASEAN members can still be "impeded by a variety of other factors including the logistics system that is handling the flow of goods between the border and hinterland of origin or destination points" (Banomyong et al,2008)

In August 2007, ASEAN member countries considered logistics services as a Priority Integration Sector. The Roadmap for the Integration of Logistics Services obligates member countries to "substantial liberalization of logistics services by 2013" (ASEAN, 2007). The Roadmap listed certain services that need to be liberalized in the logistics sectors, such as packaging, freight forwarding, cargo handling, freight transport and express delivery, etc. It also mentions different measures in the areas of "trade and customs facilitation" and "logistics facilitation," by completing of new ASEAN agreements and implementing of existing ones (ASEAN, 2007).

Figure 5: Logistics system components



Source: Banomyong et al., 2008

Logistics plays a significant role in supporting competitive advantages of a country or a region. Though some members began to improve their national logistics policies, no region-wide logistics policy has been clearly stated yet in ASEAN. Most ASEAN countries do not have enough experience in making up logistics policy (Nathan Associates, 2007). Logistics policy involves a full approach that covers logistics service providers, regulations and infrastructure. By sharing experiences in developing national logistics policy, ASEAN countries would be much beneficial because it brings a lot of benefit rather than a transport investment infrastructure plan. The ASEAN Secretariat then helps organize a common logistics policy for ASEAN. Sharing experiences in developing national logistic policy among ASEAN countries bring a lot of benefit rather than a transport investment infrastructure plan (USITC, 2010).

The logistics services' quality among the ASEAN members is considerably different. According to the World Bank's Logistics Performance Index (LPI) for 2010, Singapore ranked 2nd and Myanmar ranked 133rd out of 155 countries around the world (as shown in table 5). Hollweg and Wong (2009) show that there is an inverse connection between the restrictiveness of ASEAN members' logistics policies and the perceived logistics services quality as indicated in the World Bank's LPI. From this result, implementation of the Roadmap is believed that it may result to the development in the logistics services quality in ASEAN.

Table 5: ASEAN in the World Bank's 2012 Logistics Performance Index (LPI)

Country	Year	LPI	LPI	Customs	Infrastructure	International	Logistics	Tracking	Timeliness

		Rank	Score			shipments	competence	tracing	
Singapore	2012	1	4.13	4.1	4.15	3.99	4.07	4.07	4.39
Malaysia	2012	29	3.49	3.28	3.43	3.4	3.45	3.54	3.86
Thailand	2012	38	3.18	2.96	3.08	3.21	2.98	3.18	3.63
Philippines	2012	52	3.02	2.62	2.8	2.97	3.14	3.3	3.3
Vietnam	2012	53	3	2.65	2.68	3.14	2.68	3.16	3.64
Indonesia	2012	59	2.94	2.53	2.54	2.97	2.85	3.12	3.61
Cambodia	2012	101	2.56	2.3	2.2	2.61	2.5	2.77	2.95
Lao PDR	2012	109	2.5	2.38	2.4	2.4	2.49	2.49	2.82
Myanmar	2012	129	2.37	2.24	2.1	2.47	2.42	2.34	2.59

Source: World Bank, Logistics Performance Index database 2012, accessed on December 20, 2013.
Note: (1) No data available for Brunei. (2) For the LPI aggregate and each component, the range of possible scores is 1 (worst) to 5 (best).

According to USITC (2010), the third-party logistics service providers (3PLs) are “the companies that provide logistics-related services such as supply chain consulting, transportation management (e.g., warehousing, cargo handling, and customs ' brokerage), freight transport, and express delivery.” In ASEAN, there are large 3PLS including firms inside and outside the region (e.g, DB Schenker, DHL, and Nippon Express for the former and Singapore’s APL Logistics and Toll Global Logistics for the latter) (De Souza et al., 2007).
Thanks to trade facilitation, the services delivered by 3PLS can be more affordable, timely and consistent. It, therefore, can be said that trade facilitation has become a prerequisite in guaranteeing high-quality logistics services.
Yet, numerous restrictions imposed on foreign ownership leave a direct effect on the ability of the logistics service providers to provide high-quality services. For example, the foreign company is less likely to have power to maintain its service quality standards if it is required to conduct as a minority partner in a joint venture (USITC, 2005).
Although the entire ASEAN members were called by the ASEAN Economic Blueprint to allow foreign ownership in logistics services with 52 percent and 70 percent in 2010 and 2013 respectively, this commitment was not much agreed by several countries in the region (USITC, 2010). These commitments’ application scope is indistinct.
The AEC Blueprint recommends that “members use the ASEAN Enhanced Dispute Settlement Mechanism (DSM) in enhancing the implementation arrangement [...] identified in the Blueprint” (USITC, 2010), but does not particularly point out the subjection of liberalization commitments to dispute resolution. Moreover, there have been questions about the willingness of members in using Enhanced DSM. There have been not any members using the Enhanced DSM since its emergence in 2004. They did not even use the ASEAN DSM originally created in 1996 (Greenwald, 2006).

Having many restrictions for foreign ownership the Philippines, Thailand, and Indonesia, the three economies make the industry representatives doubt about successes. All logistics services in Indonesia are defined as “postal services” by 2009 Postal Law and therefore are reserved for Indonesians. The law permits foreign companies to provide services in cooperation with their domestic partners in “province[s] or capital[s] with an international airport and/or harbor only” (USITC, 2010). The distinctions between postal services and other logistics services in the ASEAN logistics sector’s Roadmap were not preserved by the law. The liberalization commitments in the AEC Blueprint were unfortunately ignored as well.

The prohibition of almost foreign ownership of “domestic transportation” activities by Thailand comprises movement of products within the country, which can be seen as an international shipment (CAPEC, 2009). The rules in the Philippines also raised some confusion among the foreign participation. However, it was commonly told that the application of one express delivery firm for a license would take delays of several years to be reviewed in court (USITC, 2010).

In Malaysia, a certain percentage of companies’ ownership shares have long been required to be reserved for the local Malaysian (or called bumiputera) among different industries. April 2009 marked a removal of these conditions for 27 service industries, with some logistics services involved, for examples maritime service and road freight transport. This removal was not much concurred by 3PL industry representatives as they thought that some firms in Malaysia could be prevented from provision of high-quality standards of services because of the conditions for majority of bumiputera ownership of customs brokerages (Prime Minister’s Office of Malaysia, 2009).

By entering WTO, Cambodia and Vietnam had to liberalize logistics service sector as part of their accession commitments. According to WTO (2003), one of the requirements in Cambodia’s accession package to WTO was to commit not to impose any restrictions on foreign ownership for road freight transport and courier services. In Vietnam, the cap of foreign ownership for express delivery firm was at 51 percent in 2006 and was expected to increase completely in 2012.

There was no proof of significant foreign ownership restrictions on logistics services to be found in Singapore and Brunei. This is reasonable since Singapore has always been acknowledged to be one of the most accessible markets in the Asia-Pacific region for logistics services (Hollweg and Wong, 2009). Information about restrictions in Myanmar and Laos is limited. One industry source noted that full foreign ownership of express delivery service companies in Myanmar is allowed, however it noted licensing procedures as “restrictive” (CAPEC, 2009).

3.2. ASEAN countries’ restrictions to trade in logistics services

3.2.1. Logistics Restrictiveness Index in ASEAN

According to Hollweg and Wong (2009), limitations to trade in logistics services are defined as the obstacles that prevent Logistics Service Providers (LSPs) from working in the market.

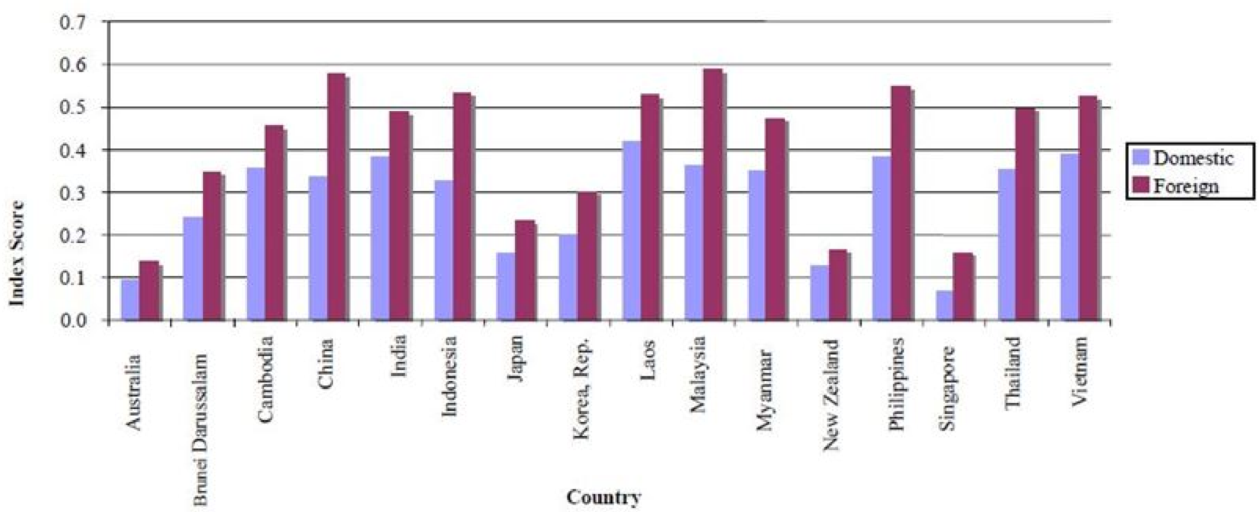
Restrictions to trade can be raised from various sources such as low quality of infrastructure or culture barriers, this paper, however, will emphasize on the government policy and regulation regarding logistics area.

There are two types of regulations, the non-discriminatory against the international service providers and the discriminatory regulations. The non-discriminatory regulations are the rules that apply to all investors, while the discriminatory regulations are implemented to only international providers. In the latter one, the foreign service providers are more likely to be treated less equally than the local one. The competition in logistics services and the market efficiency can be reduced by regulatory restrictions (Hollweg and Wong, 2009). Sometimes, government-imposed regulations are implemented to reduce the pressure of competition since the government wants to meet a social welfare or prevent market failure.

Follow the path of the previous studies, this study will revise the kinds of restrictions. First of all, the Logistics Institute of Asia Pacific and the ASEAN Secretariat compiled a list of national rules on the access and functions of logistics services providers (Desouza et al., 2007). By interviewing many people working in the logistics supply chain, it pointed out all the regulations and policies that influence the flow of products in both domestic market and international market. This paper will focus on the obstacles in the logistics policy as well as examines other trade barriers regarding the logistics sector among ASEAN +6 members.

The constrains on LSPs are different between members in ASEAN+6, the results are demonstrated in Figure 6 below. Point rating system is based on review of point set of criteria related to the international trade of Hollweg and Wong (2009). Score ranges from 0 (smallest) to 1 (the largest). Each country has its own reviews about each set of criteria, then based on the importance of each criterion of each nation, Hollweg and Wong (2009) give a score for ASEAN +6.

Figure 6: Restrictiveness Indices for ASEAN+6 Economies



Source: Hollweg and Wong, 2009

The countries that have the widest range of limitation to LSPs in term of logistics services are Vietnam, the Philippines, Malaysia and Indonesia. In Vietnam, the maritime services have always been highly controlled because Vietnamese companies do all the port services, which lead to the discrimination between local providers and foreign services suppliers. Vietnam and three other countries Malaysia, Indonesia and the Philippines still use the cargo reservation. In addition, Vietnam is not open to the participation of foreign enterprises; the international flags have to access through the gateway ports as opposed to going directly to Vietnam port. In Laos, the process of importing goods requires a wide variety of paperwork. The importers have to apply for an import license from the Ministry of Commerce of the country. In the Philippines, there is Philippines Ports Authority (PPA), which regulates all the local public ports. There are number of places and facilities that are controlled by the PPA and the PPA reserves an exclusive right to exploit all the cargos to the local companies. The licensing requirements of logistics services business in Indonesia always discriminate between domestic enterprises and foreign enterprises. In particular, foreign companies are not allowed to join the field of providing shipping services in the country. The customs authorities of Malaysia do not work at the weekend, including Saturday and Sunday. If the goods come to the port on Friday, it will have to wait until the Monday to be processed; this will result in delays in cargo shipping. Due to the religious reasons, the Malaysian customs do not work not enough 24 hours on Friday, many trucks have to wait in line at the Singapore - Malaysia border through the nigh (Hollweg and Wong, 2009).

Singapore has one of the most open environments for logistics service providers. The customs authorities of Singapore never close, and always fully comply with the mandates punctuality. In all ASEAN members excluding Singapore, the foreign companies are not permitted to provide customs brokerage services. For example, Indonesia, Myanmar, Thailand and Malaysia will not permit foreign firms to own a business license clearance services.

According to Corbett and Umezaki (2009), element of the logistics restrictiveness index are presented in Table 6.

Table 6: Logistics Restrictiveness Index on Customs Procedures

	Weights	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	Average
Overall Index	1.000	46	57	50	65	45	64	53	15	49	53	50
Customs documents	0.082	63	116	58	100	74	100	84	42	37	74	75
Customs signatures	0.082	29	57	18	92	16	N/A	24	8	41	55	38
Import licensing	0.082	50	50	50	100	50	100	100	0	50	100	65
Local language	0.014	0	100	0	100	0	0	0	0	0	100	30
Customs inspections	0.082	1	12	12	1	6	56	32	3	9	14	15
Import restrictions	0.014	25	25	25	25	25	100	25	25	50	25	35
Customs	0.082	50	100	50	100	50	50	50	0	50	50	55

Electronic Data Interchange												
Harmonized Commodity Description and Coding System	0.075	50	50	50	50	50	100	50	0	50	50	50
Possibility of a Review for Imports	0.068	50	50	62	50	25	100	50	33	100	43	56
Customs Operating Hours	0.41	50	50	50	50	100	50	100	0	100	50	60
Customs brokerage services	0.027	50	50	100	100	100	100	100	0	100	50	75
Customs clearance	0.068	100	20	32	0	34	90	36	22	38	29	40
Customs procedures time	0.068	47	52	48	100	32	25	32	8	27	47	42
Customs charges or fees	0.041	34	41	35	100	23	N/A	42	23	36	42	42
Improper penalties or fees	0.054	0	50	100	0	50	50	0	0	0	0	25
Discriminatory fees or inspection practices	0.041	0	0	50	0	50	0	0	0	50	50	20
DeMinimis level	0.082	100	100	94	100	82	100	100	67	96	100	94

Source: Findlay (2009) and Hollweg and Wong (2009).
Note: Unavailable data (n.a.) are excluded in calculating 'overall index' and 'average'.
Table 6 illustrates a differences in logistics procedures between countries and Singapore in the best country in practicing trade procedures with the lowest score 15. World Bank shows that the LPI and the customs' sub-index have a negative relationship, which means in order a country to have a good customs performance, the should be less customs limitations for both local and foreign logistic providers (Findlay, 2009). LPI is constructed bases on a survey of global and express carriers while the Customs' procedures index (CPI) and logistic restrictiveness index are made from the policy environment. Once the customs and logistics services are opening, the restrictiveness are more like likely to decrease significantly (Corbett and Umezaki, 2009).

3.2.2. ASEAN logistics cost assessment

Until recently, logistics cost has always been a big questions for all ASEAN shippers and consignees. The logistics cost comprise two problems: (1) the true cost of logistics and, (2) the amount of time it takes for moving the goods. Regarding the cost of logistics, many governments cannot evaluate accurately the local costs for logistics services. The ratio between the local logistics cost and GDP has been considered the most effective way to compare the efficiency in implementing logistics services in the country. According to Rodrigues (2005), this ratio for Singapore is relatively low, around 14% while it is nearly 20% for Vietnam (Meyrick and

Associates 2006). Regards to the second type of cost, the time it takes to process the regulatory papers is expected to be longer than the flow of goods. Although the logistics costs do not change much due to this time addition, but they will have negative impact on the goods producing in local market and then being exported.

In general, the two largest components of total export costs are transport and processing costs. According to USAID (2006), while the transport cost plays an important determinant of the logistics cost, the processing cost is the most important export logistics costs factor. The processing cost and the total export logistics costs are positively related. ASEAN focuses on the two key logistics cost mechanisms: transport and export processes while evaluating the export logistics costs. Processing cost is determined by the regulations and policies, and cannot be controlled by any particular companies. Hence, all ASEAN economies must consider the decrease in processing cost as a priority for ASEAN meeting. One thing that should be emphasized here is that, a reducing in processing costs can have both negative impact and positive impact on the nation's revenue. It can cause a decrease in the revenue of each transaction; however, it will result in a significant increase in the number of transactions. Consequently, the competitiveness of ASEAN will increase in compared with other regions.

In term of the time requirement, the export and import procedural documents takes approximately 22 to 23 days to be completed, this will have great impacts on the ASEAN market competitiveness. While the world becomes more integrated, delays in cleaning process papers will weaken ASEAN's ability to be an integrated production base. According to Djankov et al. (2006), the delays in procedural process will influence the market both in term of inventory storage cost and market competitiveness.

3.2.3. The barriers to logistics services in ASEAN

In this part, the authors identify four main categories that are obstacles to logistics services in ASEAN: Custom-related barriers, foreign investment and mode specific barriers.

a. Customs-related barriers

(1) Time consuming procedure

Due to the lack of a system electronic data interchange (EDI), all the documentations that are submitted at the country's border will take times to complete, as well as the transparent of the process is not constructed (Gupta et al. 2011). The procedures that required at the country's border are packing lists, trade documents, shipping documents, regulation forms and the country of origin. In Singapore, Malaysia and Thailand, the import products are divided into 4 main categories which are document, low value products, dutiable and non-dutiable products. In Vietnam, the import documents clearance depends on the condition of the documents, if the documents are clear and detailed, the clearance process can take about three days. This process will take approximately three to five days to for transit good. In Indonesia and Thailand, the customs' authorities ask for different documents that inadvertently decrease the efficiency in the documentation process. The authorities in Indonesia require import licenses and shipping list for every single good. While Brunei authorities always ask for both electrical documentation and the printed version of documentation (Desouza et al., 2007).

Beside the different requirement for procedural papers at the country's border, not all the ASEAN countries have an effective EDI system except for Singapore. For example, Myanmar asks for the documents five days before the goods arrive; while in Malaysia, documents may be submitted electronically via EDI, but the payment is still manual. Moreover, there is not a standard format between ASEAN members in term of documentations. Due to the language and culture barriers, different countries require different set of documents with templates, and different languages. Therefore, it leads to a inefficient and tedious process (Desouza et al., 2007).

(2) Different classification of goods

Even though there is a standard for system code between ASEAN members, the misclassification still occurs. It is because of the lack of practices and education of customs' authorities. Because they cannot classify the goods effectively, the delays in transit can occur in both international level – across border, as well as domestic level – between local ports. In addition, due to the difference in tax imposed on different goods, all the shippers are more likely to misclassify their goods so that they can reduce the cost and have the largest profit. For example, two ports of Malaysia levy different taxes for the same goods at different ports. The Indonesia and Cambodia authorities cannot use English fluently, and the customs' officials in Vietnam and Laos often lack of knowledge about technical things (Desouza et al., 2007).

b. Foreign investment-related barriers

Most ASEAN members are developing countries, so the governments want to protect the domestic market from international investment; therefore, the foreign investors will be limited in terms of both local firms' equity shareholders and establishment of foreign companies. Such rules inhibit foreign firms because it is now more difficult for them to find a right partner. All the ASEAN countries but Singapore and Brunei require the company to have the participation of local residents (Gupta et al., 2011). For example, the government in Vietnam limits foreign ownership in each firm to less than 50 percent of its equity; Laos has similar restriction to foreign investors. In Cambodia and Myanmar, depending of the company, the foreign investors can hold up to 100 percent equity.

The licensing requirements are compulsory in every ASEAN members but Singapore. Each countries has different requirement for the licensing as well as the process of attaining licenses. There are various types of licenses, for example the brand license, or the import licenses. In the Philippines, the government requires foreign investors to lobby with local companies, such as local freight forwarders to obtain licenses, rather than providing investors free licenses. The delivery process within domestic market is also an obstacle with foreign investors. In countries like Vietnam, Myanmar and Laos, foreign investors can obtain a license to operate domestically but the local companies are granted the right to monopolize the transport delivery. Some countries implement the discriminatory licensing policies, such as different discriminatory policies required by different areas, preferential access to local companies than to foreign companies (Desouza et al., 2007).

c. Mode-specific barriers

(1) Aviation cabotage regulations.

All the rules that control the domestic flow of goods by a foreign airline in a country are called cabotage regulation. It affects the cost of delivery. Since many ASEAN countries have one major airport, most economic activities take that place. Therefore, the cabotage problem does not occur but is more likely to happen in big cities like Malaysia and the Philippines. First, the oversea airlines are not allowed to operate in domestic market. For example, in Malaysia, MAS cargo monopolizes all transshipment activities within the country. Preferably, ASEAN's long-term objective is to build an open and transparent market (Gupta et al., 2011).

(2) Fleet size limitation, equipment usage and hours of operation

The restriction on any fleet size and on the processing time declines the connectivity and increases the fee of the delivery in the local market. Brunei imposes a 12 years life limitation for a truck. On the other hand, there is no obstacle to trucking within Myanmar, but rice export is forbidden using trucks to prevent illegal exporting of rice in the country (Gupta et al., 2011).

4. Implications and recommendations for improving the harmonization toward ASEAN Economic Community

4.1. Implications

This paper has examined some critical barriers influencing logistics services in ASEAN countries. Unfriendly logistics practices seem to be the cause of almost all barriers; however, there are policy measures that will help ASEAN members to ease those barriers' negative effects to logistics services. Some of the implications are listed below.

Trade efficiency can be improved by a mutual EDI for ASEAN members for all gateways (payment included). As long as EDI is still unavailable for all entryways, particularly payments, countries would still have to experience delays, lack of streamlined and inefficient practices. EDI helps smooth the documentation procedures.

The inspection practice failure is primarily caused by unfriendly and inefficient practices. The purpose of inspection is to help protect the supply chain, but if it is misused, it leads to inefficiency in trade. A common across-borders inspection policy can benefit all ASEAN countries by reducing the inspection time as well as protecting the interests of member countries.

Although there exist different classifications of goods in each country, ASEAN may implement standardized or common customs regulations. The rules need to be communicated and transparent to all participated countries. In addition, education on the proper classification procedures must be provided to all customs ' officers in order for the inbound clearance process to become more efficient (Gupta et al., 2011).

ASEAN can also gain advantage in land transportation if they have a general ASEAN certification of trucks that can cross borders without restrictions. This helps to solve the bottleneck issues and decrease total waiting time at the checking points.

On the issues of foreign investment, the lesson learned from Singapore is that permitting majority foreign ownership merely benefits countries by improving their infrastructure and attracting more foreign investments. However, this practice requires that both domestic and foreign firms must be treated equally, without any discrimination.

Customs inspections and procedures are deemed to be the main barriers of logistics services in ASEAN. The inefficiency is the result of the inadequate automated practices and complicated procedures that require even unnecessary documentation.

4.2. Recommendations for improving the harmonization toward ASEAN Economic Community

Recently, the cost of ASEAN logistics sectors is considered relatively high, procedural time is long and the level of logistic development between members is unequal. Although Laos PDR has not been required to follow WTO-based customs valuation regulations yet, customs' facilitation matters are thought to be well coordinated amongst ASEAN countries. While the maritime and ports sectors are relatively the most efficient logistics sub-sector in ASEAN, the railway and inland waterway systems remain underdeveloped. A regional institutional framework is needed for road transport to improve the quality of international road transport between ASEAN members. Air transport liberalization should have been completed since 2006; however, there is no any improvement so far. There is intense competition in regional logistics industry but now foreign service providers are trying to offer higher quality for logistical services to gain competitive advantage (Nathan Associates, 2007).

The authors propose a logistics development policy which focuses on all the strengths and weaknesses of ASEAN members. This logistics policy starts with two objectives:

(1) By encouraging ASEAN economic integration through facilitation and liberalization in every service's aspect, the logistics policy aims to establish a single market between ASEAN countries by 2015.

(2) The policy support and improve the competitiveness of ASEAN market by establishing an integrated logistic services environment within ASEAN countries.

These two objectives address the ASEAN strategic vision and define the importance of logistics in the development of integration and commercial trade. In order to achieve these objectives, six major policy areas are recommended.

Area 1: The logistics systems between ASEAN countries should be integrated. In order to reach this goal, the ASEAN countries should:

• Develop the policies to diminish the cost of doing logistics and raise the reliability

• All the information about transit times, costs, and reliability for exporters and importers in ASEAN should be available to all ASEAN countries by applying a logistics database system

• Develop a system of tracking freight capacity and value

• Encourage the establishment of distance communication between ASEAN members as well as establishing the protocols for cross-border logistics

• Implement ASEAN wide standard for "Secured Logistics Chains" that is in proportion to recently adopted international standards

• Apply the investment regulations associated with the logistic facilities and services

• Promote private- public collaboration for logistics facilities and infrastructure investment.

Area 2: Reassure the liberalization of logistics providers

• The ASEAN members should focus on the liberalization of the logistics sectors

• The progress of logistics services liberalization should be monitored and reported to all ASEAN members

Area 3: The ASEAN governments need to facilitate the procedural trade and investment

• All the information and procedures required by the authorities should be simplified to a minimum level.

• Simplify formalities, procedures and documents.

• Harmonize and standardize all the procedural trade and documents in order to support the logistics service and commercial activities

• Support member countries reach an agreement enabling transit freight movement

Area 4: Implement human resources development programs that specialize in logistics-related services

• The ASEAN countries should identify gaps related to logistics services in human resources

• Establish special support programs to provide logistics-related knowledge to fill the gap and make a more competitive liberalized environment

• Establish ASEAN logistics centers within the network of ASEAN University

Area 5: Provide channels for logistics companies to encourage their greater participation in the sector

• Each country should promote the provision of logistics services and information systems to create communication between the service providers in ASEAN.

• Support the process of establishing a common transaction for logistics service providers in ASEAN activities.

• Every government should have special support for small and medium enterprises in providing logistics services to help enterprises better compete in a liberalized environment.

Area 6: States should encourage enterprises to use the multi-forms of transport, especially transport by container.

• Companies and enterprises should utilize all the modes of transport in accordance with the permission of the ASEAN Agreement to facilitate maximum transit goods.

• The National Framework Agreement should be complied with Multimodal Transport ASEAN.

• The water supply to build the ASEAN Framework Agreement on transnational traffic.

• Promote awareness and multimodal transport container handling capacity at ports smaller logistics through appropriate policies.

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