

ASEAN ECONOMIC COMMUNITY'S LOGISTICS PERFORMANCE INDEX BENCHMARK

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ABSTRACT

Purpose: ASEAN Economic Community, comprising of 10 ASEAN countries, has agreed to develop a single market and a single production base. Regional supply chain can be redesigned in order to optimize supply chain performance. However, the logistics performance of each country is disparate. Therefore, this paper aims at investigating and benchmarking the logistics performance of 10 ASEAN countries.

Design/methodology/approach: 6 Logistics Performance Indexes by the World Bank, i.e., Customs, Infrastructure, International shipments, Logistics quality and competence, Tracking and tracing and Timeliness, are used to benchmark logistics performance of 10 ASEAN countries. To allow benchmark the different proficiency, Gross Domestic Market (GDP) per capita is crossed over. Data from 2010, 2012, 2014 and 2016 are also taken and reflect the logistics development trends.

Findings: The paper indicates normalized gaps between 10 ASEAN countries in terms of logistics performance. Findings also indicates overall logistics performance of ASEAN as a single entity.

Originality/value: The findings help understanding logistics performance and limitation of each country.

Keywords: ASEAN Economic Community, Logistics Performance Index

INTRODUCTION

ASEAN Economic Community (AEC) is a cooperative initiative of 10 ASEAN countries, i.e., Brunei Darussalam (BRN), the Kingdom of Cambodia (KHM), the Republic of Indonesia (IDN), the Lao People's Democratic Republic (LAO), Malaysia (MYS), the Union of Myanmar (MMR), the Republic of the Philippines (PHL), the Republic of Singapore (SGP), the Kingdom of Thailand (THA) and the Socialist Republic of Viet Nam (VNM). The aims is of the initiatives is to transform 10 economies into a single market and a single production base, via 5 core elements, i.e., (i) free flow of goods; (ii) free flow of services; (iii) free flow of investment; (iv) freer flow of capital; and (v) free flow of skilled labour. This will enable ASEAN economies to compete international forces by strengthen internal/ regional supply chain. (ASEAN Secretariats, 2008)

ASEAN countries occupy more than 629 million people. ASEAN GDP at current price is at 2,432 USD billion, contributing 3.3% to the world. ASEAN trade goods to the world market at 7.6% share (2,270 USD billion). Intra-AEC trading is at 24%. Intra-AEC netflow investment is at 18.4%.

| | BRN | KHM | IDN | LAO | MYS | MMR | PHL | SGP | THA | VNM |
|---|------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|
| Land Area (1,000 Sqkm) | 5.7 | 181.0 | 1,913 .5 | 236.8 | 330.3 | 676.6 | 300.0 | 0.7 | 513.1 | 330.9 |
| Population (1,000,000) | 0.4 | 15.4 | 255.5 | 6.9 | 30.5 | 52.5 | 101.6 | 5.5 | 69.0 | 91.7 |
| GDP at Current Market Prices (USD billion) | 12.9 | 18.4 | 857.6 | 12.6 | 294.4 | 65.4 | 289.5 | 291.9 | 395.7 | 193.4 |

| | | | | | | | | | | |
|--|-----|-----|-------|-----|-------|------|------|-------|-------|-------|
| Export (USD billion) | 6.3 | 8.8 | 150.3 | 3.7 | 199.9 | 11.4 | 58.7 | 366.3 | 214.4 | 162.0 |
| Total FDI Inflows (USD billion) | 0.2 | 1.7 | 16.1 | 1.1 | 11.3 | 2.8 | 5.7 | 61.3 | 8.0 | 11.8 |

Table 1: AEC Countries Basic Information Source: ASEAN Secretariats, 2016

ASEAN ECONOMY

However, ASEAN countries are disparate (see Table 1). Extremely large economies of Indonesia possess a GDP of 857.61 USD billion. While Laos and Brunei are among the small economies at less than 13 USD billion. To reflect the economies regardless of country size difference, GDP per capita is normally used to indicate economic potential of the countries. GDP per capita also ranges from 79,700-87,100 USD (Brunei and Singapore) to the low at less than 10,000 USD (Philippines, Cambodia, Vietnam, Myanmar and Laos). Only these figures can raise so many questions on how the AEC can really be integrated with such differences (see Figure 1).

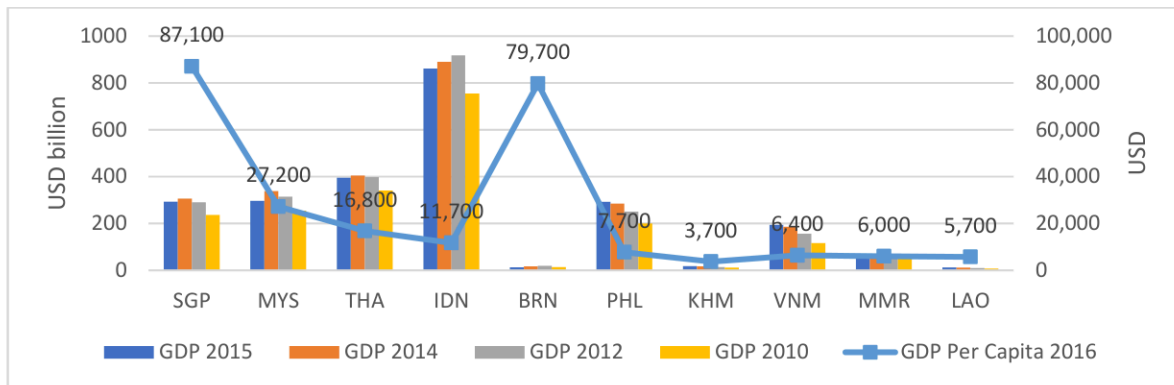


Figure 1: 2010, 2012, 2014 and 2015 GDP and 2016 GDP per Capita of AEC Countries

AEC COUNTRIES IN BREIF

Singapore is undoubtedly world's top economies. Regardless of small resources, its economics is significant to AEC and world's trade and logistics. Singapore ports are among the busiest port of the world. Trade, investment, import and export drives Singapore economies.

Brunei is also a small, but wealthy. Crude oil and natural gas production account for 90% of its GDP. Brunei is world top ten exporter of the substance in the world.

Malaysia, Thailand, Indonesia and Philippines, also known as "Tiger Cub Economies" or "Four Asian Tigers", are developing, middle-income and newly industrialized economies. Manufacturing, trade and service industries are their top income.

Cambodia, Lao, Myanmar and Vietnam, also known as "CLMV", are the new raising economies. With GDP growth of 5-7%, these countries are enjoying massive Foreign Direct Investment by China, Japan and AEC. (ASEAN Secretariat, 2105)

LOGISTICS PERFORMANCE INDEX

Logistics Performance Index (LPI) is World Bank's logistics benchmarking tools, aiming at identifying logistics performance and benchmarking with 160 countries. LPI score is based on survey of related parties to reflect the logistics friendliness of each country. It provides qualitative assessment of a country based on 6 area, as follow:

1. Customs: the efficiency of customs and border management clearance
2. Infrastructure: the quality of trade and transport infrastructure
3. International shipments: the ease of arranging competitively priced shipments
4. Logistics quality and competence: the competence and quality of logistics services—trucking, forwarding, and customs brokerage
5. Tracking and tracing: the ability to track and trace consignments
6. Timeliness: the frequency with which shipments reach consignees within scheduled or expected delivery times

The LPI uses standard statistical techniques to aggregate the data into a single indicator that can be used for cross-country comparisons. (World Bank, 2016)

AEC LOGISTICS PERFORMANCE BENCHMARKING

Here, it can be seen that LPI scores of AEC countries are ranging from 4.14 of Singapore (5th out of 160 countries) to 2.07 of Laos (152th out of 160). While Malaysia, Thailand, Indonesia, Brunei, Philippines, Cambodia and Vietnam are more or less close. Score of these 7 are ranging from 2.80-3.43 at ranks 32 to 73. Figure 2 and 3 summarise 2016 LPI score and rank of AEC countries.

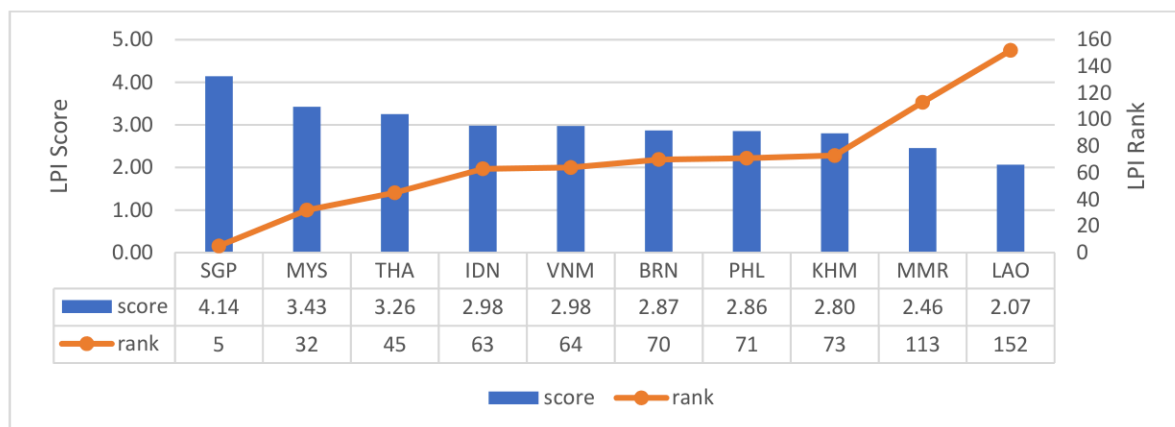


Figure 2: 2016 LPI Score and Rank of AEC Countries

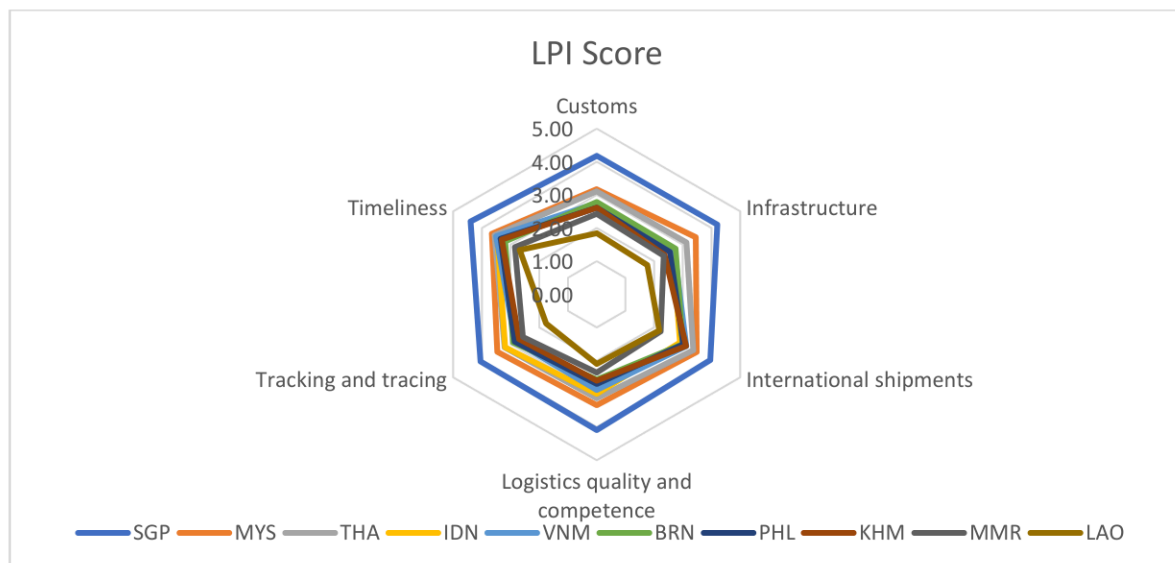


Figure 3: 2016 LPI Score by Indexes of AEC Countries

Again, it can be seen that Singapore is outstanding in every perspectives. Singapore is, in fact, ranked top 5 of the world for the past 10 years. Whereas, Laos and Myanmar are both ranked in 100-band. This indicates a big gap of integration. However, as Figure 1 showed the difference in economic potential, to allow benchmark these different proficiency, Gross Domestic Market (GDP) per capita is crossed over. Here, data from 2010, 2012, 2014 and 2016 are taken and reflect the logistics development trends.

From Figure 4, firstly, it can be seen that all AEC's GDP per capita are raising. This indicates a positive trends where AEC is growing. In fact, for the past 6 years, GDP per capita of AEC grows up to an average of 42% from 2010 to 2016. Singapore is the least among the peers at 24.3%. Thailand also grows slow at 28.1%. However, Malaysia, Indonesia and Philippines grow at the rate of 34-39%. The most growing are CLMV at the rate of 46-58%.

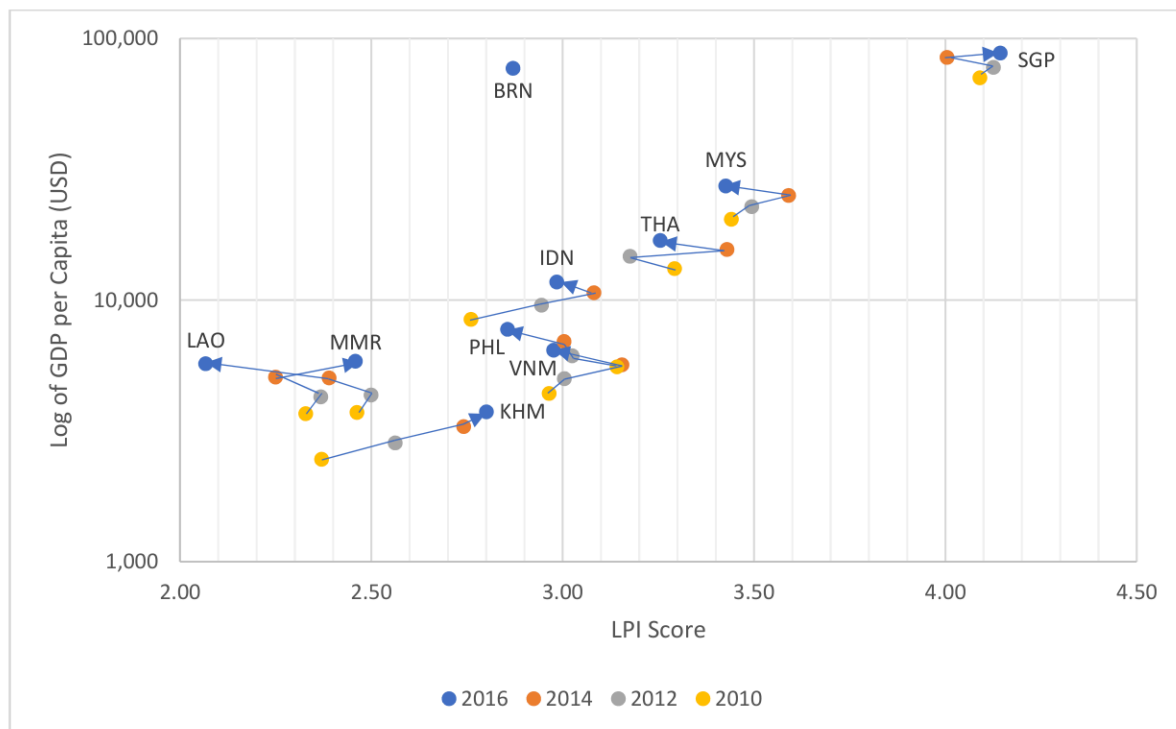


Figure 4: LPI score vs Log of GDP per Capita of AEC Countries: 2010, 2012, 2014 and 2016

Focusing on logistics performance, Cambodia is the only one that improve constantly. Cambodia logistics improves by 18% over the past 6 years of data. Indonesia and Myanmar are among the top improver at the rate of 5-8%. Singapore and Vietnam also improve but at the rate of 1%. For the rest, the score in 2016 is lower than those in 2010.

DISCUSSION

This is an alarm indicator in two perspectives. Firstly, if these countries are to be united in terms of supply chain, there are big gap to be concerned. They are in different leagues. Whilst supply chain is as strong as the weakest link, AEC group is still among the bottom of the pool. Secondly, the logistics improvement is questionable. Where the economics of AEC countries grows, logistics system does not grow accordingly. If logistics is the facilitators of the economic, this finding indicates the big room of improvement, if they need one.

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