

The Role of Japanese Automakers in Asean

(*Peranan Pembuat Kereta Jepun di ASEAN*)

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ABSTRACT

This paper examines existing literature regarding the automotive industry in ASEAN countries. There are two questions that this paper tries to answer. First, how has the automotive industry developed and what are the strategies used by the automakers to face the effects of globalization. Second, how have ASEAN countries initiated the investment of automobile manufacturers in their countries and what was the response from the industry players. In order to fill the research gap related to the role of the Japanese automakers in Southeast Asian countries, we have attempted to clarify the issues and problems of trade agreements in ASEAN region only. The conclusion is that Japan and ASEAN could not depend on the ASEAN Free Trade Area (AFTA) because trade agreements signed between non-ASEAN countries are attracting the investment of multinational firms in their countries. The liberalization in protected industries, such as the automotive industry, should be promoted to increase the competitiveness of local firms in ASEAN countries.

Keywords: AFTA; ASEAN; Automotive industry; EPA; Japan

ABSTRAK

Kertas kajian ini adalah mengenai ulasan kajian sedia ada dalam industri automatif di negara-negara ASEAN. Ia cuba menjawab dua persoalan. Pertama, bagaimana industri automatif berkembang maju selama ini serta apakah strategi yang telah digunakan oleh pembuat kereta untuk menghadapi kesan-kesan globalisasi. Kedua, bagaimana negara-negara ASEAN menarik minat pembuat kereta untuk melabur di negara mereka dan bagaimana pula sambutan daripada syarikat yang terlibat dalam industri ini. Manfaat daripada kertas kajian ini adalah para penyelidik mendapat gambaran tentang ruang lingkup penyelidikan dalam pembangunan industri automatif dan mengenal pasti isu-isu baru yang perlu diselidik, khususnya dalam hubungan antara Jepun dan negara-negara Asia Tenggara. Kesimpulannya, Jepun dan negara-negara ASEAN tidak boleh bergantung kepada Kawasan Perdagangan Bebas ASEAN (AFTA) disebabkan perjanjian sedia ada dengan negara bukan ASEAN telah berjaya menarik firma multinasional melabur di ASEAN sendiri. Liberalisasi dalam industri yang dilindungi, seperti industri automatif, perlu diberikan galakan untuk meningkatkan daya saing syarikat tempatan di negara-negara ASEAN yang lain.

Kata kunci: AFTA; ASEAN; industri automatif; EPA; Jepun

INTRODUCTION

The automotive industry is considered an “industry in industry” where not only parts and components manufacturing industries are involved, but also raw material manufacturing industries and automotive service industries. Thus, any changes in automotive industry will have similar effects on other industries. This paper considers several issues concerning the automotive industry in ASEAN4 (Thailand, Malaysia, Indonesia and the Philippines). The reason is that automotive industries in ASEAN have similar development patterns due to early involvement with Japanese automakers. It is interesting to see how Malaysia and Thailand are considered to have successfully developed their automotive industry to an internationally recognized level, while Indonesia is

receiving the attention from global auto manufacturers because of its large domestic market and the Filipino government is trying to encourage the growth of automotive industry by learning from Malaysia, Thailand and Indonesia.

This paper is divided into two main parts which focus on the changes in the automotive industry before and after the 1997 Asian Financial Crisis in ASEAN4. The reason is that the governments in ASEAN countries discovered during the crisis that if they implemented high tariff and non-tariff barriers - such as local content regulations; import ban on complete built-up (CBU) vehicles; and quotas - local automotive industries would not fully develop and proceed to the next stage. As mentioned by Dicken (2007), the first stage is the import of complete vehicles, the second stage is local assembly of vehicles



from full unit of component parts, the third stage is the assembly of vehicles involving local and foreign produced components and the fourth stage is the full-scale manufacture of automobiles. After the crisis, foreign automakers in ASEAN countries also realized that the existing local and overseas markets could not cover their losses in reduced demands from markets unless they adopted other strategies, such as increasing exports and concentrating on international divisions of labor. Using existing liberalization schemes, such as the ASEAN Free Trade Area (AFTA), Japanese automakers managed to explore new markets within the ASEAN region with the cooperation from the governments.

This paper explores the important attributes of the automotive industry within the two timeframes; before the 1997 Asian Financial Crisis and after the crisis with regional economic cooperation. The next section discusses the early involvement of Japanese automakers in some of the ASEAN countries. This paper also introduces the measures taken by some of ASEAN countries with automakers in order to survive during Asian Financial Crisis. Finally, this paper concludes with a summary and implications for the future research on the automotive industry in ASEAN countries.

JAPANESE AUTOMAKERS' INVOLVEMENT

The early development of the automotive industry in many countries typically began with learning from other major automotive producers overseas. This was done by technical cooperation, technology transfer, direct investments, joint ventures and acquisition. Japan implemented its protectionist industrial policies from 1936 until the 1960s. For the domestic market, Japanese automakers increased their investments in order to produce price-competitive and energy-efficient vehicles, which resulted in the establishment of many automotive producers, including Mitsubishi Motors, Hino, Honda, Daihatsu and Suzuki.

According to Doner (1991) and Morales (1994), the government reduced and merged the number of automakers through joint ventures to avoid strong pressure from foreign firms as competitors. In the late 1960s, Japan had ten automakers: the "big two" (Toyota, Nissan), the "medium three" (Mazda, Honda, Mitsubishi) and the "small five" (Suzuki, Subaru, Hino, Daihatsu, and Isuzu). Some of the foreign companies also succeeded in establishing ties with Japanese automakers by joint venture, such as Chrysler and Mitsubishi (1971) and Ford and Mazda (1979). As a result, intergroup competition became fiercer and forced these automakers to seek new markets in Southeast Asia.

As Shimokawa (1996) clearly points out, although China had the highest automotive market growth rate, Japan could not increase their overseas production capacity in China because the Chinese government

needed technological collaboration and a network of parts suppliers with the Japanese, not the investment in new plants. The technological collaboration measure by Chinese government has caused Japanese automakers to differ and create new international production networks in ASEAN countries. As a result, the Japanese automakers began to internationalize their models, particularly after 1985.

Geographical proximity and the occupation of Japanese troops in some of the Southeast Asian countries during World War 2 encouraged the automotive related firms to invest in ASEAN. After the war ended, the Japanese manufacturers opened new factories in overseas markets in order for them to resell the older and outdated products with used machineries (Furukawa & Schmidt 2008). Another reason for the domination of Japanese firms in Southeast Asian countries during 1970s to 1980s is that, Japan needed to find replacement markets after United States and China. In addition to that, the European market became difficult to access due to the trade friction between Japan and these countries (Edgington & Hayter 2001). The shortage of raw materials and increased cost of labor in Japan itself contributed to the dominant share of Japanese multinational firms in Southeast Asia (Nizamuddin 2008).

The automotive industry in the Philippines was considered in prosperous growth during 1950s following the entrance of US automakers, Ford and GM. Due to highly protective policies, the Philippines has not shown a significant growth in the automotive industry. Problems arose, such as low economies of scale, unstable political situations, small market and lack of export competitiveness which prompted major global automakers to retreat from the market in 1984 (Aldaba 1997). Thus, the author decided that the automotive industry in the Philippines will not be discussed in this paper.

Thailand became the most attractive location for the Japanese automakers to start their production networks and this fact is supported by the study from Poapongsakorn and Techakanot (2008). Thai government policies have always been tolerant towards foreign automakers and this attracts great interest from global auto-manufacturers. The fact that Japanese automakers invented lean manufacturing, *keiretsu* (vertical industrial groups) networks and the Just-In-Time delivery system contributed to the faster growth of Thailand's automotive production hub in Southeast Asian region.

Fujita (1998) conducted a comparative study on automotive industries in Malaysia and Thailand and found that these two countries had similar development patterns in the early years, but these patterns evolved to different processes after the government intervention in policies. Private firms in Thailand hold important roles in the government's liberalized policies towards globalization. However, in Malaysia, due to the political role of Bumiputra (indigenous people in Malay language) policy, the local automotive industry expanded by the given protection

policies from the government. This led to tough challenges for Malaysian national car firms in the future as they have to face many competitive automakers compared to Thailand.

Japanese automakers entered the Malaysian market in the 1970s when the alliance between Nissan and a locally owned Chinese company, Tan Chong Motor Holdings, was established. Later, General Motors, Honda and Oriental Holdings formed an alliance to assemble Honda, General Motors and Isuzu vehicles. The Bumiputra policy has forced these assemblies to restructure and include some Bumiputra majority owned companies (Wad 2004). At first, Malaysia was considered an attractive location for Japanese investors, partly because of the Look East Policy initiated by the previous Prime Minister of Malaysia, Mahathir Mohammad, in 1981. However, political pressures arising from Bumiputra Policy have somehow discouraged Japanese automakers from doing long-term investment in Malaysia and they have decided to allocate new facilities to neighboring countries. In 1985, Mitsubishi Motors and HICOM (state owned company) engaged in a joint venture to manufacture the first national car, the Proton Saga. Proton has received special tariffs and subsidies from the governments which helped the local suppliers to develop during 1980s to 1990s.

DEVELOPMENT POLICIES FOR AUTOMOTIVE INDUSTRY

Southeast Asian countries began to introduce import substitution policies in 1970s, starting with various protection policies, including banning CBU vehicles; quotas; prohibiting the building of assembly plants and distributing directly; local content requirements; and foreign ownership restrictions. In 1974, Indonesia banned the import of complete built up (CBU) vehicles to protect its local automotive industry. Passenger cars have tariff duties as high as 200 percent compared to commercial cars with 5 to 10 percent only (Nizamuddin 2008). The rule was abolished in 1993, but 3 years later, Indonesia implemented the National Car Program, a joint venture with Kia Motors of South Korea. This was due to the reason that Indonesian government felt that Japanese manufacturers had delayed the technology transfer (engine and transmission production) which was essential to the development of automotive industry in Indonesia.

The two main reasons why protection policies were implemented in most of Southeast Asian countries were backward linkages and nationalism (Wonnacott 1996). Backward linkages here mean that the automotive industry has a large impact on industries, such as steel and tires, which are important resources to Southeast Asian countries. National pride in home-built automobiles is often connected with protectionist policies in order for them to survive against the foreign competitors.

The reason that certain inward-looking policies are implemented is to protect local industry interests rather

than to force them to compete with foreign players. However, not all import substitution policies were successful, as demonstrated in South Korea and Taiwan. Cronyism and poor management caused the policies to fail as stated by Rasiah (2009). Furthermore, import substitution policies for manufacturing vehicles has caused inefficient production due to the small competition among producers and limited market size to achieve the economies of scale in production (Urata 1994).

The assembling of complete knock-down (CKD) units is cheaper than manufacturing CBU vehicles from the major auto-producer's point of view, if the units are produced in large scales. In addition to that, the export market for units compared to 'complete' vehicles is not too competitive because the suppliers have the know-how to assemble specific vehicles for those automakers. However, the production of CKD units in Southeast Asia has discouraged the production of parts in the local market (Wonnacott 1996). In order to prevent the situation from getting serious, many developing countries opted to reduce the number of new assembly plants while giving incentives for automakers to use locally produced parts and components.

Localization strategies are not a new issue among global automakers. In order to increase firms' competitiveness and reduce threat from competitors, automakers raced to look at several drivers before adopting localization strategies. These drivers includes host country characteristics, industry characteristics, company characteristics and market characteristics, as explained by Petison and Johri (2008). In their paper, they had chosen Thailand as one of the emerging markets for their case study.

Shimokawa (1996) noted that the Japanese automakers were patient since they cooperated with local automotive related firms for technology transfer and the ASEAN governments for the high tariff policy and local content regulations. The Western automakers failed to comply with the regulations and retreated from the ASEAN market in early 1980s. Furthermore, the Japanese had the experience from SKD (semi-knock down) to CKD assembling and succeeded in designing an ASEAN-centered international production network.

Japanese automakers were not only bringing their operations and building new factories around ASEAN, but they also brought the whole parts suppliers network with them. As Furukawa and Schmidt (2008) and Graham & Anzai (1994) mentioned, the Japanese automakers' closed network pattern regularly excludes outsiders from joining the network. Thus, if the core company decides to set up production plants overseas, the rest of the network will follow. Moreover, during the 1980s, the Japanese firms in ASEAN countries were inclined to establish new relationships with local suppliers but rather imported most of the parts from Japan. The reason is because it takes time to build trust between buyers-suppliers and depend on an assured supply of goods (Belderbos, Capannelli, & Fukao 2001).

In Doner (1991), Poapongsakorn & Techakanont (2008) and Womack et al. (1990), they stated that the supporting industry for the automotive industry in Thailand was not yet developed during 1970s. As a result, a number of Japanese automotive parts makers were asked by their vehicles assemblers to invest in Thailand after that. As for Malaysia, the establishment and joint-venture technology corporation between Proton Malaysia and Mitsubishi Motors Corporation (MMC) has encouraged the development of a supporting industry, but most of the suppliers were Japanese subsidiaries rather than local suppliers (Anazawa 1997).

ESTABLISHMENT OF AFTA AND AICO

Undeniably, the penetration of Japanese MNCs into Southeast Asian countries after the 1980s was driven by the fact that ASEAN exists as one of the successful regional groups among developing countries. Under ASEAN, member countries have discussed and implemented a number of economic policies, such as the BBC Scheme, AFTA and AICO.

In order to attract more foreign direct investment and compete with China as one of emerging economies, ASEAN needs to create one large market comprising 500 million people with lower labor costs, attractive infrastructure, skilled employees and supportive government policies. ASEAN Free Trade Area (AFTA), the first ever free trade agreement in Southeast Asia's history, was established in 1992 with the objective was to strengthen the international competitiveness of local firms against China and other global multinational companies. At the same time, AFTA aimed to increase the integration of international division of labor among ASEAN countries and attract foreign investors into ASEAN as a single market by offering zero or lower tariffs on manufacturing parts in particular for fifteen years beginning in 1994. Although the target date to achieve zero tariffs was extended from 2008 to 2010 for ASEAN6 and 2016 for New ASEAN, the efforts to reduce the tariff lines were strengthened and intra-trade volume has increased year by year.

Karikomi (2001), Watanabe (2008) and Nopprach (2010) have found that AFTA has influenced the Japanese automotive firms. Among those effects are that AFTA helps the automotive parts makers to reduce production cost with tariff elimination or reduction; possibility to obtain cheaper raw materials in neighboring countries; and it also contributes to the effectiveness in finding cheaper sources of labor according to the country's characteristics. For example, Toyota has concentrated its main assembly's parts production in Thailand; such as engine and chassis, electrical components in Malaysia and labor-intensive parts; such as car accessories, are produced in Indonesia and the Philippines. The success of Japanese automakers is strongly connected to how they make use of local resources effectively by allocating specific part's

production facilities in the ASEAN region (Aswicahyono & Titik 2000). The majority of AICO participants are the Japanese automotive-related companies.

According to Yoshimatsu (2001), a regional economic arrangement can be attractive to some foreign companies where an integrated market of several small countries can increase a maximum scale of economies. The paper focused on AICO as the case study to examine the involvement of MNCs in economic development in ASEAN countries. AICO was established to alleviate the higher costs and lower efficiency rates of automotive related companies that produce vehicles in a small market. Nopprach (2009) explained that AICO has successfully attracted intra-trade in automotive parts (2003) between Indonesia and Thailand. More than 80 percent of the approved projects in AICO were the Japanese manufacturers in the automotive industry. Although the MNCs tried to promote AICO as a way to advance their international production networks to complement the affiliates in other countries, AICO failed to work smoothly because of each state's national interest. The 'application to approval' timeframe took longer than expected, as Thailand, Malaysia, Indonesia and the Philippines were cautious and did not easily receive the applications. These problems were more obvious in regards to automotive and automotive parts companies. AFTA's overall utilization rate was found to be below 30 percent by Baldwin (2006) and 15 percent to 20 percent by Hayakawa et al. (2009) which is largely different from NAFTA's utilization rate of 60 percent (Kohpaiboon, 2006). The efforts relating to the progression of an integrated market towards its liberalization with trade and investment facilitation could increase AFTA utilization in the future.

AFTER 1997 ASIAN FINANCIAL CRISIS

After the Asian Financial Crisis, the Japanese automakers took several drastic measures in order to survive. One of the measures included standardization, by using standardize and common parts in the same vehicle production lines (platforms). Shimokawa (2010) mentioned that the production of different models in the same platforms can cut costs significantly and it can save capital that would have been used for new equipment investment. The impact of the severe economic downturn on the automotive industry can clearly be seen from the drop of local demand for passenger cars and commercial vehicles. This is true particularly for Malaysian national car producers, as they depended on local market for sales in comparison to Thailand and Indonesia. Devaluation in currency also made the imported parts and components more expensive, although Thailand and Malaysia are reported to have achieved a higher localization rate (Fujita 1998). As a result, the automakers in ASEAN began to promote exports outside of the region (Shimokawa 2010).

In order to cover the losses in domestic market after the 1997 Asian Financial Crisis, the automakers in Thailand tried to increase their exports to the Southeast Asian markets as reported by Ueda (2009) and Techakanont (2008). Kohpaiboon (2006) also showed a trend of automobile exports to Southeast Asian countries, Japan and Australia, where the volume increased during 1999-2001 and the trend is clear in passenger vehicles. Kohpaiboon (2006) also concluded that the reason to this trend was multinational corporations in Thailand have to mitigate the excess capacity of produced vehicles that arose from the crisis. Imported automotive parts and components contributed to the increased cost of production and, with low demand from local market, these factors have forced automakers to take drastic measures, such as closing ineffective factories, restructuring management employees and acquiring assistance from foreign firms (Farrell & Findlay 2002).

Watanabe (2004) stated that the MNCs depended on the position of ASEAN countries in designing their national automotive policies. Toyota and Honda are relocating their factories from ASEAN4 to China, while GM, VW and Hyundai have bases in China. Now, more non-Japanese automakers are investing in ASEAN region, particularly Thailand. Thailand has showed that its automotive industry has a lot of potentials to become one large market by actively involved in FTA trends compared with Malaysia, Indonesia and the Philippines.

ABOLISHMENT OF PROTECTIONIST MEASURES

The 1997 Asian Financial Crisis forced Indonesian and the Philippines governments to receive International Monetary Fund (IMF) financial assistance with strict conditions on their trade policies. However, the Thai government, under pressure from foreign firms, decided to liberalize several investment and foreign ownership regulations in order to assist the recovery from the crisis. Ueda (2009) and Techakanont (2008) argued that the abolition of the local content regulation in 2000, with earlier deregulation of automobile industry in early 1990s, transformed the automotive industry in Thailand from a protected industry to a more liberalized and competitive industry. Malaysia, on the other hand, rejected IMF assistance and preceded with its own trade liberalization policies.

Although the crisis made the foreign automakers in ASEAN countries look for ways to reduce production costs, the World Trade Organization (WTO)'s trade-related investment measures (TRIMS) agreement contributed to the elimination of protectionist policies, such as local content rules, trade-balancing rules, and domestic sales requirement and foreign exchange restrictions. However, this elimination posted tougher challenges to automotive supporting industries in Southeast Asian countries (Fujita 1998). The elimination of protectionist rules means that

foreign firms and less-competitive local firms are on the same level playing field.

Globalization, along with free trade agreements concluded between "stronger" and "better" auto-producer countries, has forced national car manufacturers and local supporting industries to be prepared and ready to compete with foreign auto manufacturers.

Governments can either implement 'soft' or 'hard' measures to better assist automotive industrial development in trade liberalization. According to Sally (2007), 'soft' measures, such as trade and investment promotion, can accommodate wider economic-policy reforms. On the other hand, 'hard' measures, such as selective promotion and protection policies in certain industries, have a negative impact on economic growth.

ENTRANCE OF NON-JAPANESE AUTOMAKERS

ASEAN countries began to implement various incentives to attract foreign investment from all over the world from the late 1980s. In exchange for fiscal incentives, infrastructure and economic zones with trade agreements, these countries demanded technology transfer from developed countries; and set thresholds for local content and export output from the foreign firms (Yusuf 2004).

European and American auto manufacturers entered the Southeast Asian market, particularly Thailand, as early as 1963 (Benz). But the shares were too small in comparison with the Japanese automakers. In the mid-1970s, GM and Ford tried to produce the "Asian Car" but withdrew because of low sales numbers. The first oil shock and the Vietnam War also burdened most automakers, but the Japanese managed to survive (Fujita 1998). While no further explanation is given about the Japanese automakers' survival plans in Fujita (1998), Doner (1991) concluded that the Japanese investment's timeframe of returns in Southeast Asian countries was ten to twenty years, longer than the German automakers, following a comparative study of Japanese and German automotive companies in Indonesia. Furthermore, the Japanese automakers cost-efficient production methods, such as the Just-in Time and Kanban systems, contributed to this factor.

During early 1990s, Japanese automakers decided to concentrate on certain parts and components in a few countries in Southeast Asia and increased their intra-firm trade through complementation schemes. However, non-Japanese automakers (European automakers) pursued a different strategy by concentrating automobile production in one country, Thailand, in order to compete with the Japanese competitors in production concentration (Legewie 1999). Moreover, according to Higashi (1995), the market share of European and Korean automakers began to increase in 1993 in Thailand after ASEAN4 managed to achieve a remarkable economic performance among developing countries in the world.

In order for the automakers to be competitive in technological advances, manufacturing (*monozukuri*) methods and effective vehicle prices, they need to change their perspectives by actively taking part in globalization trends, such as free trade agreements, multilateral negotiations by WTO and regional economic cooperation by ASEAN. By depending on the AFTA alone, the Japanese automakers might not have enough influence to dominate market shares in global markets.

FREE TRADE AGREEMENTS AND THE IMPACT ON AUTOMOTIVE INDUSTRY

The liberalization process in ASEAN began in the 1990s after the AFTA was established. The efforts to develop the automotive industry in ASEAN were initiated by a number of MNCs in order for them to create their own international production networks. The BBC Scheme and AICO were designed to promote intra-ASEAN trade and achieve economies of scale in the automotive industry, although the utilization rate was rather disappointing. The reason was each of the ASEAN members was concerned with protecting its own industry (Fujita 1998).

Japanese automakers pressured their government to sign free trade agreements (FTA) with its important trade partners such as Malaysia, Singapore, Thailand and other Southeast Asian countries. Japan and Malaysia have been negotiating the economic partnership agreement since 2004, but the Malaysian government could not meet the demand to liberalize the national automotive industry as per requests from the Japanese side. This was to ensure the survival of Proton and Perodua and their suppliers in post-FTA era (Onozawa 2008). It is essential for Japan and its FTA partners to find a common ground in order to make such agreements a success.

The Japanese models of FTA consist of tariff reductions and economic cooperation to enhance the effectiveness of each economic partnership agreement. Furthermore, the Japanese side can use the technical cooperation as an "exchange card" with zero and lower tariffs on sensitive industries in the partners' country. Japanese MNCs gained the maximum advantages from FTA. For the automotive sector, Japan agreed to provide various forms of assistance, including technology transfer and capacity building, in exchange for the tariff liberalization of main products traded between Japan and ASEAN countries. The impact of these Japanese economic partnership agreements (EPA) on the automotive sector in Thailand, Malaysia and Indonesia can be found in recent literature of Hamzah (2009).

One of the challenges in FTA between developed countries and developing countries is the restrictive Rules of Origin (RoO). Dieter (2007) suggested that Asia implement PANEURO in order to increase the economic integration percentage. RoO in EPAs are discussed thoroughly by Hamzah (2010) and have been found to

have positive effects on the flow of technology transfer to developing countries as foreign companies tend to invest by building new factories for locally produced parts and components. This paper has stated that RoO should not be neglected by exporting firms, particularly in the automotive industry, because there are many advantages to adhering to the rules as agreed in the trade agreements. In current regional trade agreements, different rules of origin apply to different countries in regards to the automotive industry, which hinders the exporting firms from using the preferential tariff in East Asia.

Kawai and Wignaraja (2007) noted that the majority of FTAs in East Asia have adopted a combination of the three RoO (Wholly Obtained criteria, Substantial Transformation criteria and Change in Tariff Classification criteria) but this varies in the case of automotive sector. AFTA and ASEAN-China FTA adopted a 40 percent value-added rule. Japan-Malaysia EPA adopted a 60 percent value-added rule for HS8703 (automobiles) and HS8711 (motorcycles) in contrast to a 40 percent value-added rule in Japan-Thailand EPA for the same products. The higher the percentage of value-added rule in automotive parts could mean that the government tries to protect the local industries by reducing the imports of automotive parts and increase the local content of automotive parts.

Hamzah (2010) has examined both categories rules of origin in Japan-Malaysia EPA, Japan-Thailand EPA, Japan-Indonesia EPA and ASEAN-China FTA. These rules of origin are all different. The value-Added rule of 40 percent to 60 percent is applied to these two categories alongside the Change in Tariff Classification (CTC) rule. The advantage of the CTC rule is that these types of rule only deals with little administrative work and the liberalization level can be altered from change in heading to change in subheading or items. According to Estevadeordal (1999) and Estevadeordal et al. (2009) studies, which were based on NAFTA RoO, a change at the level of a chapter is more restrictive than a change at the level of a heading; and a change at the level of a heading more restrictive than a change at the level of a subheading. This shows the limitation in trade of automotive related goods between Japan and ASEAN countries. It also proved that Malaysia, Thailand and Indonesia tried to cushion the impact from free trade by protecting their respective domestic automotive industries using the product's origin channel. However, ASEAN countries can still hope technology transfer through economic cooperation in EPAs can produce benefits other than tariff reductions. These free trade agreements could mean that the partner countries can lock in economic reforms and promote technology transfer from developed countries to developing countries (Coe, Helpman & Hoffmaister 1997). The North-South FTA could also promote a convergence within countries involved to improve their income levels which can increase their respective economic growth levels (Coe, Helpman & Hoffmaister 2008).

Technology cooperation in economic partnership agreements between Japan and ASEAN countries determines the effectiveness of its agreements which encompass WTO plus rules on many issues (Intellectual Property Rights, trade facilitation and rules of origin) (Solís 2010). This is what makes Japan's preferential trade agreements differ from others in order to defend the Japanese sensitive sectors to be liberalized.

CONCLUSION

The regional economic integration of ASEAN has been successfully supported by the balanced participation of Japanese automakers and ASEAN government's policies. Government's support of tax free and industrial zones have encouraged foreign firms to further develop the overall automotive industries by transferring appropriate technology and providing employment opportunities for the local labor force. Not only have the automakers got the advantages of economies of scale, but ASEAN4 countries have also benefited from the increased automotive trade volume and improvement in people's incomes.

After 2016, AFTA will be fully implemented in all ASEAN countries. This could mean that new ASEAN countries (Myanmar, Laos, Cambodia and Vietnam) are going to emerge as attractive destinations for foreign investors. Additionally, the geographical proximity with China and the newly-built railway between Kunming, China and major cities in CLMV (Cambodia, Laos, Myanmar and Vietnam) countries could facilitate more intra-trade flows between the ASEAN region and China. As globalization proceeds with competition rivals across the world, developing countries such as Thailand, Malaysia, Indonesia and the Philippines need to find ways to be attractive to foreign MNCs for FDI. It is unfair to cling to foreign firms alone, as the states should protect local manufacturers to a certain extent, particularly those associated with national automotive industries.

Global automakers are turning their attention to ASEAN because of the FTAs signed with countries, such as Japan, China, India and Middle East countries. The change of Asian strategies are obviously due to the fact that they could form their own regional division of labor within ASEAN and produce specific models and parts in each country. Thailand has become the regional hub for assemblers; Indonesia has shown promise for the establishment of new production facilities for Japanese automakers; and Malaysia has managed to create their own national car brands with assistance from Japanese advanced technologies. The Philippines, on the other hand, their automotive industry is liberalizing and looking for the possibility of becoming a production hub for automotive parts and components.

Last but not least, this paper needs stress that although a considerable of literature exists regarding the

automotive industry in ASEAN; the economic development gap causes analyses of the countries to be uneven. Future research should adopt a different approach by analyzing Thailand, Malaysia, Indonesia and the Philippines as a whole so that there is more focus on developmental differences in regards to the cooperation between governments and foreign firms.

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