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AUTOMOTIVE MANUFACTURING
INVESTMENT ATTRACTIVENESS
OF 5 ASEAN COUNTRIES

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LIST OF ACRONYMS AND ABBREVIATIONS

ABCIs	Asian Business Cycle Indicators
ADB	Asian Development Bank
AEC	ASEAN Economic Community
AFTA	ASEAN Free Trade Area
AFTA-CEPT	ASEAN Free Trade Area – Common Effective Preferential Tariff
ASEAN	Association of Southeast Asian Nations
ASEAN4	Indonesia, Malaysia, the Philippines and Thailand
ATIGA	ASEAN Trade in Goods Agreement
BBC	Brand to Brand Complementation
BOI	Board of Investment
BRICs	Brazil, Russia, India and China
CBU	Completely Built Up
CKD	Completely Knocked Down
CQD	Cost Quality Delivery
FDI	Foreign Direct Investment
GATT	General Agreement of Tariff and Trade
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GVC	Global Value Chain
ICT	Information and Communication Technology
IMD	International Institute for Management Development
IMV	Innovative International Multi-purpose Vehicle
IPSI	Industry Policy and Strategy Institute
JAMA	Japan Automobile Manufacturers Association
KD	Knocked Down
KPK	Corruption Eradication Commission
MFN	Most Favored Nation
MNC	Multinational Corporation
MOIT	Ministry of Industry and Trade
MRA	Mutual Recognition Arrangement
MVPMAP	Motor Vehicle Parts Manufacturers Association of the Philippines
NAFTA	North American Free Trade Agreement
NAP	National Automotive Policy
OECD	Organization for Economic Co-operation and Development
OEM	Original Equipment Manufacturer
PPP	Public Private Partnerships
PPP	Purchasing Power Parity
QCD	Quality, Cost and Delivery
SCM	Supply Chain Management
SKD	Semi Knocked Down
SME	Small and Medium Enterprises
TAI	Thailand Automotive Industry
TEVT	Technical Education and Vocational Training
TIV	Total Industry Volume
VER	Voluntary Export Restriction
WEF	World Economic Forum
WTO	World Trade Organization

CHAPTER 1. INTRODUCTION

This research aims to analyze the attractiveness for automobile investment of ASEAN countries. In order to understand driving factors influencing manufacturing investment decision, data was gathered by interviewing with three respected Japanese automotive companies. This research focuses on five ASEAN countries that Japanese automotive company built their factories. Those countries consisted of Indonesia, Malaysia, the Philippines, Thailand and Vietnam. The result shows the comparison of attractiveness on automotive foreign investment among five ASEAN countries. Recommendation section will describe insights regarding country-wise FDI attractiveness from Japanese automaker's view point. Furthermore, some references for Japanese manufacturing's future policy in ASEAN region will also be provided. This chapter presents information on research background, research objectives, methodology and the overview of following chapters.

Section 1. INDUSTRY BACKGROUND

Thanks to the overflowing of automotive investments, the industry has been generating jobs and bringing a lot of money into ASEAN countries. Japan is one of the countries who made major automotive investment in ASEAN area. When foreign investors make a decision on which country to invest, they look into many factors of "attractiveness" of each country. Thailand has been the country that received the largest total investment. Therefore, Thailand is the most developed in automotive industry when compared to other ASEAN countries. The evidence can be seen in the construction of regional headquarters in Thailand by most major automotive companies. Even though Thailand is currently the most attractive country for automotive investment, the situation can be changed. Once business environment or economic changed, the trend of investment is also altered as well.

However, even though there were many attractiveness evaluations from many organizations such as World Economic Forum (WEF) and International Institute for Management Development (IMD). Those evaluations are overviews situation of the country. They do not go into specific detail into automotive sector. More importantly, the overview attractiveness cannot represent attractiveness

in automotive industry. For example, even though Singapore is ranked second in WEF ranking, there is no investment for automobile manufacturing factory in Singapore. Therefore, factors used in determining overall attractiveness differently affect the attractiveness in automotive industry. So, those factors will be used with the interviewees of automotive companies to see the real effect of each factor specifically in automotive investment.

Section 2. OBJECTIVES

The objectives of this thesis are to study factors influencing Japanese automotive investment decision in ASEAN countries. The thesis will study those factors from automotive manufacturing business environment of ASEAN countries. Once influencing factors are realized, they will be linked to prospective investments decision making process. The results can be references for investors to get a better understanding of automotive industry in ASEAN. Recommendation will provide insights regarding country-wise FDI attractiveness from Japanese automaker's view point. In order to attract more investment to countries, Japanese automaker's requirements on car manufacturing is also presented.

Section 3. METHODOLOGY

In order to understand factors influencing Japanese automobile investment decision in those five Southeast Asia countries, the author has conducted a research with two major processes. The first one is to research on the most updated information of each country situations and strategies in various reliable articles, journals and textbooks. And the second process is to interview with three persons in charge of automotive manufacturing investment strategies in Asia-Oceania area.

Section 4. CHAPTER OVERVIEW

This thesis contains six chapters; chapter 1: introduction, chapter 2: automotive industry, chapter 3: background on ASEAN, chapter 4: research methodology, chapter 5: research analysis and chapter 6: conclusions and recommendations.

Chapter 1 introduces the overview of the thesis. This chapter consists of four sections including industry background, objectives, methodology and chapter overview. Industry background section provides a brief outline of current ASEAN automotive industry. Then, the objective of this thesis is presented in objective section. It is followed by how to reach the objective in methodology section. And the last section of chapter overview is a structure of this thesis.

Chapter 2, automotive industry, gives a more detail information regarding the situation of automotive industry in ASEAN countries. Section 1 of this chapter is automotive industry development. This section provides a global history of automotive industry. Characteristic section is a section 2 with information on the structure automotive industry. Section 3, global value chain in automotive industry, shows the chain of activities around the world in automotive manufacturing business.

Chapter 3 is the chapter that presents information on ASEAN, country by country. Each country general characteristics will be presents in the first section of ASEAN profile. It is followed by section 2 with the recent economic trends of ASEAN countries. Section 3, ASEAN countries policy challenge, is then presents with the information of problem in policies ASEAN countries' governments are facing. The last section will then give the relation between ASEAN and Japan since Japan is the biggest investor in automotive segment in the area.

Chapter 4 is the chapter of research methodology. This chapter goes into more detailed on how the research of this thesis was conducted. The first section is about research design. Research design will presents the process of getting relevant information that will be used in the interviews sheet. Once the interview sheet is generated, it will be showed in general description of an interview sheet section. And the last section, section 3, gives the process of analysis of obtained data from the interviews.

Chapter 5 presents the research analysis. This chapter starts with the results from the interview in the first section. Then, it will conclude the current situation of each ASEAN country in each country circumstance section. The last section in this chapter will provides an opinion on a newly open country, Myanmar, from Japanese automotive investor company perspective.

Chapter 6, the last chapter, is conclusions and recommendations. Summary of the study from analysis in previous chapters will be presented.

CHAPTER 2. AUTOMOTIVE INDUSTRY BACKGROUND

Automotive industry is one of the most important economic sectors in the world by revenue. This chapter presents the past and present situation of the industry. The chapter starts with section 1 of “automotive industry development”. This section provides historical information on how the industry came to be the present state. Followed by section 2, “the characteristics”, the data regarding automotive industry’s current characteristic is presented. The last section, section 3, is “global value chain in automotive industry”. This section gives an overview on how the industries in each country are connected throughout the world.

Section 1. AUTOMOTIVE INDUSTRY DEVELOPMENT

Automotive industry has been expanding globally since the first practical car with petrol engine was built by Karl Benz in 1885 in Germany. The production in large volume of automobiles began in the early 1890s in Europe. France and Germany were the largest automotive manufacturers with small domestic markets¹.

In 1903, Ford entered the automotive industry and reduced the prices of cars from USD 850 in 1908 to USD 360 in 1916. In 1913, Fordism mass production was introduced by Henry Ford. It increased U.S. car production to 84% of world car production during the 1920s. In 1929, the U.S. was able to export 10% of its production, which accountable for 35% of the world market. Due to the expansion of U.S. production, European governments have to intervene by protecting their domestic car producers and endorsing their national automotive industries.

In 1950, another significant movement was the enactment of General Agreement of Tariff and Trade (GATT). The agreement focused on reducing tariffs and tackling trade barriers². This agreement combined automotive market between Europe and U.S. GATT also enabled international trading and production.

¹ Griffin, James M., and Craig, T. (2005) Price Asymmetry in Energy Demand Models: A Proxy for Energy Saving Technical Change?, *The Energy Journal*, 26(2), p 1-22.

² World Trade Organization (2008) *Understanding the WTO - The GATT years: from Havana to Marrakesh*

In 1970, Ford, GM and Chrysler drove the production to 11 million units. Automobile industry went global from technology transfer of Fordism mass production model. The spread was from the U.S. to Western Europe and Japan following both World Wars I and II. Two important trends were raised from this technology transfer. The first one is the advancements in industrialization that led to significant increase in the growth and production of the Japanese and German automotive markets. The second trend was the export of fuel efficient cars from Japan to the U.S. due to the oil restriction from 1973 to 1974³.

At the same time, Japan began to step into the global market by expanding its car into foreign markets with accelerated growth. Passenger car exports rose from 100,000 in 1965 to 1,827,000 in 1975. With their famous “Lean production system”, Japanese manufacturers produced efficiently and became the largest car producer in the world in 2000. The expansion of Japanese automotive industry threatened domestic production in the U.S. and Europe. It urged the U.S. and European governments to apply intervention policies such as import quotas, tariffs and Voluntary Export Restriction (VER). The differences between craft production, Fordism mass production and Japanese lean production is summarized in Table 1.

³Biswajit, N. et al. (2007, July) Changing Features of the Automobile Industry in Asia: Comparison of Production, Trade and Market Structure in selected Countries, *Asia-Pacific Research and Training Network on Trade*, 37.

Table. 1: Comparison between Fordism Mass Production and Japanese Lean Production.

Characteristics	Fordism Mass Production	Japanese Lean Production
Technology	Complex, but rigid single-purpose machinery using standardized component. Heavy time and cost penalties involved in switching to new products	Highly flexible methods of production using modular component systems, Relatively easy to switch to new products
Labor force	Very narrowly skilled workers design products but production itself performed by unskilled/semiskilled 'interchangeable' workers. Each performs a very simple task repetitively and in a predefined time and sequence	Multi-skilled, polyvalent workers operate in teams. Responsibilities include several manufacturing operations plus responsibility for simple maintenance and repair
Supplier relationships	Distant relationship with suppliers, both functionally and geographically. Large inventories held at assembly plant 'just in case' of disruption of supply	Very close relationship with a functionally tiered system of suppliers. Use a "just in time" delivery systems encourages geographical proximity between customers and suppliers
Production volume	Extremely high	Extremely high
Product variety	A narrow range of standardized designs with only minor product modifications	Increasingly wide range of differentiated products

Source: Adapted from Dicken (2003) ⁴

Due to low fuel prices at the beginning of the industry, U.S. was producing 'muscle cars' with high fuel consumption. But after the oil price shocks, US had to compete with Europe and Japan who succeeded in producing fuel efficient cars. For the first time of the industry, design, marketing, prices, customer satisfaction, etc. became important factors in the automobile market. By 1982, Japan became the world leader in US market.

In 2000, China became one of the major car producers in the world. And in 2008, it overtook Japan's position as the second largest car producer. In 2009, China then surpassed the United States

⁴ Dicken, P. (2003). *Global shift: reshaping the global economic map in the 21st century* (4th ed.). New York: Guilford Press.

as the world's largest automobile producer by volume. China was able to produce 13.79 million automobiles.⁵ In 2010, both sales and production topped 18 million units, with 13.76 million passenger cars delivered. India also showed substantial growth in their car production and its share in the global car production. Indian car production increased significantly from 1.5% in early 2000 to almost 5% in 2010.

⁵ The Economist (2009, October 23) *China's car market: Motoring ahead*

Section 2. CHARACTERISTICS

The automotive industry is one of the biggest and the most knowledge-intensive industries in the world. The automotive industry's complex⁶ creates more than eight million positions in vehicle assembling, and more than forty million positions indirectly involved in related manufacture and services sectors.⁷ The Automotive is essentially an assembly industry. It brings together an immense number and a variety of components. The center of the automobile production circuit is a complex set of relationships between assemblers of vehicle and the suppliers of component, which accounted for 50-70% of the cost of the average car⁴. As figure 1 shows, there are three major processes prior to final assembly: the manufacture of bodies, of components, and of engines and transmissions. Those processes may be performed by the assemblers as a part of a vertically integrated sequence. However, there is a strong trend towards the deverticalization of automobile production as assemblers pass more responsibility to the suppliers. Figure 2 shows only three tiers of suppliers, although there can be more⁸.

- First-tier suppliers supply parts which integrate whole systems such as brake systems or internal seating directly to final assembly with intensive R&D and product development.
- Second-tier suppliers provide modules and component parts or support services to the first-tier suppliers to integrate into the systems supplied to final assembly.
- Third-tier suppliers supply raw materials or more generic engineering components and services such as mechanical tools, metal castings, rubber and plastics to the supply chain.

In essence, the automotive industry is a strongly producer-driven industry, as opposed to the predominantly buyer-driven nature of other industry such as apparel.

⁶ Hülsemann, K. (2004). Purchasing in the Automotive Industry in the Process of Changes.

⁷ OICA (2007) *Automotive Employment*.

⁸ UNIDO (2003) *The Global Automotive Industry Value Chain: What Prospects for Upgrading by Developing Countries?* Vienna: UNIDO.

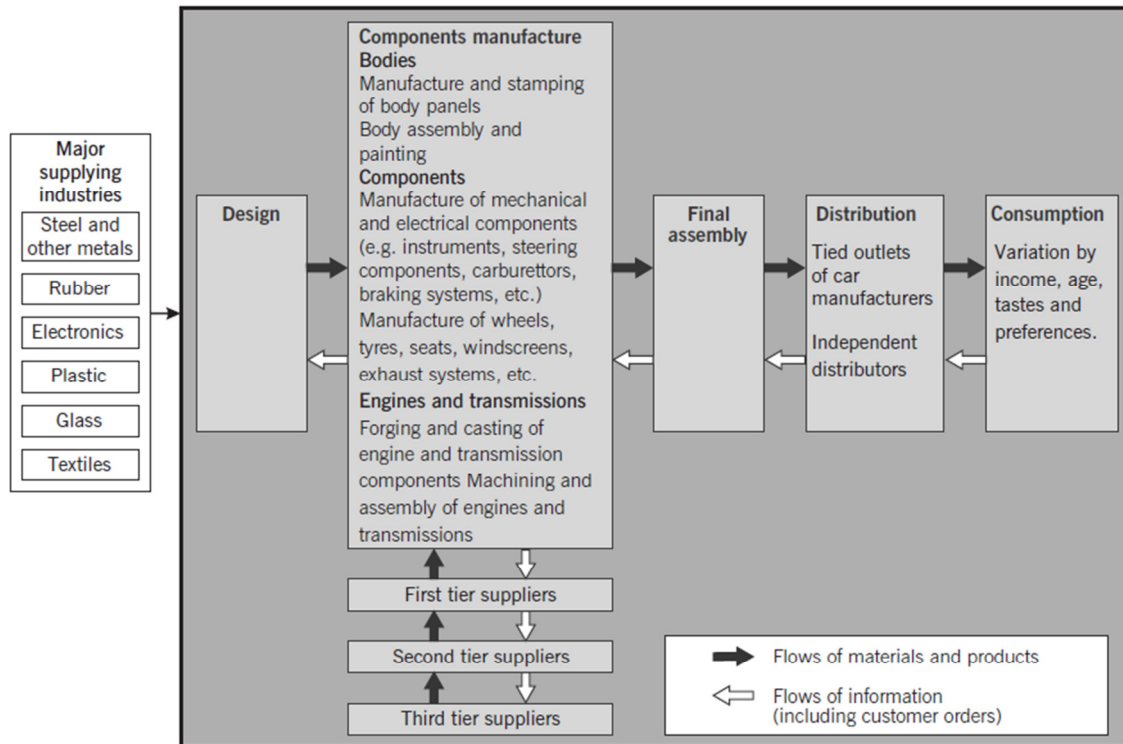


Figure 1: Structure of the Automotive Industry

Source: Dicken⁹

Section 3. GLOBAL VALUE CHAIN IN AUTOMOTIVE INDUSTRY

Global Value Chain (GVC) typically consists of lead firms and suppliers. In case of automotive industry, lead firms will be OEMs who decide strategy, final goods production volume and take financial responsibility.

Globalization of Japanese automotive industry started around 1960s. Japanese companies developed a local company around the world by doing joint ventures with local companies because

- 1) to sustain product supply in local market and 2) Policy of countries in East Asia supported

⁹ Dicken, P. (2003). *Global shift: reshaping the global economic map in the 21st century* (4th ed.). New York: Guilford Press.

domestic production rather than import¹⁰. This can be seen in high custom duties on finished import products policy¹¹ and a lot of joint ventures with the local capital¹². Almost all parts and components for automobile production were exported out of Japan and assembled in overseas factories, also known as the semi knocked down (SKD) or knocked down (KD) process¹⁰. Actually, one of the reasons that Japanese companies set up the local firms and joint corporations was to expand the localization content and products as well¹³.

In 1970s, Japanese automotive companies had to adjust currency exchange rate as it was fixed at 308 yen per US dollar in 1971 and then it was shifted to a floating rate system in 1973. The strong yen in 1971 impacted the management of Japanese companies in Southeast Asia. The KD production turned out to be inefficient as it did not consider the comparative economies of scale of each country. There were plenty of small-scale companies but they are inefficient.

In Malaysia and Indonesia, their automobile assembly industry was tied up with foreign companies in Europe, US, and Japan. Their industry became flooded with various kinds of small-scale companies that made production inefficient. The automobile company that invested early in this area was Toyota and Mitsubishi Motors¹⁴. Mitsubishi Motors developed the first Asian car in the Philippines in 1974¹³.

The 1980s was the time that Japanese automotive company significantly accelerated the Foreign Direct Investment (FDI), a global production and cross-border trade. The most influential factor that drove this change was the appreciation of the yen according to Plaza Accord in 1985. Since Japanese companies knew that Asian currencies were related with US dollar, investment for production facilities became larger. The aim was to develop production base in Asia in order to export finished car to the West. In addition, Brand to Brand Complementation Scheme (BBC), which

¹⁰ Amano, T. (2004). [Internationalization into East Asia and the growth of Japanese firms: Understanding the economic effects of global allocation and division] *MMRC Discussion Paper No. 8*. University of Tokyo.

¹¹ Nakajima, J. (2000). [Japanese MNCs - A trace to millennium], *Chiukeizaisha*.

¹² Okamoto, Y. (1987) [Multinational enterprise and the multinationalization of Japanese business enterprise] *The Journal of Economics* 53(1):2-37.

¹³ Morimoto, H. (2006). [Interfirm differences of strategic behaviors among Japanese firms under the environment of East Asia], *Japan Academy of International Business Studies* 12:291-305.

¹⁴ Shimokawa, K. (1998). [Direct investment and the development of international division of labor in Japanese automobile companies in Asia] *The Hosei Journal of Business* 35(3): 45-60

could reduce parts' import duties, also started implementation in this period. BBC was implemented by Toyota, Mitsubishi, Nissan, and other car manufacturers¹⁴. The emergence of global sourcing patterns has been and encouraged by trade and investment liberalization through World Trade Organization (WTO) agreements.

In 1990s, Plaza Accord in 1985 still impacted Japanese car export negatively. Together with the bubble economy, Japanese companies increased their production activities to East Asia which has continued to industrialize. They either re-exported the products to advanced nations or even return to Japan (re-import). The formation of such a route resulted in trade frictions with advanced nations and reduced roundabout export¹⁰. Developed country, or advanced nation, suppliers have increased their own involvement in FDI and trade, while developing country suppliers have increased their capabilities. The largest suppliers, all based in developed countries, have become 'global suppliers' with multinational operations and an ability to provide goods and services to a wide range of lead firms¹⁵. ASEAN concentrated in the production of parts such as transmission, steering gear, floor panel, and radiator, which were being supplies to other countries. The automobile industry in East Asia is considered a "national industry" where the government intervenes, except in Singapore. Therefore, part import duties are high in ASEAN. Moreover, there is an uncertainty that a future tariff rate is also influenced by the government¹⁶.

After 2000, in the last 15 years¹⁰, "the production shift to East Asia of Japanese companies was a structural adjustment through international division of labor rather than the hollowing out of Japanese industry." Although Japanese companies were performing measures of internal resource utilization types, such as "maintenance of a new base," "localization of research and development," "introduction of a supply chain," and "reexamination of procurement and sales" in Asia, management risk would still be high. Consequently, Japanese companies had to carry out a strategic

¹⁵ Sturgeon, T.J. and Lester, R.K. (2004) 'The new global supply-base: New challenges for local suppliers in East Asia' in Shahid, Y., Anjum, A.M. and Nabeshima, K. (Eds): *Global Production Networking and Technological Change in East Asia*

¹⁶ Okamoto, Y. (ed.). (1998). [Japanese companies in East Asia] *Yuhikaku*.

alliance with the West and with Asian companies¹⁷.

Due to trade liberalization, the competition in the automobile industry has become more global. Therefore, car manufacturers realize the benefits from a global viewpoint of reorganizing their production bases in Asia. The reorganizing includes (a) the formation of an export base in Thailand, (b) the maintenance of regional division of labor, and (c) having a regional base for the ASEAN4 (Indonesia, Malaysia, Philippines, and Thailand). Japanese companies thus initiated regional division of labor to substitute for the constraints of ASEAN4 (i.e., small domestic markets). They began to apply this regional division of labor strategy globally¹⁸. Keeping in sync with current themes like “China market”, the key to the growth of the Asian car manufacturing industry is “supply chain management (SCM),” and “environmental technology”. Furthermore, Toyota launched the IMV (Innovative International Multi-purpose Vehicle) project, which emphasized on involving local workers in the design process. From the procurement point of view, local-design-vehicle will strengthen auto parts suppliers in ASEAN. It will let the suppliers have a higher possibility of being exposed to the wave of selection¹⁹.

¹⁷ Uchibori, H. (2004). [Reviewing the Asian strategy of Japanese companies: An analysis of the present state and future prospects of Asian business from the survey on Japanese companies] *Japan Academy of International Business Studies* 10:169-178.

¹⁸ Mori, M. (2004). [The strategy for East Asia of Japanese automaker which strengthens a global inclination], *RIM Taiheiyo Business Joho* 4(13)54-74.

¹⁹ Yamada, Y. (2006). [Measuring ability of the Asian motor parts industry - Mainly on ASEAN, China, Indian competitive power investigation] *JETRO Sensor, December 2006*, 24-32.

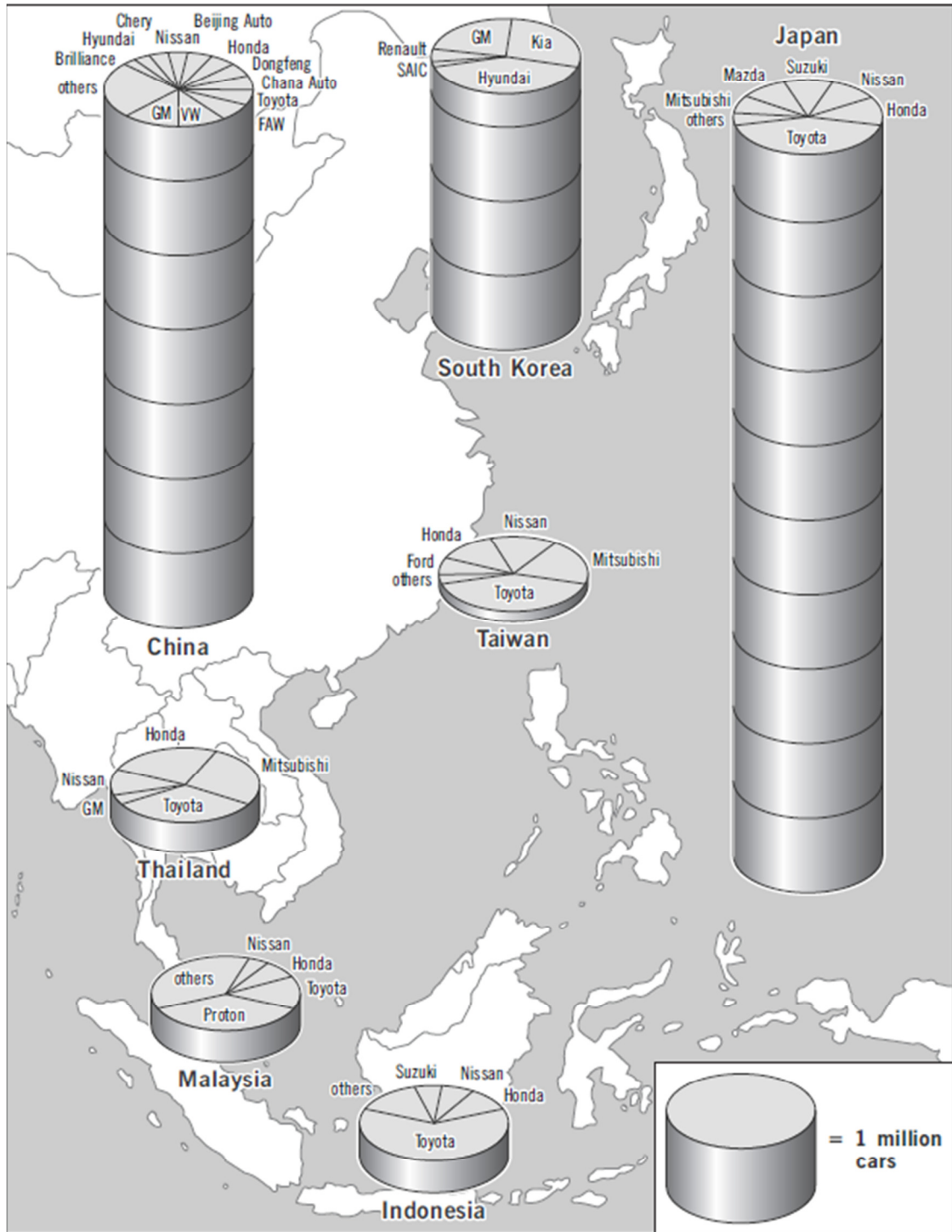


Figure 2: Automotive production in Asia

Source: Dicken¹⁰

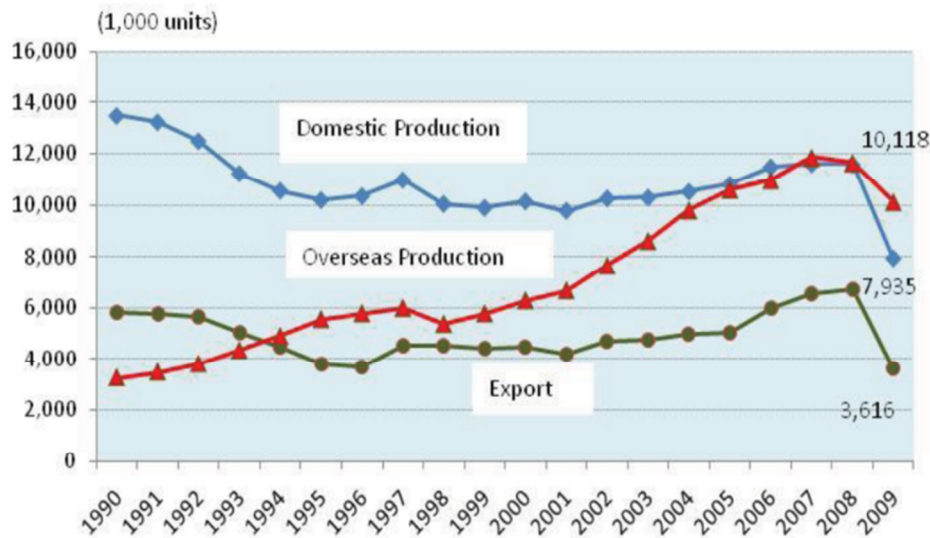


Figure 3: Japanese Automotive Industry Production and export

Source: Japan Automobile Manufacturers Association, Inc. (JAMA)

Currently, automotive companies focus at final vehicle assembly. And by extension, parts production is largely close to end markets because of political sensitivities. In many countries, high levels of motorization and the tendency for automakers to ‘build where they sell’ have also encouraged the dispersion of final assembly.

In addition, while the automotive industry has become more unified globally since the mid-1980s, it has also established strong regional-scale patterns of integration. In contrast, other high-volume, consumer-oriented manufacturing industries, like apparel and electronics, have developed global-scale patterns of integration.

Another feature of the automotive industry is that there are few fully generic parts sub-systems that can be used in different end products without heavy customization. Parts and sub-systems tend to be specific to particular vehicle models. The absence of open, industry-wide standards weakens value chain modularity. It also ties suppliers to lead manufacturers, limiting economies of scale in production and economies of scope in design. Suppliers are often the sole source for specific parts or module. This creates the need for close collaboration, raises the costs for suppliers that serve multiple customers and concentrates most design work into a few geographic

clusters. Because value chain modularity is limited, relationships between lead firms and suppliers tend to be relational or confined in character.

A grander degree of global integration in the automotive industry has developed at the level of design, as global firms pursued to leverage design efforts across products sold in multiple markets. The work of vehicle design and development remains to be concentrated in the headquarters of lead firms. In addition, suppliers have taken on a larger role in design and have established their own design centers nearby their major customers for better collaboration. Because centrally designed vehicles are tailored to local markets and parts are manufactured in multiple regions. Therefore, design activities and buyer–supplier relationships typically span multiple production regions. This led to local, national and regional value chains in the automotive industry being ‘nested’ within the global organizational structures, as shown in Figure 4

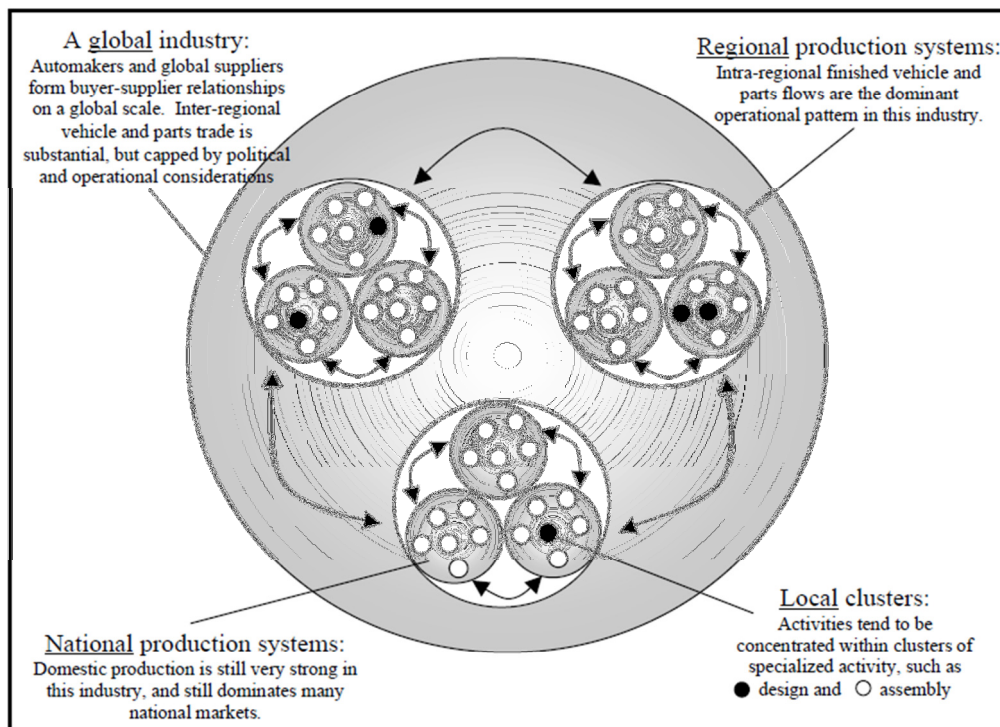


Figure 4: The nested geographic and organizational structure of the automotive industry

Source: Sturgeon; Van Biesebroeck and Gereffi²⁰

²⁰ Sturgeon, Timothy; Van Biesebroeck, Johannes; and Gereffi, Gary. (2007) “Prospects for Canada in the NAFTA Automotive Industry: A Global Value Chain Analysis.” Industry Canada, Research Report.

CHAPTER 3. BACKGROUND ON ASEAN

ASEAN, Association of Southeast Asian Nations, is a geo-political and economic organization of countries in Southeast Asia. This chapter provides information regarding ASEAN countries. The chapter will be divided into 4 sections of: ASEAN profile, recent economic trends, ASEAN countries policy challenge and ASEAN and Japan.

Section 1. ASEAN PROFILE

In 2009, ASEAN has a population of 592 million people with a combined GDP of US\$1.49 trillion. Comparing to the world's two most populated nations, China or India, ASEAN's population is around one-half and its GDP is about one-fifth to the US, which is the country with world's largest economy. ASEAN's labor force excluding Cambodia, Laos and Myanmar was 244 million in 2008, with an average growth rate of 1.7 percent per annum since 2000. With only 28% of population below 15 years old and 5.7 percent of post-retirement group of above 65 years old, the majority of ASEAN's labor force is considerably young. In term of geographical location, ASEAN is strategically located at the crossroads of world shipping and air routes surrounded by China, Japan and Korea in the northeast, India in the west and Australia and New Zealand in the south. This makes ASEAN waters one the busiest sea with 60% of the world's maritime trade passes through. As Asia economic grows, owing to the rise of China and India, ASEAN's location advantage is also set to increase. ASEAN has a diversity of unique natural resource with its land area of 4.4 million square kilometer. Eight of the ASEAN member countries (Brunei, Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Thailand and Vietnam) have oil and gas resources. Three of those (Brunei, Malaysia and Indonesia) rank in the world's top six liquefied natural gas producers.

Despite the historical and political conflicts between border nations, ASEAN has been promoting peace and stability in the region by banning the use, or threat, of force to manage disagreement between nations. Although there are occasional disputes, there has been no war among the members since ASEAN inception. ASEAN countries share the same geographical area but they

are very diverse in many aspects, resulting in a diverse cultures and traditions and wide social-economic disparity.

In terms of population, Indonesia is considered the largest with 228 million, which is 40 percent of ASEAN’s population. The second most populated country is Vietnam with 86 million people. The smallest population country, Brunei, has 0.4 million people. Looking at size of economy, Indonesia is also the largest with 34 percent of ASEAN’s total GDP. It is then followed by Thailand, with 20 percent, and Malaysia, with 14 percent. Laos has the smallest economy with a GDP of 0.5 percent (Table 2).

Table 1: 5 ASEAN countries’ profile

	Indonesia	Malaysia	The Philippines	Thailand	Viet nam
Medium-term economic outlook					
GDP growth (2012-16 average, % change)	6.6	5.3	4.9	4.5	6.3
Current account balance (2012-16 average, % of GDP)	-1.0	9.1	2.3	2.5	-4.0
Fiscal balance (2012-16 average, % of GDP)	-1.1	-4.4	-2.8	-2.4	-3.5
Basic data (in 2010)					
Total population	238 million	28 million	93 million	67 million	87 million
Population of capital city	9.6 million	1.7 million	11.6 million (in 2007)	10.2 million	6.6 million
GDP per capital at PPP (current USD)	4,394	14,670	3,737	9,187	3,134

Source: Adapted from OECD 2012

Section 2. MACROECONOMIC TREND

ASEAN region faced its largest drop in GDP annual growth in 2009 of 1.2 % since the Asian financial crisis of 1997-98²¹. However, ASEAN showed a dramatic recovery in 2010 at average GDP annual growth of 7.1% thanks to the increase in exports in the manufacturing sector and increase in domestic demand. From increase in manufacturing output, it led a more solid labor

²¹ Wong, M., Shankar, R., Toh, R. (2010) *ASEAN competitiveness report 2010*.

markets and higher wage.²² Six Southeast Asian countries, Indonesia, Malaysia, The Philippines, Thailand, Singapore and Viet Nam, have an average GDP growth of 5.0% in 2011. Though moderate, it is expected to remain this strong through 2016, according to the OECD Development Centre's Medium-term Projection Framework. The six ASEAN countries are predicted to accomplish the pre-crisis level, which is an average gross domestic product (GDP) growth rate of 5.9%, by 2016²².

The leader of growth in this region is likely to be Indonesia with its flexible domestic demand. Malaysia will also have robust growth in the medium term due to its relatively strong investment.

The Philippines economy also shows strengths thanks to domestic demand and remittances of workers. Due to weaker global trade flows, growth rate of Singapore is expected to be lower than the 2003-07 rate. For Thailand, the unprecedented scale of floods has added more risk to its near-term prospect. Viet Nam's tightening of monetary policies to bring inflation under control seems to affect the near-term growth, though the medium term outlook remains robust.³

Table 2: Real GDP growth rate of 6 ASEAN countries

	2010	2011	2016	Average 2003-07	Average 2012-16
Indonesia	6.1	6.3	6.9	5.5	6.6
Malaysia	7.2	4.6	5.6	6.0	5.3
The Philippines	7.3	4.5	5.1	5.7	4.9
Singapore	14.5	5.6	4.8	7.5	4.6
Thailand	7.8	2.5	4.9	5.6	4.5
Vietnam	6.8	5.9	6.7	8.1	6.3
Average of six countries	7.6	5			

Note: The cut-off date of data is 1 November 2011

Sources: Adapted from OECD Economic Outlook, No. 90

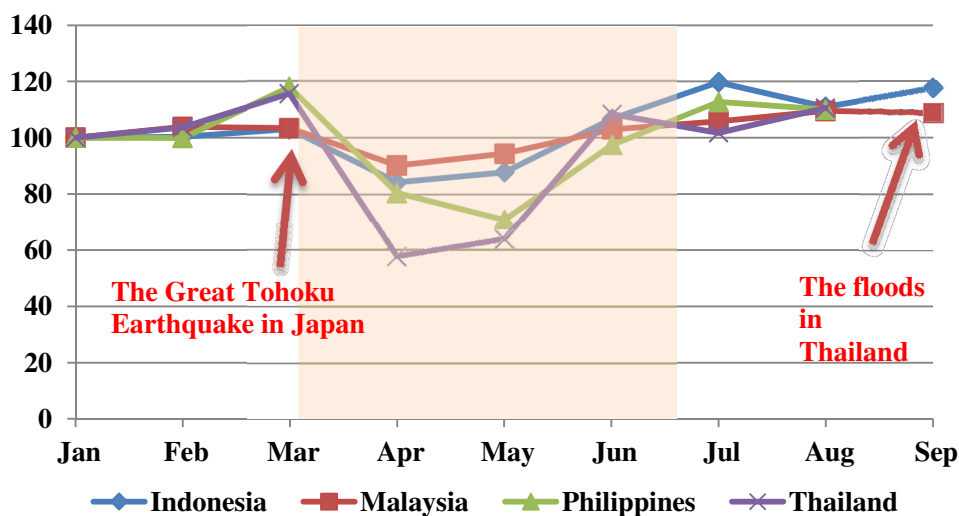
²² OECD (2012), *Southeast Asian Economic Outlook 2011/12*, OECD Publishing. [online] Available at: <http://dx.doi.org/10.1787/9789264166882-en> [Accessed: February 15, 2012]

Section 3. RECENT ECONOMIC TRENDS

Recent trade data shows that some decreasing in exports of several ASEAN countries, according to Asian Business Cycle (ABCIs), due to less demand in OECD countries. Even though the whole region's domestic demand is robust, there are substantial differences among countries. For example, there is strong domestic demand in Indonesia but relatively weak in The Philippines. Pressures from inflations also still exist in the region, particularly in Malaysia and Thailand. And global economic slowdown will too affect ASEAN.

There are many key events that hindrance ASEAN economy, most of which are external. Such events are high oil prices, insecure economy of United States, the re-emergence of the sovereign debt problems in Europe and the Japan disaster, the great east Japan earthquake in 2011. The impact of the earthquake not only severely affects Japanese economy for the first two quarter. It also responsible for major power shortages in Japan, which lead to crippled production of key components in Japan. This results in global supply chains disruption especially in automotive and electronics sectors. The effect of this disruption was severely suffered in Thailand and the Philippines where production of motor vehicles and components decreased significantly from March to May 2011. Indonesia and Malaysia also saw smaller declines in production. The Great Tohoku Earthquake momentarily impacted activities and exports in some ASEAN countries such as Indonesia, the Philippines and Thailand. But the scale of the negative impact seems to have been brief.

Not so long after recuperate from the impacts of great earthquake, the supple chains of global automotive chains was disrupted again by Thailand's worst flood in almost 70 years. The shutdowns of factory in Thailand caused by floods have paused many production lines. It then led to a parts shortage for auto production in Japan and North America. In November 2011, some automakers, Mitsubishi, Nissan and Mazda, resumed their production after suspended the operation for about one month.



(index, January, 2011=100)

Figure 5: Production of motor vehicles and components in 2011

Source: CEIC

After the flooding event, Thai government takes necessary steps to prevent future floods and to rebuild damaged infrastructure. Companies are now prone to weighing the benefits of current clustering plants in Thailand against the benefits of risk reduction by diversifying production sites to other countries. This could lead to investments rechanneling to neighboring countries in the region.

In order to stimulate economic growth and attract foreign investment, many ASEAN countries have made significant investments in transportation infrastructure. In Indonesia, the Philippines, Thailand and Viet Nam, billions worth of infrastructure projects are under construction. On the other hand, Malaysia and Singapore are focusing on infrastructure of information and communications technology. Singapore also is investing in research and development to optimize possible underground space usage.

In September, ASEAN and the Asian Development Bank (ADB) announced the founding of the ASEAN Infrastructure Fund, with an initial equity contribution of USD 485.2 million (ADB, 2011). The fund's total lending commitment will amount to about USD 4 billion through to 2020. It is expected to leverage more than USD 13 billion in infrastructure financing by 2020 with

anticipated 70% co-financing by the ADB. With the commitment to improve infrastructure in the regions, various medium-term plans growth looks promising.

Section 4. ASEAN COUNTRIES POLICY CHALLENGE

Many Asian countries experienced that outstanding growth rates in the region have brought about an increase in real income levels and accelerated the process of moving up the value chain. Consequently, those countries adapt their development strategies to reflect the changing growth dynamism in the region and international market conditions. Several new elements were put in their medium-term development plans (in most cases, five-year plans) (Table 3.0.1).

Table 3: Medium-term development of 5 ASEAN countries

Country	Period	Theme/Vision
Indonesia	2010-14	Towards the realization of an Indonesia that is prosperous, democratic and just
Malaysia	2011-15	Charting development towards a high-income nation
The Philippines	2011-16	In pursuit of inclusive growth
Thailand	2012-16	A happy society with equity, fairness and resilience under the philosophy of Sufficiency Economy
Vietnam	2011-15	Note: Vietnam's forthcoming medium-term plan as in the process of formulation

Source: OECD Development Center based on national sources

Even though different countries have different policy challenges, overall the priority areas identified in the national plans focus on human capital development, infrastructure investment, public sector efficiency (in particular taxation), product market liberalization and labor market reform. The overlap across priority areas is large but, even within the same broad policy area, challenges facing each country differ depending on their different economic circumstances, such as their income levels and regulatory frameworks.

Human capital development has been identified as a key policy area in all the development plans. This reflects the need to meet the requirement for labor with ever increasing skills amid rapid transformation of economic structures. The outstanding growth performance of the region over the past decade has led to increased real incomes, effecting in a decline of international competitiveness in labor-intensive industries in some countries, while at the same time the upgrading of industrial structures to higher levels on the value chain have increased the demand for more skilled labor. To develop high skill and knowledge intensive industries and strengthen their competitiveness in the medium to long term, a flexible education system that is responsive to industry needs is needed.

Overall, the region has been relatively successful in increasing education levels through increasing enrolment rates. However, education systems need to be more outcome-oriented to guarantee a high-quality labor force. The particular areas countries have prioritized in their development plans to achieve this objective differ somewhat. For example, Indonesia needs to pay more attention to improving the outcomes of tertiary education, in particular to ensure that the skills of graduates correspond to those required by industry. Observing outcomes of the education system in Thailand are not so satisfied. Stronger Technical Education and Vocational Training (TEVT) is important in the Philippines and Viet Nam in order to help their industries to move up in the value chain. Infrastructure investment is a bottleneck to growth in several economies in the region. This is especially critical in Indonesia and the Philippines, where the lack of adequate transport infrastructure impedes efficient trade activities; outdated information and communications technology (ICT) infrastructure delays business transactions; and insufficient or unreliable basic utilities make economic activities impossible altogether in some areas. While improvement in infrastructure will depend mainly on individual country efforts, there is also a need for co-ordination across countries in the region. Intra-regional infrastructure needs to be further developed to reap the full benefits of regional integration. The comparatively low level of tax revenue in ASEAN countries (which averages 15% of GDP in the region)¹ suggests that there is room for domestic resource mobilization through tax reforms. Reforming tax systems is required to meet development needs such as infrastructure investment, education and health services (partly due to an ageing population).

Strengthening small and medium enterprises (SME) development is also crucial for ASEAN countries, given that most of these economies are SME-based. In particular, fostering an SME base that is competitive in the international market is key to sustaining growth. The internationalization of SMEs should be supported by government-sponsored training and capacity building programs and should be part of an integrated framework aimed at promoting growth, enhancing competitiveness and fostering innovation. Support services targeted at SMEs need to be better co-ordinated among provider agencies in order to reduce the administrative burden on SMEs and to assist them to fully reap the benefits of available schemes.

Table 4: Summary of medium-term policy challenges and responses

Indonesia	Infrastructure	Speed up transport infrastructure development by improving the regulatory environment..
	Human capital development	Improve the outcome of higher education and reduce urban-rural disparities in access to educational infrastructure
	Labor market	Reform labor market regulation to increase employment
Malaysia	SME development	Enhance SME development with special attention to capacity building and innovation
	Human capital development	Strengthen the link between industries and academic institutions to improve labor force skills and to enhance research and development
	Taxation and fiscal system	Reform the tax regime and improve efficiency of public spending to bolster the sustainability of public finances
Philippines	Infrastructure	Increase funding for infrastructure development and attract more private participation
	Human capital development	Improve the access to and the quality of basic education and strengthen technical education and vocational training
	Taxation	Reform the tax system by enhancing tax collection and widening the tax base
Thailand	Health	Reform health care schemes to provide a higher quality of and equal access to services
	Human capital development	Improve outcomes in education and reduce urban-rural disparities
	Agriculture	Enhance agricultural productivity and improve jobs in the farm sector
Viet Nam	Enterprise development	Speed up the reform of state-owned enterprises, particularly by improving the governance and management
	Macroeconomic management	Establish an adequate monetary policy framework to control inflation
	Human capital development	Increase skilled labor by education reform

Source: OECD Development Centre

Section 5. ASEAN AND JAPAN

In 2010, combined automotive sales in the ASEAN's six main markets, Thailand, Indonesia, Vietnam, The Philippines, Singapore, and Malaysia, ASEAN marked record-high automobile production and sales volumes. Indeed, ASEAN represents one of the fastest-growing production bases and automobile markets in the world. In 2010, Japanese auto manufacturers achieved a total

production of 2,712,132 units as shown in figure 6, an increase of 38%, sold 2,071,858, and exported 922,599 units. These activities were supported by 103,460 direct employees at 65 Japan Automobile Manufacturers Association member factories and facilities.²³

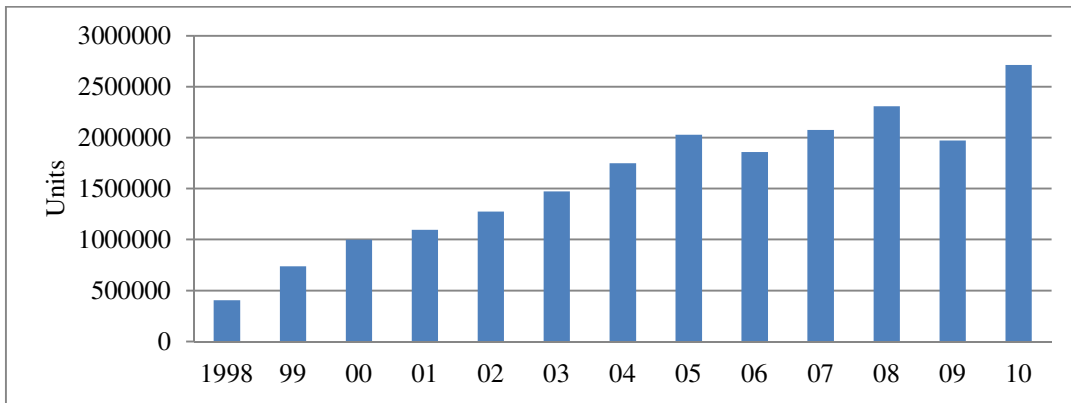


Figure 6: Production volume of JAMA members in ASEAN

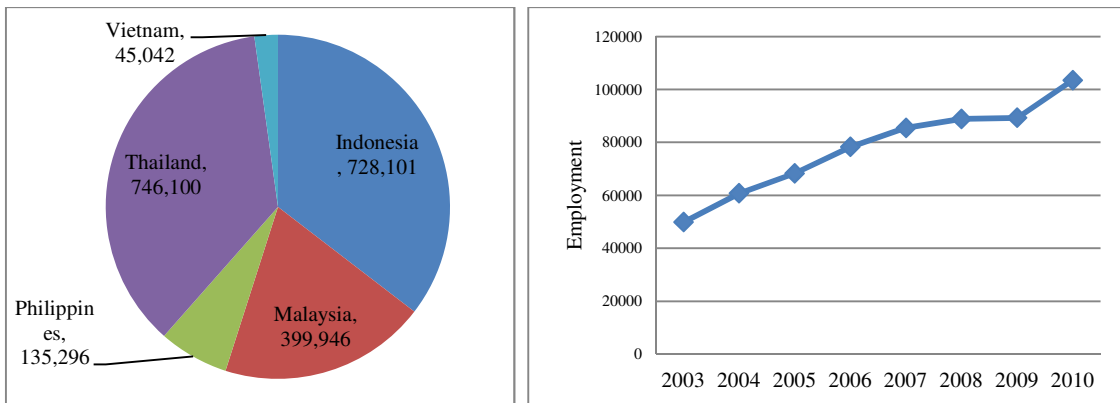


Figure 7: Sale by country

Figure 8: No. of jobs by JAMA members in ASEAN

Source: Japanese Automobile Manufacturing Associations

Building on this progress, further improvements in competitiveness will be essence for the ASEAN automobile industry to achieve continued growth. Enhanced market integration will be especially vital. Building on the AFTA, in May 2010 the ASEAN Trade in Goods Agreement (ATIGA) entered into force, allowing free movement of goods within ASEAN as well as introducing

²³ Japan Automobile Manufacturers Association, Inc (2010) *Hand in Hand Towards a New ASEAN-JAPAN Partnership*.

new policies not yet sufficiently specified within the existing AFTA-CEPT, including elimination of nontariff measures, trade facilitation, Rules of Origin refinements, and the establishment of provisions on standards, technical regulations and conformity assessment procedures. ATIGA is anticipated to contribute significantly to the realization of the ASEAN Economic Community (AEC) by 2015.

ASEAN cooperation has made steady progress with a goal to create an ASEAN Community by 2015 that will be built on the three pillars of an ASEAN Economic Community (AEC), ASEAN Political-Security Community and ASEAN Socio-Cultural Community. Implementation has fallen behind schedule, as almost 20 percent of deliverables under the AEC Blueprint for 2008-2009 still have not been achieved by October 2010. Measures that have not been implemented mainly involve the ratification of important economic agreements by individual members. Within the AEC context, promoting harmonization and mutual recognition of automotive technical standards is an important issue for the automobile industry. ASEAN has also been expanding its linkages with external partners, with a widening network of free trade agreements, which have been concluded with China, Japan, Korea, Australia and New Zealand, and India to-date. ASEAN is concurrently considering proposals for an East Asian Free Trade Area for ASEAN+3 countries and a Comprehensive Economic Partnership for East Asia involving ASEAN+6 countries. ASEAN also cooperates with the Plus Three partners of China, Japan and South Korea on a number of financial initiatives, the most significant of which is the Chiang Mai Initiative Multilateralization in 2010, which is the multilateralization of a currency swap arrangement established to address short-term liquidity problems among participants and strengthen regional financial stability.

ASEAN has devoted a great deal of attention to the establishment of the ASEAN Mutual Recognition Arrangement (MRA), anticipated in 2012. Concepts like the Single Window System (enhancing simplification of customs procedures) and a pilot project covering self-declaration of origin have been highlighted as important topics and are currently being discussed. A lot of collaboration initiated in ASEAN aim to enhance economic in the region by serving requirement for FDI.

CHAPTER 4. RESEARCH METHODOLOGY

Chapter 4 presents the process of obtaining data in this thesis from existing studies and from interviews. This chapter consists of 3 sections including research design, general description of interview sheet and data analysis.

Section 1. RESEARCH DESIGN

This comparative research aims to analyze attractiveness of each ASEAN country (Indonesia, Malaysia, Philippines, Thailand and Vietnam) in automotive manufacturing investment. In order to understand the actual situation and factors influencing Japanese automaker investment decision in those 5 Southeast Asia countries, the author has conducted a research on the following.

1. Research on the most updates information of each country situations and strategies in various reliable articles, journals and textbooks.
2. Interview with 3 persons in charge of automotive manufacturing investment strategies in Asia-Oceania area.

Interviews were conducted by utilizing Global Competitiveness Index (GCI) developed by Professor Xavier Sala-I- Martin from World Economic Forum (WEF). GCI is a comprehensive tool that measures the microeconomic and macroeconomic foundations of national competitiveness. There are many determinants driving productivity and competitiveness. WEF has grouped these components into 12 pillars of competitiveness:

- 1) Institutions, 2) Infrastructure, 3) Macroeconomic environment, 4) Health and primary education, 5) Higher education and training, 6) Goods market efficiency, 7) Labor market efficiency, 8) Financial market development, 9) Technological readiness, 10) Market size, 11) Business sophistication, and 12) Innovation

However, factor 8 and factor 12 are cut off from this research. Factor number 8, financial market development, is cut off because the financial support, such as loans or well-regulated securities exchanges, is not necessary for Japanese Automaker since they bring their own money to

invest. The same reason can be apply to factor 12, Innovation, because they also bring their own technology to produce a car. Therefore, only remaining 10 factors were used in the interview.

Section 2. GENERAL DESCRIPTION OF INTERVIEW SHEET

In order to understand actual factors influence country selection for investment in automotive manufacturer among five ASEAN countries, 10 factors modified from GCI of WEF²⁴ are used in the interview sheet which can be divided into 3 parts.

Part I: Factors influence analysis:

All 10 factors are listed for interviewees to weight influential level on country selection for investment. These factors are; 1st factor: Institutions

This factor considers the quality of both public and private institutions. Elements in consideration are government efficiency, security levels, corporate governance, and perceived fairness and transparency of public institutions.

2nd factor: Infrastructure

Good infrastructure results in economic growth and poverty reduction. Related elements are quality and extent of general and specific infrastructure. This includes roads, railroads, ports, air transport, electricity, and telephony.

3rd factor: Macroeconomic environment

The economy can sustainably grow with a stable macroeconomic environment. The stability includes the government budget balance, public debt, inflation, the national savings rate, the interest rate spread, and the country credit rating.

4th factor: Health and primary education

Efficient operations and high productivity require a healthy labor force with quality education. This extent of this factor can be determined by general health level of a country's population and the quality of, and access to, basic education.

²⁴ World Economic Forum. (2011). *The Global Competitiveness Report 2011-2012*

5th factor: Higher education and training

Higher education is crucial for economies that want to move up in the value chain. This includes the quality of, and access to, secondary and university level education and the quality of on-the-job training.

6th factor: Goods market efficiency

Healthy market competition is important in driving market efficiency. The elements to measure good market efficiency are the extent of domestic and foreign competition in a given market and the quality of demand conditions.

7th factor: Labor market efficiency

The flexibility of the labor market ensures the efficient allocation and use of talent. Therefore, this factor looks into the ability to shift workers from one economic activity to another rapidly and at low cost.

8th factor: Technological readiness

The penetration of information and communication technologies (ICT) and firms' capacity to adopt and leverage technology to enhance their productivity, both are the measurement of Technological readiness of the country.

9th factor: Market size

The market size factors consider both the size of the domestic market as well as the export markets. The size of the market affects productivity because large markets allow firms to exploit economies of scale.

10th factor: Business sophistication

Business sophistication is about the quality of country's business network and the quality of individual firms operations. It looks at the degree of sophistication of operations and company strategies and the presence and development of clusters.

Interviewees are required to check on influential level of each factor. Figure 9 show scale used for the factor influential level to investment decision. More detail can be found in appendix 1.

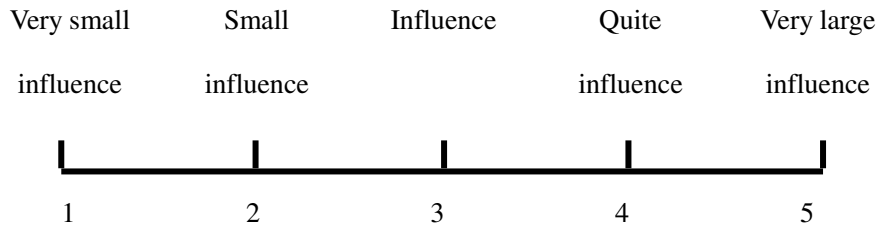


Figure 9: 5-scales used in interview for the factor influential I

Part II Each country situation:

Current status of five Southeast Asia (Indonesia, Malaysia, Philippines, Thailand and Vietnam) will be considered against automotive company expectation based on those 10 factors. Each country will be evaluated by each factor with 5-scales as shown in figure 10. Interview sheet is attached in appendix 2.

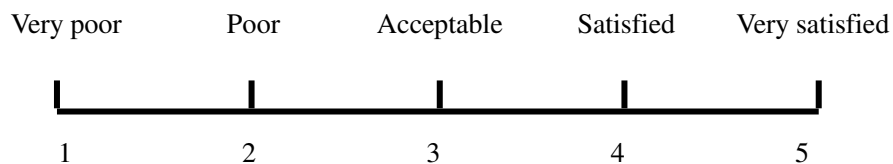


Figure 10: 5-scale used in interview of each ASEAN country satisfaction

Part III Comments on Myanmar:

As Myanmar is opening up, it has a potential to be an emergence as Asia’s next tiger economy. Many businesses have interest in investment in Myanmar such as infrastructure, banking and mining. This part aims to gather information about Japanese automotive industry in Myanmar from automotive investor point of view. Interview form can be seen in appendix 3.

Section 3. DATA ANALYSIS

After all data are collected by interviewing with people in charge of Japanese automotive manufacturing investment and researching on previous studies, data analysis will be done with following processes;

1. The first process aims to pick up factors that significantly influence investment decision from the total of 10 factors. The method that will be used to filter out the significant factors from other factors is selecting factors by using responses from personnel working in automotive manufacturer investment. The author will choose significant factors by using the level of influence determine by those three interviewees' perspective.
2. The second process will evaluate current status of each country. It will be done by using factors retrieved from the first process. The analysis will concentrate on explaining the reason behind such evaluation on each significant factor in each country. Once analyzed, the conclusion on, current and prospective, overall attractiveness of automotive investment from Japanese investor perspective will be drawn.
3. The third process will focus on Myanmar attractiveness in automotive investment. The evaluation process will be done with data from the interview and factsheets of current Myanmar condition. Due to the new entrant status of Myanmar, this part aims to find the requirements automotive manufacturer investors are looking for in the country.

CHAPTER 5. RESEARCH ANALYSIS

Chapter 5 presents the analysis of the result. This chapter contains three sections with interview results, each country circumstances and Myanmar. The first section focuses on the factors that influence Japanese automotive investment decision by using data from the interviews. Followed by each country circumstances, this section presents interviewees' opinion on each ASEAN countries. Finally, since Myanmar is a newly opened country, the last section denote to interviewees' view on this emerging market.

Section 1. INTERVIEW RESULTS

In order to understand factors influencing investment decision in actual practice, the author conducted interviews with person in charge or person related to Asia-Oceania investment strategies of three respected global automotive companies. Among ten factors modified from GCI of WEF, all three companies emphasize "Market size" as the most influential factor for selecting country to invest. Both company A & B consider domestic market size much more heavily than export potential to foreign market (with the portion of 80:20). Access to large market allows company to benefit from economies of scale in its production. According to company C, target investment country could be separated into three types, categorized by market environment as follows:

1. Market for only selling car such as Singapore
2. Market for only car production such as Indonesia and Malaysia
3. Market for both domestic selling and production for export such as Thailand

Since "Market size" is the most influential factor for investment, according to the interview, Thailand is considered to be the regional hub of these respectable global automotive companies. This is due to the ability of Thailand to be both a market for domestic and a production site for international exports.

"Macroeconomic environment" was considered as a very large influence factor for company B and C for the reason of sustainable growth in long-term. However it is only considered as a fair

influence for company A. “Institution” factor influences these 3 companies differently. It has very large influence on company C, large influence on company B and fair influence on company A. Points of concern in institutions are about long term, consistency and reliable government policy in supporting of auto industry.

Good infrastructure is also important for company A and B to select country to invest. Infrastructure is necessary because assembly factory needs sufficient parts to be supplied in designate time. Finished cars need to be sent to dealers all over country for domestic market and to overseas dealers for foreign market, both requiring decent infrastructure as well.

Competitive advantage such as trade tariff or trade barrier is important for company A and B. Therefore, “Goods market efficiency” is considered to be a large influence factor to investment decision for those companies. Tax and tariff structure is important for both demand and production as tax and tariff are treated as an additional cost. Therefore, demand can be affected by rising in selling prices from extra tax and tariff cost.

“Business sophistication” is also crucial for investment decision as this factor is considered as a very large influence factor for company A and large influence factor for company B. Japanese automotive company is well-known in supplier network or keiretsu. Therefore, to apply the system to another country, efficient in business sophistication is required. It is required because it could support the value chain, supplier operation, production process sophistication. Efficient in business sophistication will increase ability to compete both in cost and quality.

Another interesting factor is “Labor market efficiency” which is considered as a very large influence for company A and fair influence for company B. Automotive assembly factory requires a large labor force, so the cost is also excessive. The cheaper labor wage, the more cost competitiveness company can tradeoff. Therefore, country with cheaper labor cost will have attractiveness in investment especially for manufacturing company.

For other 3 factors i.e. “Higher education-training”, health and primary education and technological readiness are considered fair influence and small influence to investment decision for all three companies. The reason is those companies have their own education and training system.

Training will be conducted internally so public education is not crucial for business operation. Similar to technological readiness, each company will transfer its own technology. The companies also build the technology up themselves such as outsourcing satellite for overseas video call.

Overall factors that influence the selection of country to invest among these three companies are not so different. The concept of build-where-they-sell is still a key point. Therefore “Market size” becomes the most influential factor for every company. The rest depends on each company’s strategy. For example, company A concerns about competitive advantage in cost and business operation more than stability, while company B and C concern more about long-term sustainability. Company C gives especially high concern on institution consistency and fair policy support automotive industry. However, most of them also do not put attention on human capital knowledge or technology because auto assembly factory has its own production system. The system need to train to employee internally same as its own technology that can be installed by themselves.

Table 5: Interview result of level of factors influence to manufacturing investment decision

Influential level	Very large influence	Large influence	Influence	Small influence
Company A	<ul style="list-style-type: none"> Market size Labor market Efficiency Business sophistication 	<ul style="list-style-type: none"> Institution Infrastructure Goods market efficiency 	<ul style="list-style-type: none"> Macroeconomic Environment Health-primary education Higher education - training 	<ul style="list-style-type: none"> Technological readiness
Company B	<ul style="list-style-type: none"> Market size Macroeconomic environment 	<ul style="list-style-type: none"> Infrastructure Goods market efficiency Business sophistication 	<ul style="list-style-type: none"> Institutions Labor market efficiency 	<ul style="list-style-type: none"> Health-primary education Higher education -training Technological readiness
Company C	<ul style="list-style-type: none"> Market size Macroeconomic environment Institutions 			

Section 2. EACH COUNTRY CIRCUMSTANCE

Second part of the interview is about each country situation against these three respected global automotive companies' expectation. The responses are as followings;

Indonesia

Indonesia is highly evaluated among 3 interviewees from respected global automotive companies. Indonesia receives satisfaction level of "satisfied" in "Institutions", "Macroeconomic environment", "Health-primary education", "Higher education-training", "Goods market efficiency", "Labor market efficiency" and "Market size". Technological readiness and "Business sophistication" factors are at "acceptable" level. And Indonesian infrastructure is considered as "poor" level.

After research in more detail into Indonesia current situation, Indonesia ranks at 44 out of 142 countries of WEF in 2010 to 2012. Its institutions ranks at 61st with a score of 4.0 out of 7, a little lower than average score of ASEAN countries (4.3). In automotive industry perspective, Indonesia is now the third-largest car market in Southeast Asia after Thailand. Indonesia overtook Malaysia in 2008 and became the second-largest car market in ASEAN behind only Thailand. Indonesia then dropped back behind Malaysia again in 2009.²⁵

In terms of "Institutions", corruption was a major problem in the past decades. The Corruption Eradication Commission (known as KPK for its Bahasa acronym), created in 2002, is an independent organization that has power against corruption. However, in 2010, Indonesian executives who participated in the Executive Opinion Survey rated that corruption was the 2nd most problematic factor for doing business. About 30% of them selected it as the most problematic one.

²⁵ Business Monitor International, Indonesia Autos Report Q2 2010, February 2010, p.7, and Malaysia Auto Report Q2 2010, February 2010, p.17

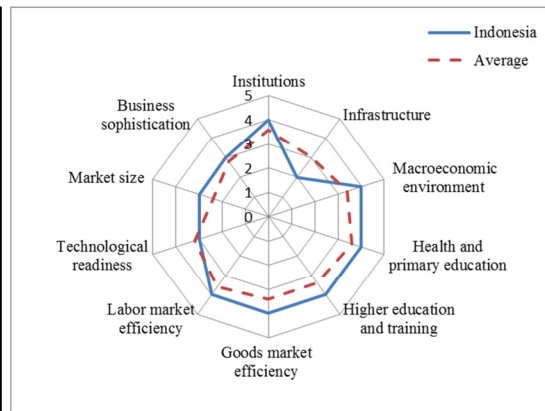
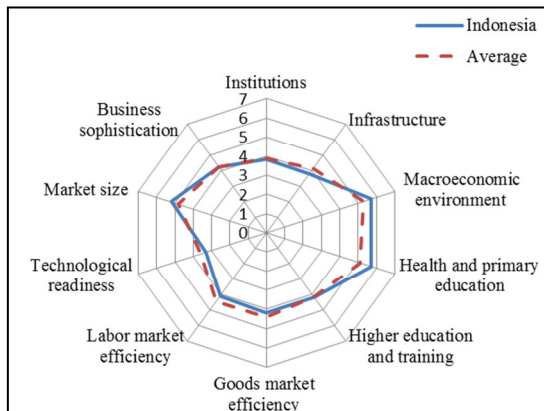


Figure 11: Indonesia competitiveness by WEF **Figure 12: Indonesia attractiveness by interviews**

Even though the government effectiveness had improved significantly in the last few years, but it is still inadequate. The major concern is the lack of transparency in policymaking. Respondents of the Executive Opinion Survey 2010 cited bureaucracy as the most problematic factor (16.2%) for doing business. Refer to information from interview, those 3 companies rated high concern in “Institutions” impact to investment decision.

Indonesia’s infrastructure, ranked at 76th from 142 in 2011 and 2012, still required improvements in many areas. The insufficient supply and quality of transport, energy, and telecommunications infrastructures limit Indonesia output. The lack of investment in this area leads to difficulty in improving Indonesian infrastructure. Moreover, the geography of more than 17,000 islands also makes it a challenging environment for infrastructure deployment. The World Bank estimates that only 55% of Indonesian roads are paved compared with an average of 80% for Malaysia, the Philippines, Thailand and Vietnam as a group.

The total carrying capacity of liners serving Indonesia is just 202,000 twenty-foot equivalent units, equal to Vietnam, half of Thailand, and 14 times less than Malaysia. The telecommunications network is also inadequate. Indonesia’s government understand country’s infrastructure situation and prioritize this issue by announcing its Medium Term Development plan for 2010-2014 infrastructure development. In the plan, investment around 5% of GDP and two-third of which will be financed by private investment including foreign investors through public-private-partnerships (PPP).

Over the past five years, Indonesia has cut budget deficits and reduced its debt-to-GDP ratio to below 30%. This made Indonesia successfully brought inflation under control. The savings rate is quite high (33% of its GDP) comparing to international standards. This means Indonesia's stock of assets is not just growing but also incorporating more technology in order to generate productivity gain. In addition, further reduction in debt and an improved country credit rating, would result in lower interest payments and free up additional financial resources.

Indonesia ranks 5th in "Market size" among all developing countries, behind only the BRICs (Brazil, Russia, India and China). Indonesian has a population of almost 240 million people. Between 1999 and 2009, the share of the middle class citizen has increased dramatically from around 25 to 43% of population. Indonesia is ASEAN's largest market, accounting for almost 40% of the group's GDP and population. The large size of the Indonesian population and the low level of car ownership in the country suggest that there is a lot of potential for expansion in the automotive industry. This makes Indonesia a base for investors interested in penetrating this fast-growing market.

Another factor which is rated large influence to automotive investment decision is "Business sophistication". This factor includes quality and quantity of national business networks and supporting industry. Auto assemble factory and its suppliers are interconnected in geographically proximate groups (clusters) for efficient operation and innovation creation. The country has relatively well-developed clusters with a lot of local suppliers but the products are still considered as medium quality supplies.

Last factor is "Labor market efficiency". Indonesia's labor markets, ranked at (), are assessed as less efficient than Thailand (30th), Vietnam (46th) and Malaysia (20th). Severance payments for permanent employees are equivalent to 103 weeks of salary, twice of Malaysia. This inflexibility has a certain level of impact on the country's economy.

Indonesia plans to follow Thailand's footsteps by offering incentives for the production of fuel-efficient cars. The incentives are not expected to be available before 2012, but automotive manufacturers are pleased to know that producing "greener" vehicles will become more competitive

in Indonesia. Nonetheless, Indonesia is still expected to be one of the better performing economies in the ASEAN region and this should be reflected in vehicle purchases and annual sales data.²⁶

Malaysia

According to the interview result, Malaysia’s attractiveness for global automotive company from Japan was ranked 3rd behind Thailand and Indonesia. According to WEF, Malaysia ranks 21 out of 142 countries in competitiveness level. From interviewees’ expectations, Malaysia’s overall situation is at acceptable level except “Market size” and “Business sophistication” factors are in poor level.

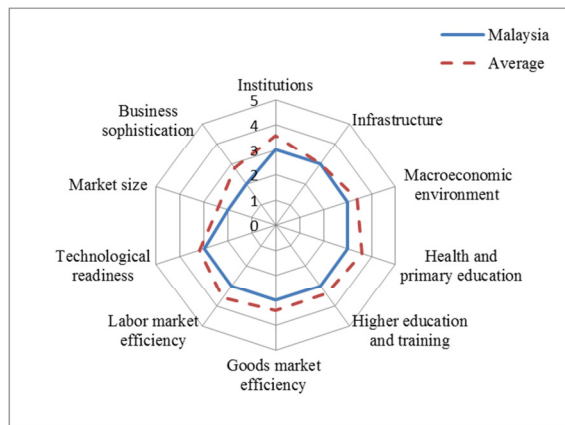
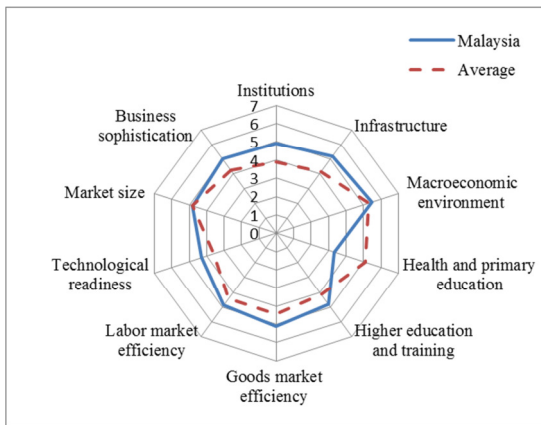


Figure 13: Malaysia competitiveness by WEF
Source: Adapted WEF 2011-12

Figure 14: Malaysia attractiveness by interviews

Overall, Malaysia is considerably competitive among ASEAN countries. Its world rank competitiveness from WEF is 21st out of 142 countries. Due to domestic national car programs and a focus on car sales and production, Malaysia has retained the highest level of passenger car sales in ASEAN for 2009. It possesses clear strength in microeconomic competitiveness but weakness on macroeconomic competitiveness. Malaysia’s strongest point in microeconomic competitiveness is

²⁶ Business Monitor International (2009), “Industry News – Incentives Aim at ‘Green’ Car Production,” *Asia Pacific Automotives Insight*, July 28, 2009.

supporting related industries and clusters, which is reflected particularly in the extent of cluster policy, state of cluster development, local availability of process machinery and local supplier quantity. However, Malaysian automotive sector has been heavily subsidized and protected to produce national champions and automobile components and parts suppliers. Therefore, it benefits national car rather than supports foreign automotive investment.

In 2006, Malaysian government issued the National Automotive Policy (NAP) in an effort to enhance the competitiveness of the domestic sector and to better position the sector within the regional and global trading environment¹⁵. Even though Malaysia have been undergone several changes in the last years, Malaysia automotive sector is still heavily protected from international competition. This has weakened the domestic firms' competitiveness, current and future and ensured that the inevitable market liberalization will be costly.

Malaysia is the country with the highest car ownership density in ASEAN reaching 350 vehicles per 1000 persons in 2009. This is to be compared others ASEAN countries in 2009, Indonesia's density 79 vehicles per 1000 persons, Thailand's less than 62 vehicles per 1000 persons in 2009, the Philippines 33 vehicles per 1000 persons, and the lowest among 5 ASEAN countries, Vietnam 13 vehicles per 1000 persons²⁷ and ASEAN average is 44 cars per 1000 persons. The relatively high ownership density in Malaysia could imply a certain level of market saturation.

The Philippines

Among ASEAN 5 countries which Japanese automotive companies have assembly operations, the Philippines' attractiveness for Japanese automotive investment is ranked 4th. According to WEF, the Philippines rank 75 out of 142 countries. The lowest score among all factors is "Institutions" with the score of 3.2 out of 7-scale.

²⁷ World Bank Group. (2011). *Motor vehicles (per 1,000 people)* [online] Available at: <http://dx.doi.org/10.1787/9789264166882-en> [Accessed: August 27, 2011]

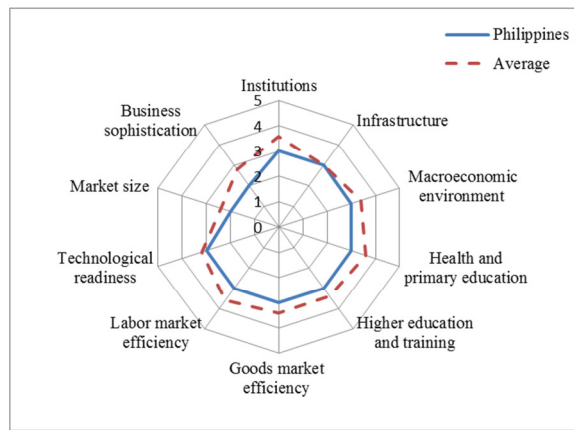
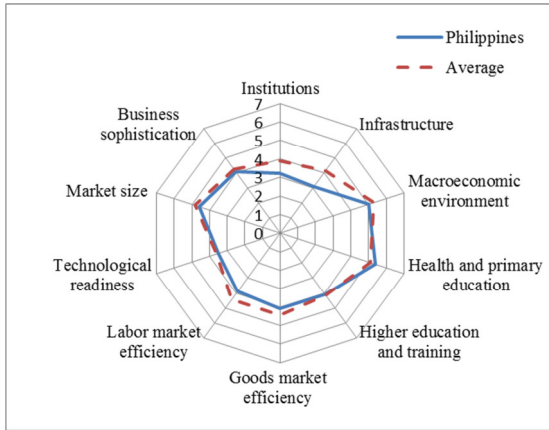


Figure 15: Philippines competitiveness by WEF **Figure 16: Philippines attractiveness by interview**
 Source: Adapted from WEF 2011-12

According to the interviews, the current condition of the Philippines are mostly rated in acceptable level and poor level for “Market size” and “Business sophistication” respectively. The concerned point of Japanese automotive companies regarding investment decision to the Philippines are the followings;

Regarding “Institutions”, even though almost three decades of auto industry have been initiated in the Philippines, a large part of the industry still remains undeveloped because of the so-called local content policy. The government assumed that, with an increase on competition, local content can be improved by focusing on import of substitution. However, the local content program only had a limited impact on the growth and development of the industry. The domestic content of automotive products has been relatively low and this has remained unchanged despite the government’s local content program. The MVPMAP revealed that the local automotive sector used only 10-15% locally produced parts and local automobile assemblers must rely on imports for the other 85%.²⁸

Labor market is also not in a good shape for auto industry in the Philippines. Strikes and the high degree of radicalism in the labor sector have imposed high costs on the industry. These led to

²⁸ Tenorio, A. and Lugo, L. (2002), “Auto parts industry: stymied by imports”, *Business World*.

very costly delays, as affected firms must readily import the materials that cannot be delivered by the striking company otherwise the whole production assembly line is stalled. Another labor-related weakness is a relatively high cost of labor comparing to Asian neighbor countries. The daily minimum wage rate in the Philippines is around US\$8.34-9.18, while in Vietnam: US\$1.83-2.04, Shanghai: US\$1.96-5.63, Jakarta: US\$2.00-3.73, and Thailand: US\$5.00-6.82²⁹. Moreover, the country's labor policy requiring firms to hire its workers as regulars after a period of six months is also hurting the industry. The industry argues that in other ASEAN countries, firms are allowed to hire contractual workers up to two to three years. Given the wide fluctuations in the industry, this policy has added up to their costs. Since they are unable to regularize their workers, they have to hire and train new workers each time demand peaks up³⁰.

In terms of business sophistication, quality of suppliers is insufficient. This is the result of hindered tariff structure to auto industry. First is a dramatically reduction on a MFN tariff of CKD packs for motor vehicles 30% between 1981 and 1992. This declined to 20% in 1993 and 1994, dropped to 10 percent in 1995 and further to 3 percent during the years 1996-1997. As a result of this tariff reduction, tariffs on locally produced parts and components ranged from 10 to 35% (except for carpet whose tariff rate was 50%) while CKD imports were levied a much lower tariff of only 3%. With this tariff structure, it would be cheaper to import parts than to procure them locally. Therefore, it is not necessary for Japanese auto companies to transfer their technology to local companies. Thus, the import substitution negatively impacts Filipino's auto industry in long run. Suppliers also could not develop their skill to produce parts meet the cost quality-delivery (CQD) requirements of the Japanese assemblers. Moreover, the industry is also hurt from the "unfair competition" from cheap second-hand used CBUs which are priced at 30-50% lower. Industry sources reported that because of second-hand imports, they are losing sales of about 20,000 vehicles annually²⁹.

The industry also points out infrastructure problems in the country due to the high cost of power and distribution. These contribute to the high production costs in the industry which is already

²⁹ <http://nwpc.dole.gov.ph/pages/statistics/Asean%20Wages%202010.pdf>

³⁰ Aldaba, R.M. (2007), *Assessing the Competitiveness of the Philippine Auto Parts Industry*, Philippine Institute for Development Studies.

saddled by a weak supply base and a small domestic market that is allegedly being eroded by the influx of smuggled vehicles. Though the country’s population ranked second among five ASEAN countries, the market is not so attractive. In 2009, potential consumer (upper-middle and wealthy income group) are less than 6.58% of population and expected to slightly increase to 18% of population in 2020.³¹

In sum, the Philippines’s government is the key to turn-around automotive industry to be more attractive. There are a lot of rooms to be improved, for instance, consistency in policy supporting the industry, tariff, labor condition and also infrastructure.

Thailand

Thailand got the highest rate of attractiveness for Japanese automotive investment. Interviewees were very satisfied in 4 factors of Thailand; “Institutions”, “Health-primary education”, “Goods market efficiency” and “Business sophistication”. For factors rated in satisfied level were “Macroeconomic environment”, “Higher education-training”, “Labor market efficiency” and technological readiness. The factor rated at the lowest for Thailand current situation was “Market size”, rated in acceptable level. In terms of country competitiveness ranked by WEF, Thailand ranked 39 following Singapore (2nd) and Malaysia (21st) among ASEAN countries.

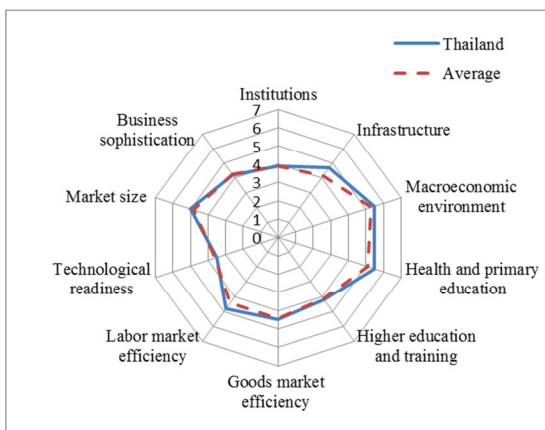


Figure 17: Thailand competitiveness by WEF

Source: Adapted from WEF 2011-12

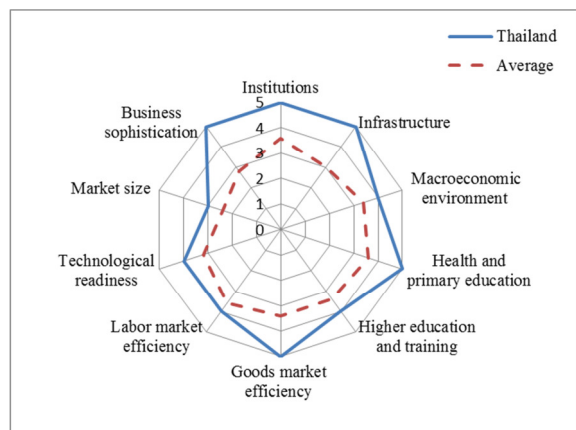


Figure 18: Thailand attractiveness by interview

³¹ Iuchi, S. (2012). Opportunity of ASEAN Emerging Business in the Global Arena.

Thailand is ASEAN's Automotive Hub with the largest vehicle assembling capacity and the highest quality parts manufacturing capability of any nation in the region, according to the Japan Automobile Manufacturers Association (JAMA). Local part manufacturers supply approximately, 80% of parts used in the assembly of pickup trucks, and just under 50% of parts used in the assembly of passenger cars.

In terms of "Market size", Thailand population is relatively low compare to Indonesia. Thai population is around 67 million. According to interview, Thailand Total Industry Volume (TIV) is about 2 million, divided into new car for 1 million and used car for almost 1 million. However, Indonesia TIV is around 4 million with new car around almost 1 million and used car around 3 million. Even though, Thailand's market size does not look so attractive for automotive investment, there are other attractive areas as follows.

For decades, the government's support and promotion of automobile industry has been quite consistent. Policy and procedure have been set to assist the process in which the automobile industry would grow. Initially, government's policy was quite protective. But in post AFTA period, it became quite liberal and many MNCs are poised to take advantage of the situation. Earlier, automobile sector was developed through an import substitution policy where import tariff was set high, components import was restricted and promotion of domestic investment was regarded as important. The Thai Government is working with major automakers in order to prepare a draft of the next five-year strategic plan for the country's automotive industry.³² However, even though Thai government has good policy support auto industry, other parts of political institutions that impact negatively to auto industry also need improved such as government stability and transparency.

For "Goods market efficiency", the government of Thailand made a decision in the 1980s to promote truck production rather than following Malaysia's lead with a national car program such as the Proton. In fact, excise taxes for vehicles range from 30 to 50%, and pick-up trucks are taxed at a rate of 3%. As a result, pick-up trucks account for nearly 70 percent of all vehicles produced and

³² Business Monitor International, Competitive Landscape, Thailand, Q2 2010, March 12, 2010, p.4

over 50 percent of domestic sales.³³ In addition, the Board of Investment (BOI) offers many compelling tax and non-tax incentives to investors in the Thai automotive industry such as work permit and visa facilitation for expatriate employees.

In terms of business sophistication, government is focusing on industrial clusters for providing opportunities to new entrants. In case of component sector, careful attention is being given to sketch the plans for the missing link sub-sectors of the value chain to reduce importable components. For the reason that incentives the Thai automotive industry has been shifting toward an export orientation since 1996. Thailand Automotive Industry (TAI) has developed an 8.7 billion baht (US \$ 217.5 million) plan to further develop the sector. This plan includes human resource development program, automotive experts dispatching program to establish clusters and upgrade auto parts manufacturing technology, generation of fund for the establishment of research and development centers, development of information center to analyze industry data and automobile export promotion center.

Last comment from interview, the reason that Thailand could attract auto investment the most is because Thailand is good place to stay, it is safe, the food taste good, the weather is comfortable, and the people are nice. Even though labor cost is competitive, but Thailand is rising up minimum wage and unemployment rate is almost 0% so labor supply is going to be inadequate. Therefore, the attractiveness in labor market efficiency moves from Thailand to Indonesia instead.

Vietnam

Vietnam's attractiveness to Japanese automotive investment was at the bottom among 5 ASEAN countries. Only the labor efficiency was rated in satisfied level. Factors of "Institutions", "Macroeconomic environment", health and primary education, "Higher education-training", and technological readiness were rated in acceptable level. The remaining factors; Infrastructure, "Goods market efficiency", "Market size", and "Business sophistication" were rated in poor satisfaction level. For world competitiveness rank by WEF, Vietnam ranked at 65th.

³³ U.S. Trade Representative, "2010 National Trade Estimates Report for Foreign Trade Barriers – Thailand", p. 358

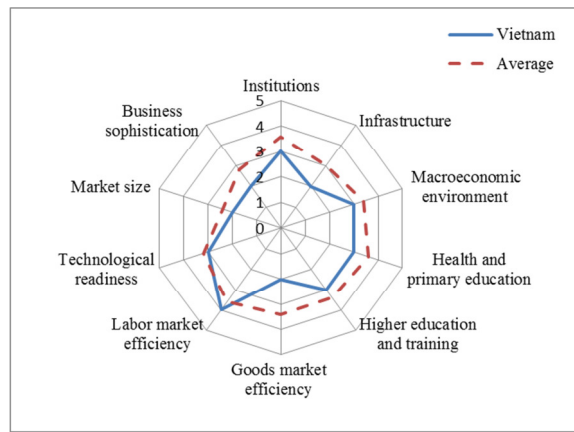
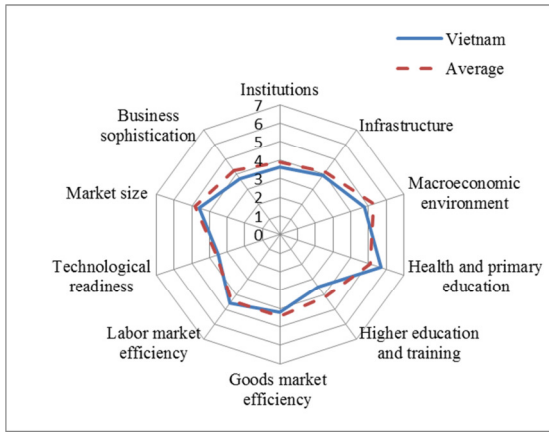


Figure 19: Vietnam competitiveness by WEF

Figure 20: Vietnam attractiveness by interview

Source: Adapted from WEF 2011-12

According to the market size, Vietnam's vehicle production industry is one of the smallest among the member states of the Association of South East Asian Nations (ASEAN). The underdevelopment of supporting industries has much to do with the size of demand. According to the data from the Industry Policy and Strategy Institute (IPSI) of MOIT in 2009, one Japanese automotive assembler had a localization ratio of only 9% because domestic demand for automobiles is too small for efficient operation. On the other hand, the motorcycle assembler had a localization ratio of 86% based on domestic demand. However, regarding the interview, Vietnam is a potential market in the future. In 2007, Vietnam population is more than Thailand with around 20 million. But car ownership in the country was 9 times smaller than Thailand (Vietnam car ownership is 13 vehicles per 1000 people while Thailand has 125 vehicles per 1000 people).²⁶ This shows that even though Vietnam current market is not so attractive but the potential does exist.

since the country has a large and young population, with 90% below or within working age. In 2009, total population of Vietnam is 87 million with the share of working age (15-64 years old) has increase to 67.18%. Therefore, in terms of labor force, Vietnam has entered the period of a “golden population structure” with total workforce around double size of the non-working population.

For “Business sophistication”, there are various issues in supply chain. Another IPSI survey on the capability of local suppliers conducted in 2008 revealed trouble in value chain. The troubles include no local company supply relatively “easy” parts and components made of cast iron, steel or plastic continue to be imported. Domestic suppliers also could not make the complicated parts because their engineering and technical capabilities are generally low. And they lack the ability to perform required QCD (quality, cost and delivery) and etc.

Generally, suppliers are small and medium sized companies, and government policies do not have policies support this group. Small-sized foreign enterprises always face difficulties because the industrial zones of Vietnam only focus on big investors. In local clusters, firms face problems of infrastructure and long distances from customers who are usually assemblers in industrial zones near main roads, harbors and airports.

Furthermore, Vietnam has not even started to seriously build industrial linkages. The government needs a special program for business linkages in the automotive industry. There is only “Master plan of supporting industries in Vietnam until 2010, vision of 2020” approved in 2007. These policies aims to promote supporting industries including; develop high-quality university education, technical training for engineers and workers, management consultation, incentives, proper tax and tariff structures, finance, matching and linkages, full use of business associations, public private partnership, international and regional cooperation, and constant organizational reform to revitalize and coordinate various policy elements. These industrial policies designed similarly to Malaysia and Thailand policy.

Section 3. MYANMAR

Republic of the Union of Myanmar is the 40th largest country in the world. It has a total perimeter of 1,930 kilometer and is the second largest country in Southeast Asia. Myanmar is also the 24th most populated country in the world with over 60.28 million people.³⁴ According to CIA World Fact Book statistics, Myanmar has only 3,200 km of paved roads compared to a land area of

³⁴ Asian Development Bank (2010), *Asian Development Bank & Myanmar Fact Sheet*, [online] <http://www.adb.org/publications/myanmar-fact-sheet> [Accessed : July 8, 2011].

677,000 square kilometers.

As the country begins a push to open its markets and economy to the outside world, many investors are interested in starting businesses in Myanmar. However, the country has poor investment environment, including weak law and obstruction of foreign inflow investment. In recent years, foreign investors have stayed away from nearly every industry except for natural gas, power generation, timber, and mining. Other areas, such as manufacturing, tourism, and services, struggle with poor infrastructure, unpredictable trade policies, undeveloped human resources (from neglected health and education systems), widespread corruption, and inadequate access to capital for investment. Private Banks still operate under tight domestic and international restrictions, limiting the private sector's access to credit.

In 2011 the government took initial steps toward reforming and opening up the economy by lowering export taxes, reducing restrictions on its financial sector, and reaching out to international organizations for assistance. Although the Myanmar's government has good economic relations with its neighbors, significant improvements in economic governance, the business climate, and the political situation are needed to promote foreign investment.

According to the interviews with respectable global automotive companies from Japan, the companies have interest to invest in Myanmar but they are waiting for Myanmar to be developed its basic structure such as infrastructure, real estate, construction, banking and other utilities to be ready. Currently, Myanmar is conducting a lot of activities to persuade foreign investment by focusing on basic structure development. For instance, Myanmar's president visiting at investor's country. There are also many conferences on how to invest in Myanmar such as Myanmar investment summit 2012. The summit aimed to present on how to do business in Myanmar and how to create networks between government and foreign investors. The received investment will mainly focus on creating basic structure as can be seen in

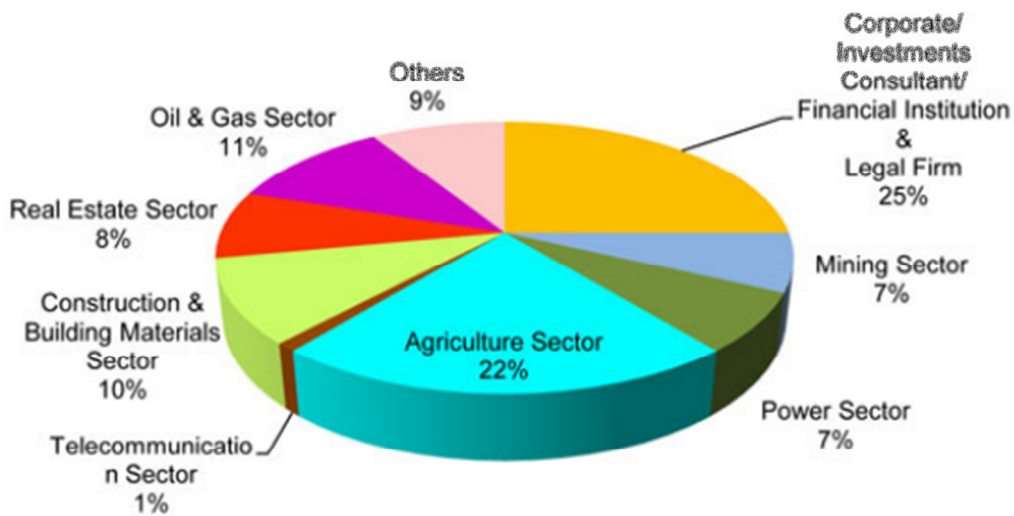


Figure 21: Myanmar investment summit 2012'a participants³⁵

Japanese companies are pushing to line up business in Myanmar but still lag behind its peers from Thailand, South Korea and especially China, whose companies have invested massively in Myanmar in recent years. Japan's trade with Myanmar has increased rapidly over the past few years. According to Japan's Ministry of Finance data, export volume to Myanmar nearly doubled to ¥40 billion (\$492 million) in 2011 from 2010, while imports grew 40% to about ¥47 billion.

Even though the first mover into the area will get advantages, Japanese automotive companies are still speculating. Not only they are waiting for the business environment to be ready, but production network and clusters development are also required by automotive industry. Those of which require a lot of time, money and training to transfer the technology. Therefore, one of the interviewees gave an opinion that only assembly plant should be built and component parts should be imported from ASEAN neighborhood countries instead of developing automotive clusters like in Thailand. The company sees opportunity in Myanmar since labor cost is the cheapest in the region and human capital amount is abundance. According to the interview, the investment may starts in the next 3-5 years based on Myanmar's readiness and government policies.

³⁵ Centre for Management Technology (2012) New Myanmar Summit 2012 [online] <http://www.cmtevents.com/aboutevent.aspx?ev=120636&> [Accessed : March 9, 2011]

CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS

In Chapter 6, the summary of the study is stated by using information from the findings and analysis on the Chapter 5. Then the findings and analysis are presented to achieve the thesis objectives. The objectives are 1) Study driving factors influencing to the country selection for car manufacturing investment of Japanese automaker. 2) Review current circumstances that support or discourage the FDI from Japanese automaker. To achieve these objectives, information was gathered from various sources such as World Economic Forum (WEF), journals, news. Information gathering also includes the interviews with three experienced managers in Asia-Oceania department of three respectable global automotive companies. The finding of this research will be provided with insight regarding country-wise FDI attractiveness from Japanese automaker's view point. On the other hand, this research results might provide some references for Japanese manufacturing's future policy in ASEAN region.

Section 1. JAPANESE AUTOMOTIVE INVESTMENT INFLUENCING FACTORS

According to the result, 10 factors were used in the interview. The factors can be categorized into 3 groups. The grouping was based on influential level on the country selection for car manufacturing investment of Japanese automaker. The categorization is shown in table 6.

Table 6: Group of factors influencing Japanese automaker on manufacturing investment

Very large influential factors	Large to medium influential factors	Small influential factors
<ul style="list-style-type: none"> • Market size • Macroeconomic environment • Institutions 	<ul style="list-style-type: none"> • Business sophistication • Infrastructure • Goods market efficiency • Labor market efficiency 	<ul style="list-style-type: none"> • Health and primary education • Higher education-training • Technological readiness

It can be seen that the group of large influential factor mainly concerned country's capability in car selling. From the result, the most influential factor to Japanese automaker investment decision

is “Market size”. Those three automotive companies expect their finished car to be sold well domestically. Furthermore, potentiality of exporting to foreign market is also crucial. The second most influential factor was “Macroeconomic environment”. Those companies considered this factor as an indicator of country’s readiness. Investment can be started or added if macroeconomic indicator is sustainable or increasing. The third most influential factor was “Institutions”. Those automotive companies considered that the government of the countries represented this factor rather than any other institutions. The government has a power to issue policies supporting the industry. Also, government reliability, consistency and transparency could impact country’s stability. Those elements play a large role in attracting or repelling FDI inflow.

The factors in large to medium influence group were rather related to manufacturing operation and cost efficiency. For “Business sophistication”, the manufacturer would select country with better clusters development. Therefore, companies can utilize this advantage to be both competitive and drive down the costs of inputs to raise their profit. It is similar to “Labor market efficiency” and “Infrastructure” which impacts directly to cost and quality of product. “Goods market efficiency” concerns elements effecting supply and demand of the market. Elements impact supply side, such as tariff and trade barrier, could increase company competitiveness in cost efficiency production. Demand condition, such as customer sophistication, can create competitive advantage or disadvantage to the company as well.

Three other factors; “Health-primary education”, “Higher education-training”, and technological readiness, were considered as a small influence to investment decision. The reason is that Japanese automaker will train and transfer own technology. Therefore, local education and technology are not necessary.

Section 2. FIVE ASEAN COUNTRIES AND MYANMAR BUSINESS ENVIRONMENT

Among five ASEAN countries, the automotive interviewees rated Thailand as the most attractive for FDI. This interview result was consistent with actual FDI inflow in Thailand. Over the past decade, Thailand has been receiving the highest FDI inflow from Japanese automotive

companies. One of main reasons was government support. Many policies offered incentive to Japanese automotive investors. Consequently, Thailand automotive industry was developed the most by those Japanese companies. Many global automotive companies decided to establish Regional Head Quarters in Thailand. Apart from government support, Thailand also has other good conditions to build car manufacturing factory. The conditions include policy consistency, strength in auto clusters development, and adequacy of infrastructure both in quality and quantity. However, Thailand also has some disadvantage. For instance, market size and macroeconomic growth are relatively medium compare to other ASEAN countries. Labor cost is also increasing. The changes in those factors may cause FDI to shift to other ASEAN country such as Indonesia.

Indonesia, as of interview time, was the second most attractive for FDI. However, Indonesia is very attractive for future FDI. The country positioning is better than the other five ASEAN countries in this research. The country's macroeconomic environment stands out, robust growth and stable. With around 240 million of population, Indonesia boasts a large pool of potential consumers. The number of population that has purchasing power (middle-income to upper-middle income group) is increasing rapidly. There are abundant of labor supply which is also cheap. Among five ASEAN countries, Indonesian current labor regulations are too strict and distorting labor market. Fortunately, the government recognized that it needed to be reformed. In addition, government has policy supporting automotive industry. However, in order to build up foreign investor's confidence, the policy-making process should be more transparent and predictable. One of the most concerns from the interview was Indonesia's infrastructure. Its roads are generally poor, the capacity of seaports is limited and electricity supply is inadequate. Nevertheless, although infrastructure problem exist, the country still is expected to be the most attractive location for Japanese car manufacturing factory investment in the near future.

Malaysia is the only country that promotes own nation car. The government has been protecting it since establishment. Highly protection through incentive has been making its nation car succeed in sale volume. Unfortunately, the successfulness was not from the real strength of the company but from the government protection. On the contrary, the protection decreases nation car

competitive ability. In terms of market size, Malaysia has biggest portion of upper-middle income to wealthy group among five ASEAN countries. However, the number of population is the least and current car ownership ratio is the most. Therefore, Malaysia market is not particularly attractive for FDI. Overall, the country is quite competitive for general business operation due to its solid institutions, good infrastructure and high quality of labor. Nonetheless, Malaysia is not so attractive for Japanese automotive investor because of government nation car protection policy. The government tries to encourage automotive industry with two approaches. The first approach is changing incentive scheme to attract more FDI inflow. The second approach is improving local industry by strengthening the link between industries and academic institutions. This will also improve labor force skills and R&D capability for further development of industry.

The Philippines attractiveness in Japanese automotive FDI was rated at a similar level as Malaysia. All ten factors were rated in acceptable to poor level. Inadequate transport network and unreliable power suppliers obstruct economic growth. Main issue of the Philippines was inefficient business sophistication. The country automotive cluster does not function well. The number of suppliers is inadequate. Even so, existing suppliers are not capable to produce and supply parts as assemblers required. The requirements include good quality, designated amount and on time delivery. This problem is the consequent of government imported part tax reduction policy. The policy made the cost of imported parts lower than locally produced parts since 1990s. Foreign automotive did not see necessity to transfer their technology to local suppliers. Subsequently, importing part became a logical choice for car assembling. As a result, the industry as a whole could not be developed and could not move forward as it should be. Besides, Labor forces are not qualified enough. Despite the fact that the country's population ranked second among five ASEAN countries, the market is not so attractive. Potential customer portion (upper-medium to wealthy income group) is relatively small. Overall, the Philippines has long way to go to be able to compete in automotive industry among ASEAN countries.

Vietnam was at the bottom of attractiveness ranking from the interview. The country was rated poor level in "Infrastructure", "Goods market efficiency", "Business sophistication" and

“Market size”. Similar to the Philippines, Vietnam infrastructure is inadequate both in quantity and quality. Goods market efficiency is less favor because import duty existing. For “Business sophistication”, Vietnam automotive clusters are still behind other 5 ASEAN countries. Current market size is not so attractive because of low income demographic. Conversely, the market has a potential to grow due to car per capita has a long way to reach market saturated level. The most attractive factor of Vietnam is “Labor market efficiency”. There are abundant of cheap labor forces to offer. Lastly, Vietnam becomes one of the more attractive choices to invest. This happens after Japanese firm got damaged by big flooding in Thailand last year.

After Myanmar opened the country, the government put effort to attract FDI for country development. The main focus is on society utilities and infrastructure development. Many industries have interest to invest in Myanmar since the domestic demand would be high as a new open-up country. But investors still do not have confident in Myanmar’s ability and its policies. For Japanese automotive companies, they rather wait and see how the government performs for around 3-5 years before making a decision to invest. The investors also would like to wait for country to be ready for automotive business operation. Because automotive industry requires a lot of factors to operate efficiently such as effective infrastructure, skilled and cheap labor, market efficiency, etc. For Myanmar, important factors to attract FDI from Japanese automaker are both the country economy readiness and consistent government policy support industry.

Section 3. RECOMMENDATIONS

This research aims to define driving factors influencing to the country selection for car manufacturing investment of Japanese automaker. Together, this research aims to review current circumstances that support or discourage the FDI from Japanese automaker. With these main objectives, the research described requirements from investor point of view. Then, the research evaluated on each ASEAN country’s abilities to support those requirements.

Interesting point regarding country’s attractiveness of five ASEAN countries in this moment is the shifting of attention from Thailand to Indonesia. Even though Thailand has been receiving the

largest amount of FDI inflow from Japanese automotive in the past decade, the country is losing attractiveness to Indonesia according to the interview. Thailand market size satisfied Japanese automaker but not as good as Indonesia. Thailand has only 67 million of population with car per capita of 165 (per 1000), while Indonesia has around 280 million peoples with car per capita of only 79 (per 1000). Indonesia is obviously in the best position for domestic market size. In terms of purchasing power, Indonesia population of upper-middle income level is expected to reach 70 million, the largest among five ASEAN countries. Regarding macroeconomic environment, Indonesia's annual GDP during 2012-2016 is expected to grow at 6.6% per annum. This GDP growth rate is the highest among five ASEAN countries. Government also considers releasing policies supporting automotive industry. In addition, labor cost is also cheaper. Although Indonesia automotive clusters development is still behind Thailand, it is better than other three ASEAN countries. Certainly, Indonesia will surpass Thailand in terms of FDI inflow from Japanese automotive investor in the near future. Indonesia also has a high potential to be the biggest car manufacturer for both domestic and international market. However, the country needs to develop its infrastructure to be sufficient for doing business efficiently. Lastly, strategic incentive policy will encourage new investment such as low tax for importing machine for new plant establishment.

With a huge investment in the past decade, Thailand's automotive industry becomes the most developed among five ASEAN countries. However, Thailand is losing its competitiveness in terms of economic of scale and labor cost. Fortunately, Thailand has been receiving strong support from Japanese automotive. The country's automotive clusters development became the most advanced. Thus, many global automotive companies selected Thailand to establish their Regional Head Quarters. With these advantages, Thailand can position itself as a manufacturing support to other ASEAN countries on behalf of respective company. Government should focus on human resources development from both internal and external sources. An example of an external source is technology transfer from Japanese automaker. On the other hand, an internal source can be developed by creating links between local academic institutions and industry. This internal source can solve the problem of higher labor cost by promoting high skilled labor, technician and engineer.

Lastly, Thailand should give consideration concerning natural disaster prevention. Last year big flood damaged severely to Japanese car manufacturers both manufacturing machine and finished car. Many Japanese companies are considering changing location such as Shiseido decided to move its factory to Vietnam. Even though car manufacturing is a heavy industry, which is difficult to change location, there is a possibility of investors moving the factories to another country. If flood damages the industry once again, investors may lose confident to continue operating in Thailand. This lost does not only apply to automotive industry but also apply to overall business environment in country.

Malaysia automotive industry is quite strong in terms of microeconomic. The strength can be reflected in cluster policy, local availability of process machinery and local supplier quantity. Nevertheless, this strength does not make Malaysia to be competitive enough in foreign market due to government policy of protecting the nation car. Consequently, the country automotive industry becomes weaker. In order to increase its attractiveness to FDI and develop local competitiveness, partnership with Japanese automaker is recommended. This partnership creates mutual benefits between foreign investors and local manufacturers. Foreign automotive investors can share its technology. At the same time, local authorities can provide some incentive back to those investors. This will create competitive environment to local market. Thus, it will force local manufacturers to improve the ability to catch up with competitors in the market. According to the interview, the country does not have any outstanding attractive factors over Thailand and Indonesia. But with strong domestic market, Malaysia should focus on improving its own manufacturer capability for further market expansion.

The Philippines automotive industry is in a difficult situation. With an increasing competition from international firms, domestic firms have to improve their manufacturing efficiency. However, with limited technology and R&D capability, the Philippines' firms can partners with foreign firms to absorb the required technology. In order to further improve the firms' competitiveness, government support is also needed. The government can help the firms by pursuing market expansion policies. This will trigger the demand for domestically produced parts-components and

for domestically assembled vehicles. Human resources development and labor policy issues are also needed to be improved by the government. Concerning high cost of raw materials, tariff reduction can be provided to address the problem in some sectors where tariff on major raw materials are greater than finished goods. Finally, the government needs to improve infrastructure provision in the country, such as utilities and transportation, to help firms bring down their operating costs.

The only remarkable attractive factor of Vietnam is labor cost. Among five ASEAN countries, Vietnam seems to face the greatest hurdle. The country needs to develop its infrastructure to be sufficient for business operation. A good infrastructure will also encourage country economy to grow further. There are rooms for growth in Vietnam automotive market since current car per capita is still low. The most important action that Vietnam should take immediately is developing the country's infrastructure to attract foreign automotive investors.

Automotive development in each five ASEAN country has different approached which led to different results. There are countries that have fruitful development in automotive industry. On the other hand, there are countries with sluggish development. It is good for Myanmar to learn and find out the best practice for the country. Many ASEAN countries have been developing their automotive industry with supporting from Japanese automotive companies for a long time. Therefore, Myanmar may need to find its unique advantage position for foreign automotive investment and clearly set direction and policy. For instance, Myanmar has to choose between developing local clusters as a whole and only focusing on assembly manufacturing from parts import.

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**APPENDIX 1: EVALUATION SHEET OF TEN FACTORS INFLUENCING
MANUFACTURING INVESTMENT OF JAPANESE AUTOMOTIVE COMPANIES.**

Factors	Contribution to Factor	Influential level to investment decision				
		Very small influence	Small Influence	Influence	Large Influence	Very large influence
1. Institutions						
A. Public institutions						
B. Private institutions						
2. Infrastructure						
A. Transport infrastructure						
B. Energy and telephony infrastructure						
3. Macroeconomic environment						
4. Health and primary education						
A. Health						
B. Primary education						
5. Higher education and training						
A. Quantity of education						
B. Quality of education						
6. Goods market efficiency						
A. Competition						
B. Quality of demand conditions						
7. Labor market efficiency						
A. Flexibility						
B. Efficient use of talent						
8. Technological readiness						
A. Technological adoption						
B. ICT use						
9. Market size						
A. Domestic market size						
B. Foreign market size						
10. Business sophistication						

APPENDIX 2: INTERVIEW SHEET: EACH COUNTRY SITUATION

Country's name						
% reach expectation		Evaluation				
		Very poor	Poor	Acceptable	Satisfied	Very satisfied
Factors		-20% 😞	21% - 40%	41% - 60% 😐	61% - 80%	80% up 😊
1. Institutions						
	Comment					
2. Infrastructure						
	Comment					
3. Macroeconomic environment						
	Comment					
4. Health and primary education						
	Comment					
5. Higher education and training						
	Comment					
6. Goods market efficiency						
	Comment					
7. Labor market efficiency						
	Comment					
8. Technological readiness						
	Comment					
9. Market size						
	Comment					
10. Business sophistication						
	Comment					

APPENDIX 3: COMMENTS ON MYANMAR

Myanmar

Myanmar is opening up, has a potential to be an emergence as Asia's next tiger economy. Many businesses are interested to invest in Myanmar such as infrastructure, Banking, Mining Please kindly suggest your concern about Automotive industry in Myanmar from automotive investor point of view.

1. Does your company have interest to invest in Myanmar? Why?

Answer :

Why:

2. What do you think about future of Automotive industry in Myanmar?

3. What is your suggestion to Myanmar's government on behalf Automotive investor?

4. Any comments