Chapter 5

Trade Facilitation: A Study in the Context of the ASEAN Economic Community Blueprint

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INTRODUCTION

The WTO, OECD and APEC all have very similar definitions of trade facilitation. They see it as the simplification and harmonisation 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. We will adopt a slightly broader meaning, however, and also consider the time and resources involved in the movement of traded goods across borders and to their destinations within countries. We have adopted a wider perspective because the ASEAN Economic Community (AEC) Blueprint (ASEAN (2007b)) focuses more broadly on improving trade logistics and not just on improving information flows related to traded goods. Moreover, research suggests that policies that cover a wider perspective than customs processing reform are likely to be more successful.

In this section of the report we address:

- the reasons why the interest in trade facilitation among policy advisors and analysts has increased noticeably in recent years;
- the evidence that there is room for improvement in trade facilitation among ASEAN economies;
- the evidence relating to the nature and potential size of the economic gains from trade facilitation;
- the steps currently underway in ASEAN countries to achieve improvements; and
- the creation of a scorecard for measuring improvements in trade facilitation over time and across ASEAN countries

We will conclude by identifying the policy implications for ASEAN and research priorities and opportunities for ERIA.

2. INTEREST IN TRADE FACILITATION

Trade facilitation is one means by which non-tariff barriers to trade are reduced. The focus on it in trade discussions and negotiations has increased appreciably in recent years, including in ASEAN. There are a number of reasons for this.

Firstly, over the past few decades tariff barriers and quota restrictions on trade in goods have been lowered or eliminated. As a result, the economic gains from further changes to such barriers have tended to decline so the focus has naturally shifted to other potential sources of economic efficiency and gains from trade; service liberalisation and trade facilitation are two such potential sources.

Secondly, the reduction in tariff and non-tariff barriers to trade has been followed by significant growth in the volume of trade. Trade has been growing faster than GDP in most economies, including most of those in ASEAN, for several decades. Since the high costs of moving goods across borders affects all trade, the absolute gains to be made from simplification and harmonisation of trade have increased. This has encouraged more effort to capture these potential gains.

Thirdly, experience gained over time has shown that trade facilitation can generate "win-win" opportunities for consumers, legitimate businesses and governments. Greater transparency and much easier auditing and checking of trade for tariff classification and collection and physical and bio-security monitoring usually go along with simplification and harmonisation. This advantages governments whereas speeding up the movement of goods and lowering its costs advantages consumers and businesses. The "win-win" opportunities have helped create a greater willingness among politicians and policy advisors to promote trade facilitation.

Fourthly, a number of studies by international bodies have highlighted the potential high costs of increased trade transaction costs (TTCs), especially to developing economies:

- APEC (2002) estimated there would be an increase in GDP for APEC economies of 0.9% or $US154 billion following just a 5% reduction in trade transaction costs;

- OECD (2003) based on a Computable General Equilibrium (CGE) model estimated that a 1% reduction in trade transaction costs would bring annual gains of about $US40 million, with developing economies being the biggest winners in relative terms; and

- Two OECD surveys published in 2002 and 2003 (see OECD (2005)) suggest that studies of the impact of lowering trade transaction costs range between 1 and 15% of the trade transaction value. Most estimates are in the low to middle values of this range but developing economies are more likely to be in the upper end of the range.

Fifthly, the development of just-in-time inventory practices and the fragmentation of the supply chain for many products so that goods and/or their various components are produced in several countries has increased the significance of the costs of border delays and charges and the costs of logistics more generally. This has stimulated greater interest in removing or reducing these costs.

Finally, on the supply side, the increase in capacity and reduction in the costs of information and computer technology (ICT) has made simplifying border procedures and lowering transhipment costs easier and more cost effective to achieve.

3. ASEAN'S TRADE TRANSACTION COSTS

3.1. Ease of doing business: World Bank (2007a)

The World Bank's 'Ease of Doing Business' rankings include a component relating to trading across borders. This reflects the number of documents necessary to export and import goods, and the time and costs of trade. Higher rankings indicate greater ease of trading across the border. Singapore is ranked number 1 overall among all the 178 countries rated in the survey. At the other end of the scale, Laos is ranked 158 out of 178; there are no data for Myanmar.

The 'Ease of Doing Business' trading across borders data includes details on the

number of documents required to export and import goods. These data show a wide range of requirements among ASEAN countries and that only one, Singapore, requires fewer trade documents per shipment than the OECD countries on average, although Indonesia comes close.

Figure 1:   Ease of doing business – trading across borders
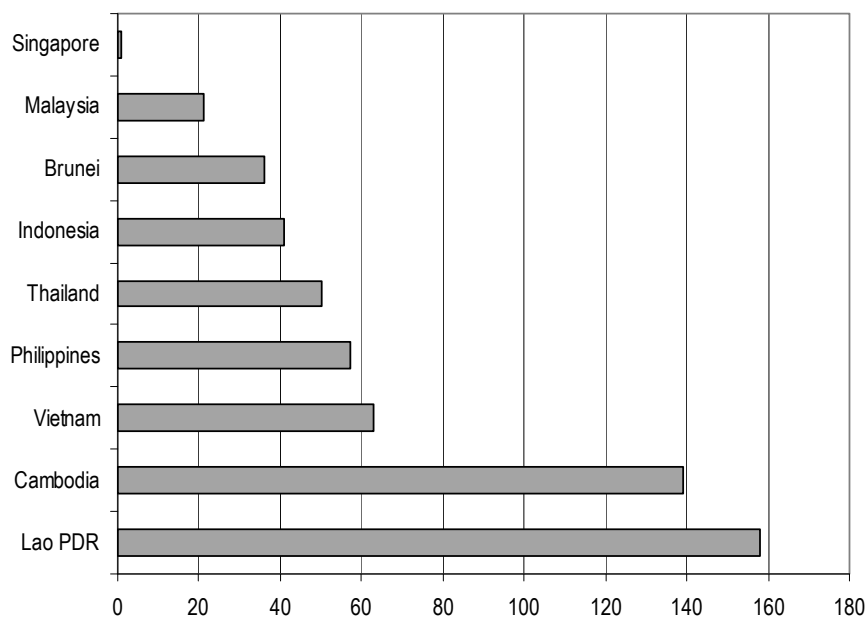
Note: Ranking in '2008' listing out of 178 countries
Source: World Bank (2007a).

3.2. Connecting to compete: World Bank (2007b)

3.2.1 Logistics performance index (LPI)

The World Bank has also recently published a more detailed study of the direct and indirect costs related to trade (World Bank (2007b)). This is entitled Connection to Compete: Trade Logistics in the Global Economy. The data are based on 5,000 country evaluations undertaken by 800 freight forwarders and express carriers. Each respondent was asked to rate performance in seven logistics areas for eight countries with which they conduct business. Performance was evaluated using a five-point scale with 1 the lowest score and 5 the highest. The seven areas of performance rated were:

- efficiency of the clearance process by customs and other border agencies;

- quality of transport and information technology infrastructure for logistics;

- ease and affordability of arranging international shipments;

- competence of the local logistics industry;

- ability to track and trace international shipments;

- domestic logistics costs; and

- timeliness of shipments in reaching destinations.

The World Bank used a weighted average of the responses in the seven areas to develop, for each country, an overall Logistics Performance Index (LPI) score. There are no data for Brunei but there are LPI data for all the other ASEAN countries.

Figure 2:   Documents required to export and import
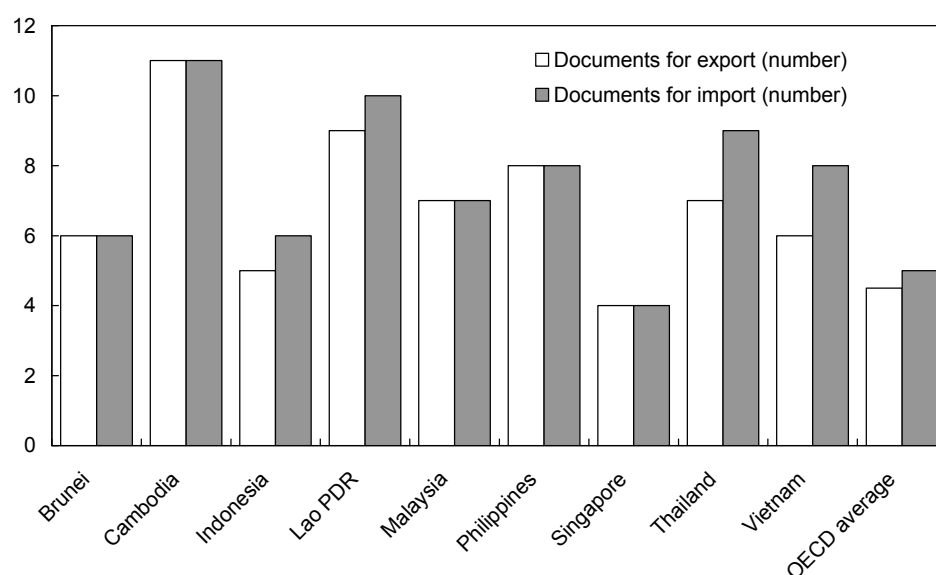
Note: Number of documents.
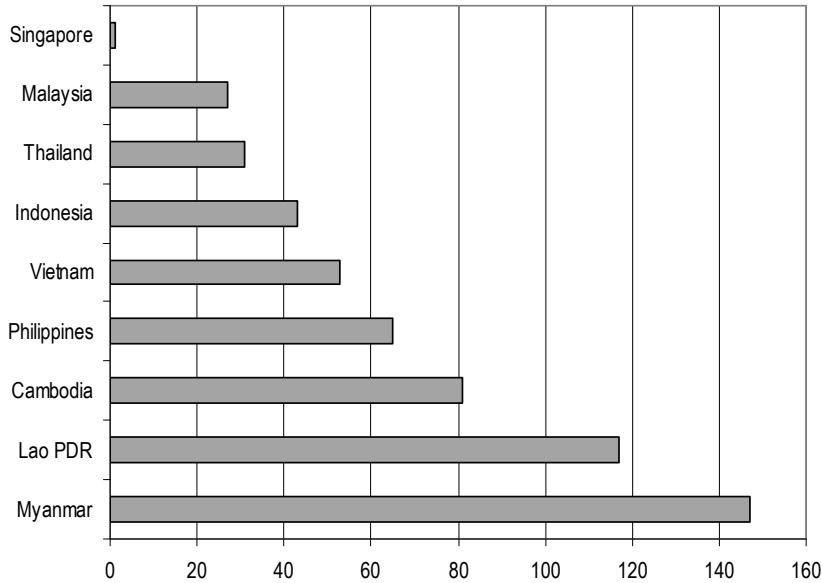*Source*:   World Bank (2007a).

The study covers 150 countries. Once again, Singapore comes out on top among all the countries ranked by the survey. Malaysia also makes it into the top quintile and Thailand into the top quartile. Among ASEAN countries rated, all but Cambodia, Lao PDR and Myanmar are in the top half. The lowest ranked among the ASEAN countries is Myanmar at 147th.

Figure 3 shows the rankings of ASEAN countries according to the LPI and Figure 4 gives their overall scores. Only one country in ASEAN, Singapore, has an LPI score above the OECD average but Malaysia and Thailand are close. The average score for the ASEAN countries is 20.4% below the average score for the OECD countries.

Figure 3: Logistic performance index (LPI) rankings

Note: Rank out of 150 countries in 2007 study.
Source: World Bank (2007b).

Table 1 summarises the differences in scores on the seven sub-components of the LPI between ASEAN countries and OECD countries and within ASEAN and the OECD. There are two points to note:

- the ASEAN average is below the OECD average by about 20% for the LPI as a whole and also for most of the sub-components. The exception is domestic logistic costs; ASEAN is ahead of the OECD by 13.4% on this measure.

- the variance of the scores between ASEAN countries is much greater than the variability between OECD countries. For three sub-components and the overall LPI, the intra-ASEAN variance is more than three times the intra-OECD variance. Again the exception that stands out is domestic logistic costs; the variance within the two groups of countries is very similar for this component and relatively small for ASEAN.

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Figure 4: Logistic performance index (LPI) scores
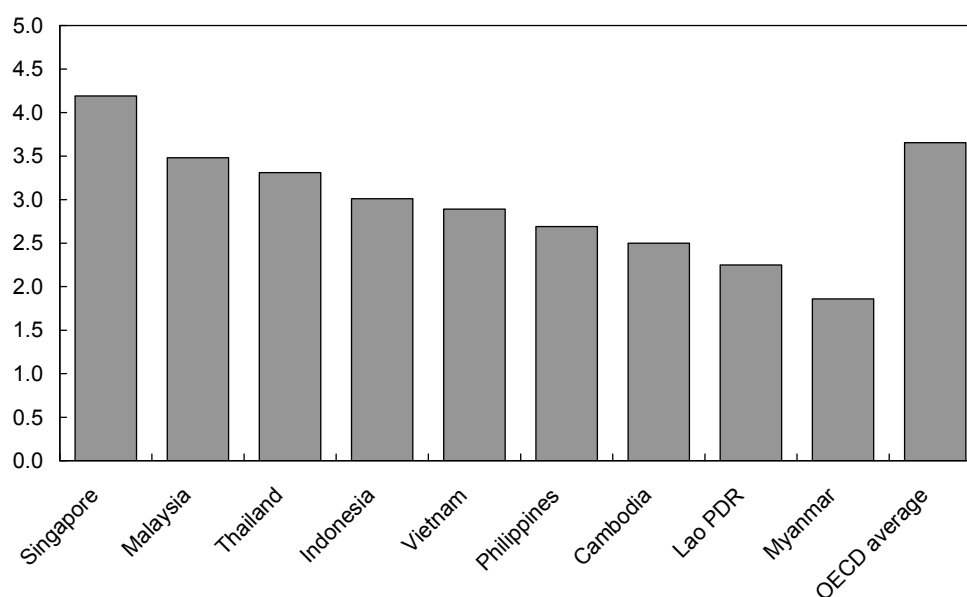
Note: Score on a scale of 1 (low) to 5 (high).
Source: World Bank (2007b).

Table 1:   ASEAN and OECD logistic performance index scores compared

	ASEAN Average	OECD Average	OECD-ASEAN Difference	ASEAN Variance	OECD Variance	OECD Variance to ASEAN Variance
Logistical Performance Index	2.91	3.65	-20.39%	0.49	0.15	30.06%
Efficiency of customs & others in clearance	2.77	3.46	-20.01%	0.38	0.18	46.51%
Quality of transport & IT infrastructure	2.70	3.62	-25.21%	0.62	0.25	39.43%
Ease & affordability of international shipment	2.90	3.50	-17.29%	0.43	0.12	27.70%
Compotence of local logistical industry	2.89	3.65	-20.81%	0.45	0.17	38.85%
Tracking & tracing ability	2.87	3.71	-22.52%	0.68	0.15	22.38%
Domestic logistics costs	2.97	2.62	13.38%	0.14	0.12	85.14%
Timeliness in reaching destinations	3.33	4.03	-17.36%	0.51	0.11	21.95%

Source: Calculated by NZIER from World Bank (2007b).

*3.2.2 Country specific performance data*

Each respondent to the survey from which the World Bank developed the LPI was also asked to also evaluate the logistics performance of the country in which they are based and provide time and cost data relating to it. The World Bank has also published the data which cover these aspects of trade (World Bank (2007b) Table A3):

- the percentage rate of physical inspection of containers;

- the number of days for customs clearance;

- the time for exports (median) and imports (best and median) between shipper and port. The best relates to the 10th percentile of shipments and the median to the 50th percentile;

- the number of border agencies for exports and imports;

- the percentage of respondents who consider there is a simple and inexpensive review process available; and

- the typical charge in United States dollars to import and export a 40-foot container or semi-trailer.

These data are reported in Figures 5-10. There are no data for Brunei or Lao PDR

Figure 5:   Rate of physical inspection of containers (%)
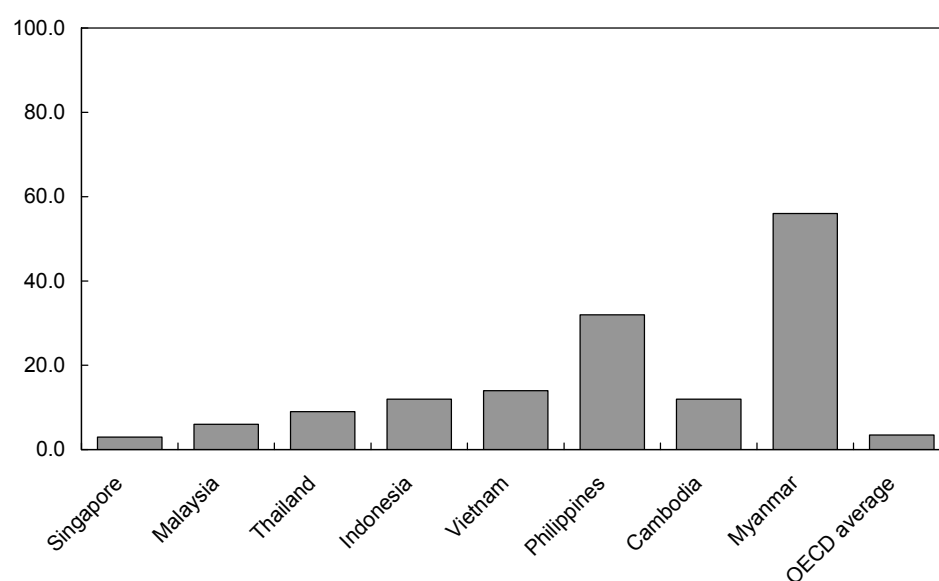
Source: World Bank (2007b).

Figure 6:   Customs clearance time (Number of days)
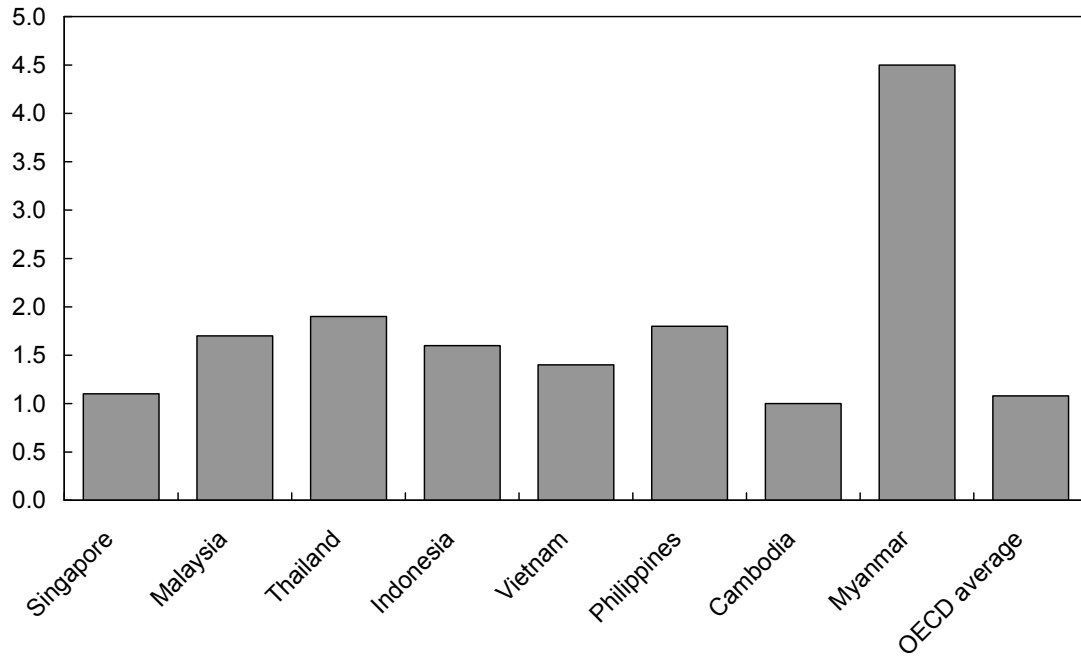
Source: World Bank (2007b).

Figure 7:   Time between shipper/consignee and port
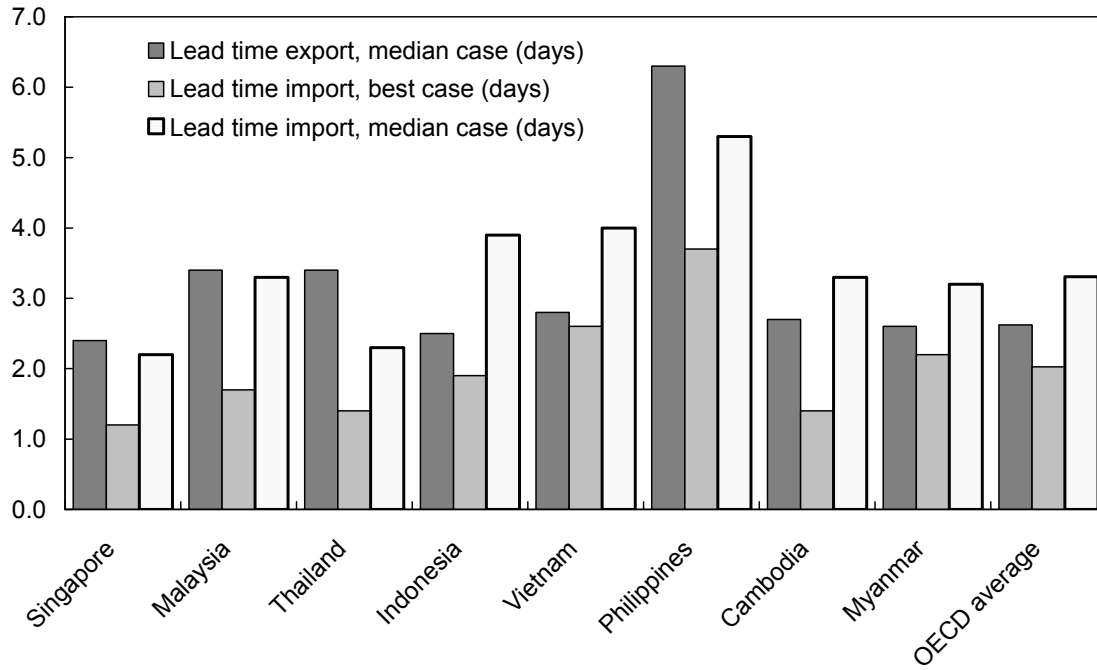
Note: Number of days: median = 50 percentile and best =10 percentile.
Source: World Bank (2007b).

Figure 8:   Number of border agencies (Average of responses)

Legend:
- Number of border agencies exports
- Number of border agencies imports

X-axis: Singapore, Malaysia, Thailand, Indonesia, Vietnam, Philippines, Cambodia, Myanmar, OECD average
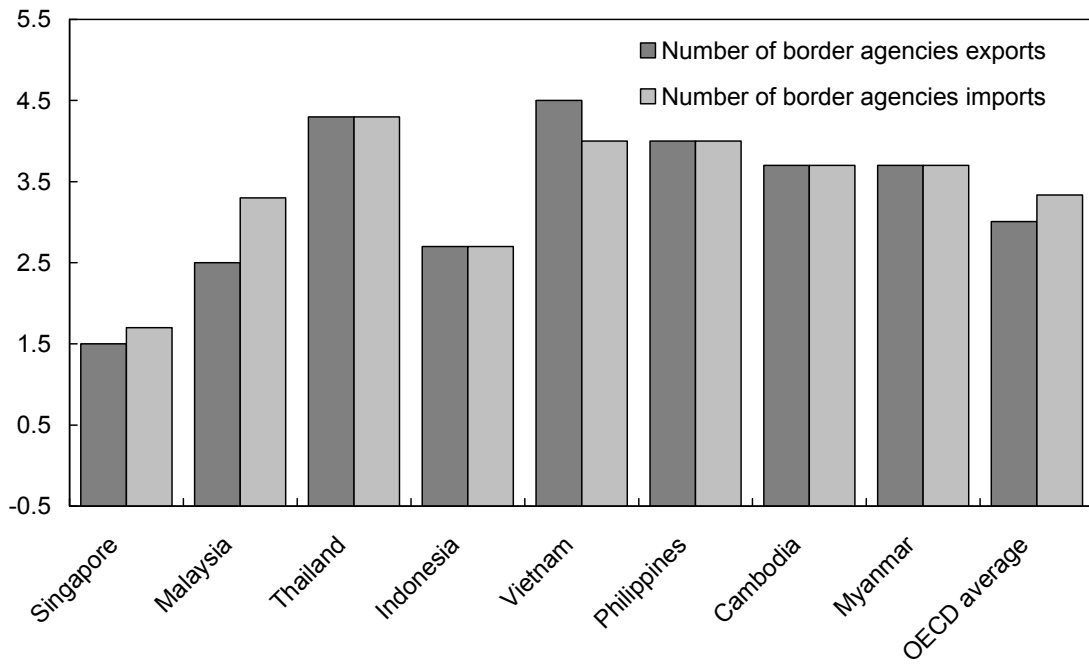
Source: World Bank (2007b).

Figure 9:   Possibility of review procedure

X-axis: Singapore, Malaysia, Thailand, Indonesia, Vietnam, Philippines, Cambodia, Myanmar, OECD average
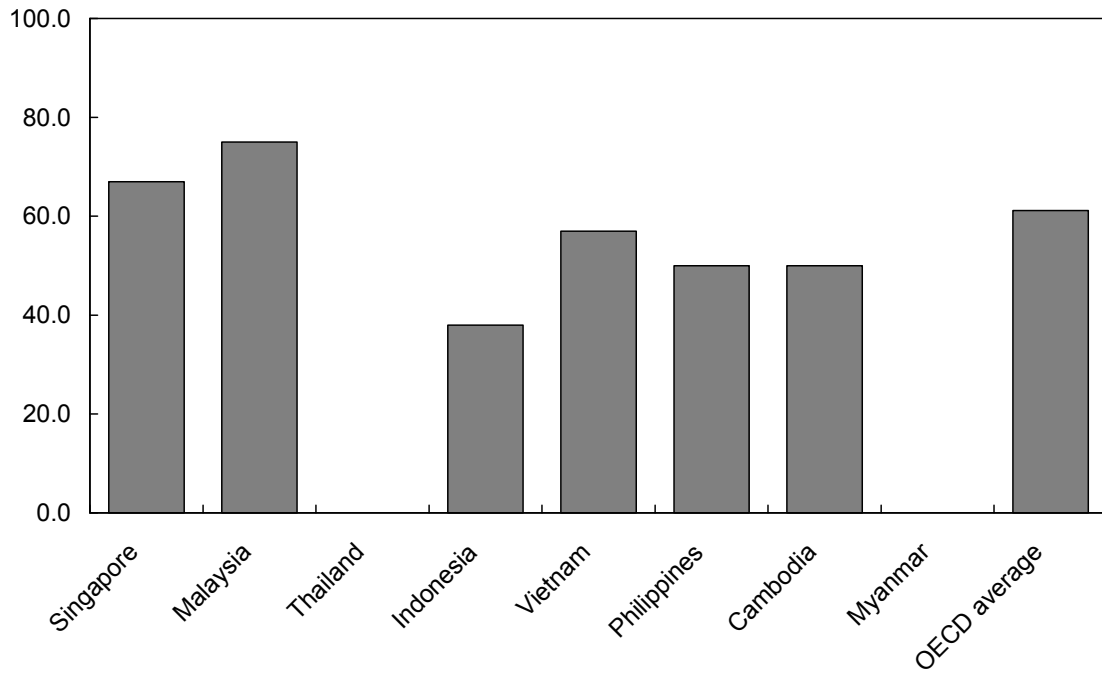
Note: Percentage of respondents answering a simple and inexpensive review procedure is available.
Source: World Bank (2007b).

Figure 10: Typical charge for 40-foot container
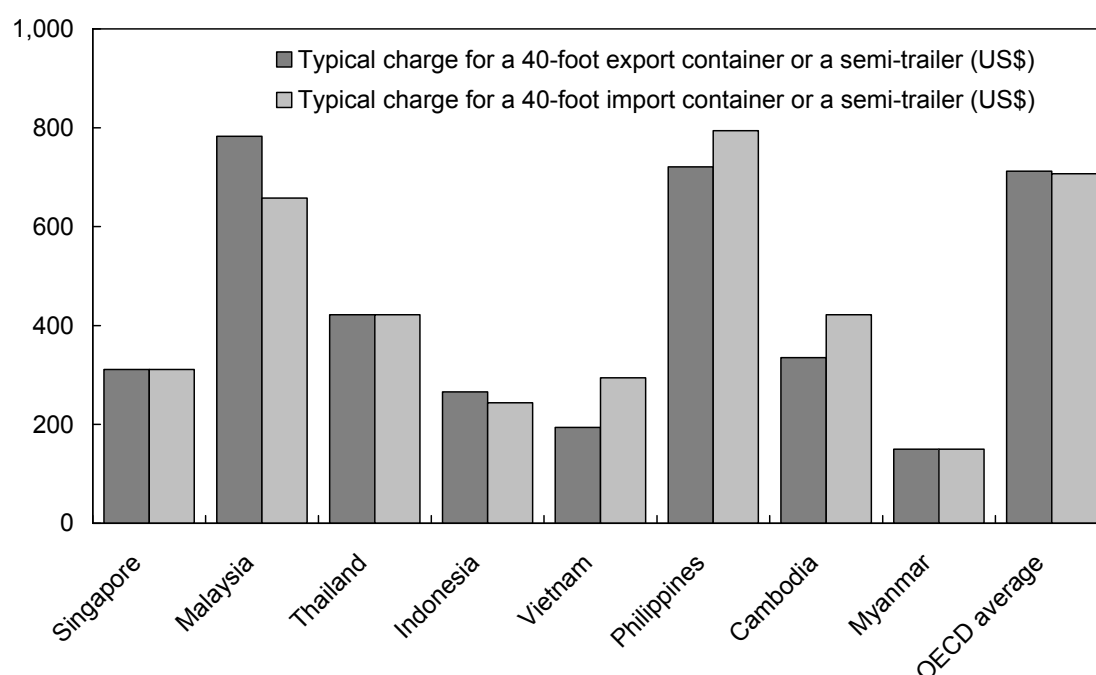
Note: $US per container or semi-trailer.
Source: World Bank (2007b).

It is very clear from this data that, according to the professionals surveyed, there are significant differences between ASEAN countries in the extent to which trade is facilitated in practice by logistics. and customs procedures. Moreover, compared with the OECD average, customs inspection rates and clearance times are high and the possibilities of an efficient review, low. On shipping costs, ASEAN generally scores well compared with the OECD; Malaysia and the Philippines are exceptions.

These data show that for most ASEAN countries there is considerable scope to improve performance in regard to trade facilitation as we have broadly defined it. They also show that even the very well performing countries in the region have at least one aspect they could improve.

4. THE ECONOMIC IMPACTS OF TRADE FACILITATION

The economic impacts of trade facilitation fall into three categories:

- the impact on trade flows and hence upon the gains from trade;
- the impact on government revenue; and
- the impact on foreign direct investment.

There has been a considerable amount of research in recent years looking at the first two of these impacts. Quite a lot of this research relates to developing economies and some of it to countries in East Asia. The research on all three aspects was surveyed by an OECD working party in late 2005.

4.1. Trade flows

From its survey of the results of studies using mainly gravity and CGE models, the key conclusions about the relationship between trade facilitation and trade flows drawn by the OECD working party are (OECD (2005) p.15):

- all the studies indicate there is a positive link between trade facilitation and the volume of trade; there is significantly increased trade for even modest reductions in TTCs;
- the studies also indicate that trade in both rich and poor countries stand to gain from trade facilitation; in relative terms the gains are higher for developing economies than developed economies as they usually have more improvements in efficiency to make;
- both the country improving its customs procedures and the countries exporting to this country stand to benefit but the country that improves its border procedures benefits most, so unilateral action pays;
- the potential gains from increased port/transport efficiency are considerably larger than for increasing efficiency of customs procedures; and
- the quantitative results and the results from business surveys are consistent; inefficient movements of goods across borders are a serious impediment to trade

and growth.

The OECD paper notes these key conclusions are supported by the country case studies also surveyed.

The recent World Bank survey of 800 logistics experts has provided some other key insights into the relationship between trade, growth and logistic performance (World Bank, 2007b, p.1):

- while costs and timeliness are of paramount importance, traders are primarily concerned with the overall reliability of the supply chain;
- country performance is largely influenced by the weakest link in the supply chain; poor performance in just one or two areas can have serious repercussions in overall performance;
- modernising customs is usually not enough; the co-ordination of border procedures between customs and other agencies remains an important concern;
- logistic performance is more and more determined by the availability of quality, competitive private sector services such as trucking, customs brokering and warehousing;
- policymakers should look beyond the narrow trade facilitation issues that focus on road infrastructure and information technology in customs to also reform logistic service markets and reduce co-ordination failures across the whole supply chain;
- a focus on improving the whole of the supply chain in parallel as part of a comprehensive approach appears to be more likely to succeed than a piecemeal approach.

4.2. Revenue collection

Tariff revenue can be important for the governments of developing economies and especially so for some of the least developed economies. This is because trade taxes are sometimes one of the few practicable means of financing public administration available to the government. Consumption and income taxes are difficult or impossible to collect efficiently in many developing economies.

A number of case studies have shown that modernisation of the custom service can significantly increase the actual revenue collected from trade taxes by reducing opportunities for smuggling by using false declarations or bribing officials. The case studies suggest (OECD (2005) pp18-23):

- the benefits of customs modernisation have exceeded the costs by a wide margin;
- even moderate reform can improve custom revenue;
- the financial results may take some time to emerge as the reforms are often implemented in stages over time; and
- the biggest gains are often available to the countries with less capacity to undertake the customs reform programme, so technical assistance in capacity building can be important.

4.3. Foreign direct investment

One of the key drivers of foreign direct investment is to access the labour resources of developing economies. The efficiency with which inputs can be imported and outputs exported are factors in the investment appraisals supporting the decisions of firms looking to invest in international outsourcing. Case studies have confirmed this to be the case. Since trade facilitation increases the efficiency in this regard it will stimulate higher levels of foreign direct investment with its consequential positive effects on the economy's growth.

There have, however, been very few studies that have empirically examined the importance of trade facilitation to foreign direct investment. One that did, found that customs clearance times were a key determinant of foreign investment (OECD (2005) p.24).

5. ASEAN AND TRADE FACILITATION

5.1. Previous initiatives

A number of the past activities of ASEAN have been aimed at trade facilitation in a general sense. These include (see ASEAN (2003?) and ASEAN (2007a)):

- the introduction in 2004 of a green lane system for common effective preferential tariff (CEPT) goods;
- harmonisation of the customs valuation methods in ASEAN through the adoption of the WTO valuation agreement;
- promotion of harmonisation and transparency in the classification of goods through the implementation of the ASEAN Harmonised Tariff Nomenclature (AHTN) in 2004; and
- development of Strategic Plan of Customs Development 2005-10 (SPCD) to modernise the customs environment.

5.2. The ASEAN Economic Community Blueprint

ASEAN has recently released its Blueprint to establish the ASEAN Economic Community (AEC). The key characteristics of the AEC will be (ASEAN, 2007b):

- a single market and production base for the ten ASEAN countries;
- a highly competitive economic region;
- a region of equitable economic development; and
- a region fully integrated into the global economy.

Trade facilitation, in the broad sense we have defined it, has been identified by ASEAN as key to the development of AEC and, particularly, to the development of a single market and production base by allowing the free flow of goods within the region.
The Blueprint sets out a number of action points to create a free-flow of goods, including ones in the following areas:

- trade facilitation:

  - develop simple, harmonised and standardised trade and customs processes, procedures and related information flows;

- customs integration:

  - integrate customs structures, modernise tariff classification, customs value and origin determination

  - establish ASEAN e-Customs;

  - improve capability and narrow development gaps; and

  - adopt risk based approaches;

- ASEAN single window:

  - develop ten national single windows of individual member countries which enable the single submission of data and information and single decision-making for customs clearance of cargo; and then

  - integrate the national single windows into an ASEAN single window; and

- standards and technical barriers to trade:

  - harmonise standards, technical regulations and conformity assessment procedures through implementation of the ASEAN Policy Guideline on Standards and Conformance.

The AEC Blueprint also identifies that logistics development is important to creating a competitive economic region. To help promote a competitive region the Blueprint lists action points for infrastructure development. Included among these are actions in the following areas:

- transport co-operation:

  - enhance transport facilitation and logistic services;

  - promote multi-modal transport infrastructure linkages and connectivity;

  - facilitate transport and tourism integration; and

  - further liberalise the air and maritime transport sectors;

- land transport:

  - complete the Singapore-Kunming Rail Link; and

  - complete the ASEAN Highway Network;

- maritime and air transport:
    - adopt the general principles and framework for an ASEAN Single Shipping Market; and
    - develop and implement the ASEAN Single Aviation Market;
- information infrastructure:
    - facilitate inter-connectivity and technical inter-operability among ICT systems;
    - leverage national networks into a regional information infrastructure;
    - improve trust and confidence in the use of the internet and security of electronic transactions, payments and settlements;   and
    - develop high speed inter-connections among all national information infrastructures.

ASEAN has developed a very detailed timeline for implementation and completion of the various action points under the blueprint and provided that "the ASEAN Secretariat shall review and monitor compliance of implementing the Blueprint." To assist it with this task, the ASEAN Secretariat is required to develop and maintain a set of statistical indicators and AEC scorecards.

6. SCORECARD FOR TRADE FACILITATION

We have combined the priorities of the AEC Blueprint and the information relating to each country in the two World Bank data sources relating to trade to create a scorecard for measuring trade facilitation in ASEAN. The data used to construct the scorecard come from World Bank (2007a and 2007b) reports and includes information on logistics performance, the time and costs of trading, and customs performance.

The scorecard can be updated annually using the information from the annual World Bank Ease of doing business survey, updates to logistics performance information, through surveying international traders in the various ASEAN countries and incorporating the commitments made to the ASEAN Single Window and conformance with standardised ASEAN customs practises. Annual updates to the scorecard would provide information on and leverage for encouraging improvements to
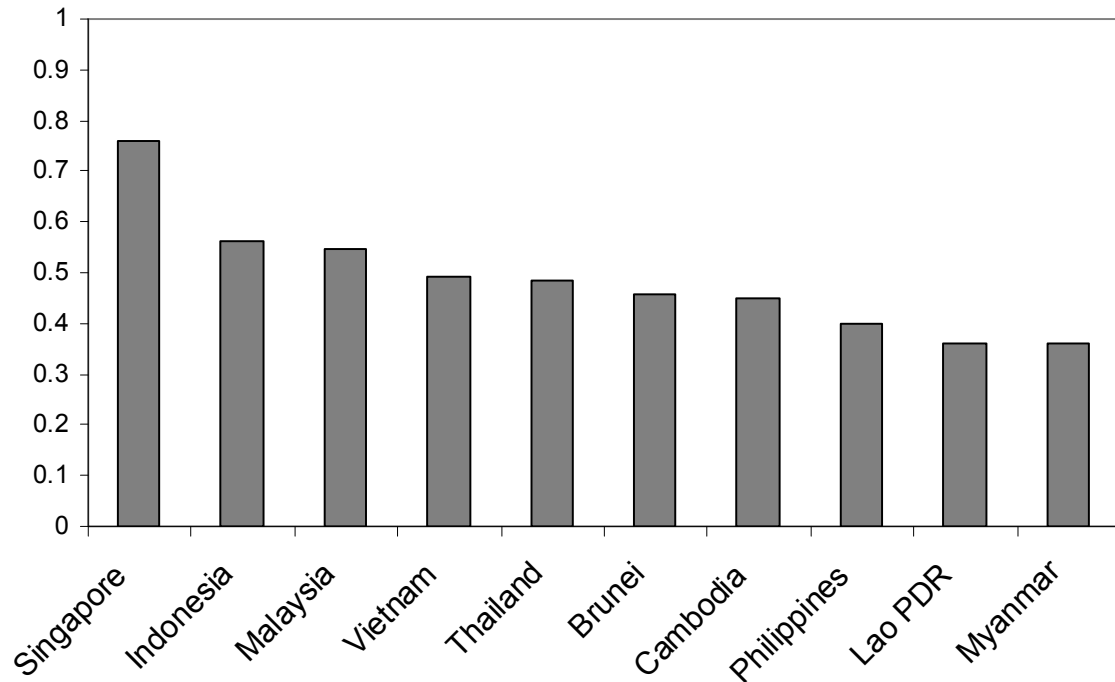
trade facilitation.

To create the scorecard various indicators of trade facilitation have been weighted into an index based on how closely aligned they are with the priorities set out in the AEC blueprint:

- commitment to the ASEAN Single Window receives a weight of 0.1 reflecting the significance of this separate strategy to economic integration and trade facilitation in the region;
- the Logistics Performance Index (LPI) which includes 7 logistics components as listed in 3.2.1 is given a weight of 0.45; and
- the importance of moving towards conformance with an ASEAN standard as emphasised in the AEC blueprint is reflected in the weighting system by allocating the remaining 0.45 to indicators of customs procedures and the cost and time required for exporting and importing.

Appendix 1 provides the details of the raw data, scores and scoring system, and weights used in the scorecard calculation.

Figure 11 shows the results of the first calculation of trade facilitation scorecard for ASEAN. The scorecard indicates that Singapore is most conducive to trade. Singapore has better quality logistics services, faster customs processing and trading times, and lower costs than the rest of ASEAN. Conversely, the Philippines, Lao PDR and Myanmar have the lowest indexes highlighting the difficulties traders experience in these countries. The initial calculation of the scorecard shows that in 2007 Singapore was the best performer among ASEAN countries in terms of trade facilitation while the Philippines, Lao PDR and Myanmar have substantial room for improvement, particularly in the areas of logistics performance and customs procedures. Singapore scores well because it has higher quality logistics services, faster customs processing and trading times, and lower costs than the rest of ASEAN. The Philippines have higher per unit costs of trade and longer expected trading times, Lao PDR and the Philippines require a large amount of documentation, and Myanmar and Lao PDR have low logistics performance indexes.

Figure 11:   Trade Facilitation Index

Source: NZIER.

7.   POLICY IMPLICATIONS

7.1. Limited need to develop policy options

The research and data we reported at the start of this section lend considerable support to ASEAN's current policy intentions in relation to trade facilitation as these are set out in the AEC Blueprint and the accompanying detailed timelines. More specifically, they support the following assumptions which are embodied in ASEAN's current policy and implementation plans:

- there are considerable opportunities within ASEAN to make gains from trade facilitation and so pursuing them should be a priority;
- when planning and implementing reforms in this area it is best to take a broader view of trade facilitation than to consider it is principally customs process reform;

and

- progressing improvements across the whole supply chain in parallel is preferable to piecemeal development of narrow areas in isolation.

Other aspects of ASEAN's current policy are also obviously sound. Examples are, the development of detailed implementation timelines and priorities in advance of actual implementation and the empowering of the ASEAN Secretariat with the role of monitoring and reporting performance relative to these plans and to use statistical indicators and scorecards to assist it do this.

In short, there is nothing in the research and data we reviewed that indicates any need for ASEAN to change policy intentions relating to trade facilitation and supply chain improvement from those in the AEC Blueprint. The key will be to ensure the current policy intentions are translated by the various governments and agencies into action and actually implemented.

7.2. Research opportunities

It is in this aspect that we consider ERIA is able to offer assistance to ASEAN and its Secretariat in two ways:

- ERIA could continue to play a role in developing and refining the statistical indicators and scorecards the ASEAN Secretariat will use to monitor and report on progress. An initial ASEAN scorecard for trade facilitation is reported in Section 6; and
- policy makers and politicians can need good information on the potential gains for the economy as a whole and consumers in order to overcome opposition to reform. One role for ERIA would be to provide the research to establish the benefits and costs of reform and identify their distribution.

While there are typically many who will benefit from trade facilitation reform there are also, in some cases, a few who will suffer significantly because a monopoly rent or source of income they previously enjoyed is taken away. The losers are often employees in the very same public entities which need to develop and implement the reforms.

Reducing the amount of paper work clearly threatens those whose job it is to create and manage it. Reducing the rates of cargo inspection threatens the livelihoods of those who carry out the inspections. Reducing the complexity and unpredictability of customs procedures and increasing the speed of decision making threatens the incomes of those who have earned rents by ensuring the outcomes of the exercise of discretion are favourable and 'facilitating' the smooth flow of cargo through approval procedures.

7.3. Specific opportunities

The above suggests the following specific research opportunities for ERIA to assist ASEAN policy makers and politicians in the context of development of the AEC:

- a gravity model study to assess the impact of the costs and time of border procedures among ASEAN countries on trade flows;
- case studies of the likely level of leakage of trade revenue among selected ASEAN countries;
- case studies of the impact of border costs and delays on the investment decisions of potential foreign direct investors in ASEAN;
- development, testing and refinement of scorecards and statistical indicators relating to trade facilitation and logistics development; and
- case studies monitoring the outcomes of trade facilitation reforms in ASEAN countries to see if there are lessons to be learned by other economies.

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APPENDIX 1. TRADE FACILITATION SCORECARD

Table A1: Raw data

	Logistics Perfomance Index	ASEAN Single Window due date	Customs clearance (days)	Lead time export, median case (days)	Lead time import, median case (days)	Typical charge for a 40-foot export container or a semi-trailer (US$)	Typical charge for a 40-foot import container or a semi-trailer (US$)	Number of border agencies exports	Number of border agencies imports	Possibility of a review procedure (%)	Rate of physical inspection (%)	Documents export	Documents Import
Brunei	2.9	2008	6.0	3.3	3.4	398	412	3.4	3.4	42	18	6	6
Cambodia	2.5	2012	1.0	2.7	3.3	335	422	3.7	3.7	50	12	11	11
Indonesia	3.0	2008	1.6	2.5	3.9	266	244	2.7	2.7	38	12	5	6
Lao PDR	2.3	2012	3.0	3.3	3.4	398	412	3.4	3.4	42	18	9	10
Malaysia	3.5	2008	1.7	3.4	3.3	783	658	2.5	3.3	75	6	7	7
Myanmar	1.9	2012	4.5	2.6	3.2	150	150	3.7	3.7	0	56	7	8
Philippines	2.7	2008	1.8	6.3	5.3	721	794	4.0	4.0	50	32	8	8
Singapore	4.2	2008	1.1	2.4	2.2	311	311	1.5	1.7	67	3	4	4
Thailand	3.3	2008	1.9	3.4	2.3	422	422	4.3	4.3	0	9	7	9
Vietnam	2.9	2012	1.4	2.8	4.0	194	294	4.5	4.0	57	14	6	8

Notes: (1)   imputed ASEAN averages shaded.
Source: World Bank (2007a & 2007b).

Table A2:   Scoring system

Weight	Indicator	Score
0.45	Logistics Performance Index	(LPI/5)
0.1	Single window	
	yes	1
	some move	0.5
	no	0
0.07	Customs clearance (days)	
	0 - 1	1
	1.1 - 1.5	0.8
	1.6 - 2	0.6
	2.1 - 2.5	0.4
	2.6 - 3	0.2
	3+	0
0.05	Lead time export, median case (days)	
	0 - 1	1
	1 - 2	0.8
	2+ - 3	0.6
	3+ - 4	0.4
	4+ - 5	0.2
	5+	0
0.05	Lead time import, median case (days)	
	0 - 1	1
	1 - 2	0.8
	2+ - 3	0.6
	3+ - 4	0.4
	4+ - 5	0.2
	5+	0
0.04	Typical charge for a 40-foot export container or a semi-trailer (US$)	
	0-100	1
	101-200	0.8
	201-300	0.6
	301-400	0.4
	401-500	0.2
	500+	0

Weight	Indicator	Score
0.04	Typical charge for a 40-foot import	
	0-100	1
	101-200	0.8
	201-300	0.6
	301-400	0.4
	401-500	0.2
	500+	0
0.05	Number of border	
	1 - 2	1
	2 - 3	0.75
	3 - 4	0.5
	4 - 5	0.25
	5+	0
0.05	Number of border	
	1 - 2	1
	2 - 3	0.75
	3 - 4	0.5
	4 - 5	0.25
	5+	0
0.05	Possibility of a	proportion
0.05	Rate of physical inspection (%)	proportion
0.04	Documents Export	
	0-2	1
	2-4	0.75
	4-6	0.5
	6-8	0.25
	8+	0
0.04	Documents Import	
	0-2	1
	2-4	0.75
	4-6	0.5
	6-8	0.25
	8+	0

Source: NZIER.

Table A3:   Adjusted scores

	Logistics Perfomance Index	ASEAN Single Window due date	Customs clearance (days)	Lead time export, median case (days)	Lead time import, median case (days)	Typical charge for a 40-foot export container or a semi-trailer (US$)	Typical charge for a 40-foot import container or a semi-trailer (US$)	Number of border agencies exports	Number of border agencies imports	Possibility of a review procedure (%)	Rate of physical inspection (%)	Documents export	Documents Import
Brunei	0.58	0.50	0.00	0.40	0.40	0.40	0.20	0.50	0.50	0.42	0.18	0.50	0.50
Cambodia	0.50	0.00	1.00	0.60	0.40	0.40	0.20	0.50	0.50	0.50	0.12	0.00	0.00
Indonesia	0.60	0.50	0.60	0.60	0.40	0.60	0.60	0.75	0.75	0.38	0.12	0.50	0.50
Lao PDR	0.45	0.00	0.20	0.40	0.40	0.40	0.20	0.50	0.50	0.42	0.18	0.00	0.00
Malaysia	0.70	0.50	0.60	0.40	0.40	0.00	0.00	0.75	0.50	0.75	0.06	0.25	0.25
Myanmar	0.37	0.00	0.00	0.60	0.40	0.80	0.80	0.50	0.50	0.00	0.56	0.25	0.25
Philippines	0.54	0.50	0.60	0.00	0.00	0.00	0.00	0.25	0.25	0.50	0.32	0.25	0.25
Singapore	0.84	1.00	0.80	0.60	0.60	0.40	0.40	1.00	1.00	0.67	0.03	0.75	0.75
Thailand	0.66	0.50	0.60	0.40	0.60	0.20	0.20	0.25	0.25	0.00	0.09	0.25	0.00
Vietnam	0.58	0.00	0.80	0.60	0.40	1.00	0.60	0.25	0.25	0.57	0.14	0.50	0.25

Source: NZIER.

Table A4:   Weighted scores

	Logistics Perfomance Index	ASEAN Single Window due date	Customs clearance (days)	Lead time export, median case (days)	Lead time import, median case (days)	Typical charge for a 40-foot export container or a semi-trailer (US$)	Typical charge for a 40-foot import container or a semi-trailer (US$)	Number of border agencies exports	Number of border agencies imports	Possibility of a review procedure (%)	Rate of physical inspection (%)	Documents export	Documents Import
Brunei	0.26	0.05	0.00	0.02	0.02	0.02	0.01	0.03	0.03	0.02	0.01	0.02	0.02
Cambodia	0.23	0.00	0.07	0.03	0.02	0.02	0.01	0.03	0.03	0.03	0.01	0.00	0.00
Indonesia	0.27	0.05	0.04	0.03	0.02	0.02	0.02	0.04	0.04	0.02	0.01	0.02	0.02
Lao PDR	0.20	0.00	0.01	0.02	0.02	0.02	0.01	0.03	0.03	0.02	0.01	0.00	0.00
Malaysia	0.31	0.05	0.04	0.02	0.02	0.00	0.00	0.04	0.03	0.04	0.00	0.01	0.01
Myanmar	0.17	0.00	0.00	0.03	0.02	0.03	0.03	0.03	0.03	0.00	0.03	0.01	0.01
Philippines	0.24	0.05	0.04	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.02	0.01	0.01
Singapore	0.38	0.10	0.06	0.03	0.03	0.02	0.02	0.05	0.05	0.03	0.00	0.03	0.03
Thailand	0.30	0.05	0.04	0.02	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00
Vietnam	0.26	0.00	0.06	0.03	0.02	0.04	0.02	0.01	0.01	0.03	0.01	0.02	0.01

Source: NZIER.