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A Chance in Myanmar Induced by the Minimum Wage Policy in Thailand

A Case Study of Myawaddy Industrial Area

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Abstract

The central government of Myanmar has developed the Myawaddy Industrial Area to enhance domestic small and medium-sized enterprises by setting up plants at the border of Thailand, but the present economic conditions in Myanmar make the realization of this plan difficult. In the Mae Sot district of Thailand, there are currently many Burmese migrant workers who could potentially become the workforce for the industrial area, if the central government creates new jobs. Multinational corporations in Thailand plan trans-boundary investments to surrounding countries where workers are paid low wages, after Thailand enacted a nationwide minimum wage policy which regulates at least 300 baht per day per worker as of 2013. The Myawaddy Industrial Area could drive the industrialization of Myanmar, if the government institutes a duty free zone to attract foreign direct investment and develops infrastructure. This paper discusses the effects of the industrial area located at the border of Myanmar in relation to the *maquila* program in Mexico and the Export Processing Zone in NIEs as previous models.

Keywords: *Maquiladora*, EPZ, Minimum Wage Policy, MNC, export-oriented, import-substitution, trans-boundary, migrant

1. Introduction

Myanmar has recently started to democratize, as promoted by the Prime Minister Thein Sein (the current President of Burma), who has taken up an economic open-door policy, and has invited FDI (Foreign Direct Investment). From 2013, the central government of Myanmar unlocked the immigration gate for foreigners in the northwest area of the state of Kayin along the border of Thailand, which makes access by land possible between Thailand and Myanmar. It is expected that trade between Myanmar and the other ASEAN (Association of Southeast Asian Nations) countries will increase, as AFTA (ASEAN Free Trade Area) will eliminate intraregional tariffs and non-tariff barriers among ASEAN members in 2015 (Ishikawa 2009a, 2009b, 2013). The low cost of labor and its potentialities in Myanmar could attract many countries to make FDI. Furthermore, Thai garment factories and other labor intensive industries are considering transfering to surrounding countries in which they can procure cheap workers, as the Thai Government has enacted the 300 baht minimum daily wage policy since 2013. In Eastern Thailand, MNCs (Multinational Corporations) have started to follow the 'Thailand-Plus-One' strategy and have built factories in border areas: for example, Poipet and Koh Kong in Cambodia, and Savannakhet in Laos, implementing multinational operations by utilizing trans-boundary factories.

The central government of Myanmar plans to designate three industrial areas: Thilawa, Dawei and Kyaukpyu, which are all based in ports along the coast as SEZs (Special Economic Zone). In these SEZs, EPZs (Export Processing Zone) capabilities will enhance FDI, where the main investors are high-technology companies, which are driving economic development in Myanmar. On the other hand, the MIA (Myawaddy Industrial Area), which the central government is developing in Kayin and is located at the border area of Thailand, will invite only low-technology companies. It is uncertain to what extent the MIA will contribute to the industrialization of Myanmar as it is. Additional intervention by the central government might be required in order for the MIA to develop as expected.

Since the 1980s, a number of studies have been conducted examining the economic development of Latin America and East Asia (Zhou, 2008). NIEs (Newly Industrialized Economies) emerged in both areas, which contributed to the adoption of export-oriented strategies in each country. Hobday found that the strong performance of export-oriented East Asian NIEs (i.e. South Korea, Taiwan, Hong Kong, and Singapore) became the standard for excellence in economic development and technological catch-up (Hobday, 2003). Haggard (1990) concludes that “the crucial difference between the East Asian and Latin American NIEs is the difference between industrialization through export and import substitution.” Regarding industrialization through exports, Amsden (1989) indicates that exports are conducive to technological advancement because technological progress in late industrialization is based on learning and borrowing, unlike earlier industrialization in the West that was based on the generation of new products and processes. The driving force behind the export industry is MNCs.

Fujimori and Hirata found a relative quantitative relation between exports and imports in many EPZs in Asian NIEs (Fujimori, 1978, 1990; Hirata, 1978). ILO and UNCTAD analyzed EPZs and found the life cycle of export and import (ILO, UNCTAD, 1978). In short, there are differences between each EPZ and this affects the industrialization process. Tajima (2006) indicates that the difference between EPZ and the *maquila*[1] program, a Mexican policy adopted in 1965 to stimulate industrialization, is that the *maquila* program lacks the support of mature supporting industries and of government intervention, both of which are necessary if the *maquila* program is to grow. On the other hand, a neoclassical economics approach emphasizing export-oriented industrialization operates under a market principle which does not regard governmental intervention as effective (Esho 1997).

In this paper, we examine the present status of development in the MIA, and describe its potential to be a driving force for economic development in Myanmar. Then, we suggest a possible industrial policy that would allow the MIA to substantially contribute to Myanmar’s industrialization, based on an analysis of the *maquila* program in Mexico and EPZ in East Asian NIEs (hereafter simply referred as “NIEs”).

2. Myawaddy Industrial Area

As shown in Figure 1, the Myawaddy district of Kayin in Myanmar is the key point of land transport in South East Asia, as it is located near the border to Thailand and along Asian Highway Route 1 (AH1), also known as the ‘East-West Economic Corridor’, which connects Myanmar (west) to Vietnam (east). Its area is approximately 3,000 km^2 and has a population of approximately 68,000, not including about 20,000 migrant workers who have crossed the border and live in the Mae Sot district of Thailand (Limskul and Taguchi, 2012). The government in Kayin, which was devolved by the central government of Myanmar, plans to develop the industrial area named ‘MIA’, and has already completed the phase 1 plot for DDI (Domestic Direct Investment).

Figure 1. The location of Myawaddy and Mae Sot

(Source) Prepared by authors

[1] We will use “*maquila*” when referring to the assembly industry in general and “*maquiladora(s)*” to refer to a plant or plants. (Brannon; Luckers. 1994)

One of the ministers of Kayin state[2] commented that the target industries to invite were labor intensive industries like garment factories and that almost all companies were local SMEs (small and medium-sized enterprises) whose headquarters were located in Yangon, Myanmar's largest commercial city. He emphasized the benefits of prompt efficiency, as labor intensive factories do not require high construction costs, making it possible for owners to control investments. He also argued that heavy machinery for manufacturing processes are not necessary in labor intensive factories, that primitive infrastructure facilities such as private power generation and well water are available, and that they employ many workers, which creates jobs. To sum up, the development strategy of the MIA in Kayin is to focus mainly on local companies and not to extend invitations for FDI.

However, considering the development of industry and the economy in Myanmar, the capability of local SMEs to create new jobs would be insufficient to expect a meaningful economic impact. The land area of phase 1 in the MIA is 57.4 ha. (METI, 2014). If, for example, the proportion of usable area is 50%, that leaves a total building area of 28.7 ha. If the average building area is approximately 4,000 m^2, the MIA would need to invite more than 70 domestic garment factories to fully cover phase 1. It is economically difficult for more than 70 domestic companies to invest in the MIA, because it is located approximately 450 km from Yangon. This leads to the conclusion that the MIA requires the assistance of FDI to operate efficiently (METI, 2014).

The logistics network from the MIA to Bangkok, Thailand (Bangkok route), which is approximately 490 km long, has already been made available for transportation, as AH1 near the MIA was renovated by Thai contractors funded by a Thai grant. Despite the need to cross a border, transportation on the Bangkok route saves time and money in comparison to the logistics from the MIA to Yangon, Myanmar (Yangon route), as traffic conditions in Myanmar are poor (Ishida 2010). In the interest of economic cooperation, Myanmar is giving SEZ precedence over Thilawa, Dawei and Kyaukpyu Industrial Areas, which are planned for the seacoast, far from the border of Thailand. Therefore, MNCs in Thailand and other countries are considering establishing factories in the MIA so that they can procure a cheap labor force and operate factories profitably in Myanmar. Investment by high value-added industries such as electrical appliance, electronic apparatus and automobile parts producers will create large-scale economic impacts. The minimum wage policy in Thailand has effectively created favorable conditions for the development of the MIA in Myanmar. The MIA has great potential to contribute to the industrialization of its country according to Burmese policy.

3. Incentives of MNCs in Thailand

Do MNCs in Thailand and other countries have motivations to invest in the MIA? Wages are higher at labor intensive factories in Bangkok than in other districts of Thailand. The farther from Bangkok the factories are located, the cheaper the wages are. The labor intensive industry has shifted from Bangkok to these outlying areas which are near the border to Myanmar. The great number of higher education institutions in Bangkok make it possible for factories to acquire middle management and skilled workers without difficulty. To promote the decentralization of direct investment, BOI (The Board of Investment of Thailand) divides the country in three and grants incentives such as tax privileges, guarantees etc. The farther from Bangkok factories were located, the more the juristic person's income tax and dividends were exempted. However, almost all high technology manufacturers operate factories in Bangkok or its surroundings (BOI-named "Zone 1"), where there is a cluster of high-income workers. For example, Table 1 explains that the minimum wage of Zone 1 (such as Bangkok, Nakhon Pathom, Nontha Buri, Pathum Thani, Samut Prakan and Samut Sakhon) was 215 baht, whereas in Zone 2 (such as Chonburi, Cha Choeng Sao, Sara Buri and Ayutthaya etc.) the minimum wage was around 190 baht, in Zone 3 (such as Bang Kan, Nakhon Ratchasima etc.) the minimum wage stood around 180 baht in 2011 (Table 1). This means that the minimum wage decreased in inverse proportion to the distance from Bangkok, with the exception of Phuket, where workers are in high demand due to its status as an international resort area. (Ministry of Labor in Thailand, 2013)

Table 1. Minimum Wage by Area in Thailand (2011-2012)

No.	Number of Areas	Names of Areas	Zone	Minimum Wage per day (Baht)		
				2011	2012	2013
1	1	Phuket	2	221	300	300
	6	Bangkok, Nakhon Pathom, Nontha Buri, Pathum Thani, Samut Prakan, Samut Sakhon	1	215	300	300
2	1	Chonburi	2	196	273	300
3	2	Cha Choeng Sao, Sara Buri	2	193	269	300
4	1	Ayutthaya	2	190	265	300

2 Interviewee: A minister of Kayin state in Myanmar. (February 13. 2014)

5	1	Rayong	2	189	264	300
6	1	Bung Kan	3	186	259	300
7	1	Ranong	3	185	258	300
8	1	Krabi	3	184	257	300
9	2	Nakhon Ratchasima, Prachin Buri	3	183	255	300
10	1	Lop Buri	3	182	254	300

(Source) Prepared by authors from Ministry of Labor in Thailand, 2013

In pursuit of a comparatively low cost of labor, many labor intensive industries which employ large numbers of workers tended to build their factories in industrial areas far from Bangkok, and finally gathered in Zone 3. Furthermore, relatively good traffic conditions in Thailand boosted the decentralization of investment. The principal road network in Thailand was established by the U.S. for military use, and developed by grant funds from the U.S. and World Bank. It was recently called one of the most advanced networks in ASEAN countries (Kakizaki, 2002). This network has enabled the efficient distribution of factory products in Thailand, and even labor intensive factories located far from Bangkok can convey their products to Laem Chabang Port, which is one of the largest export sites in the world, by utilizing it. All these things made it clear why Zone 3 contains the majority of the labor intensive industry.

On January 1 2013, the government of Thailand enacted a nationwide Minimum Wage Policy which requires employers to pay at least 300 baht per day to each worker. At that point, labor intensive industries lost the advantage of being able to procure low wage workers in industrial areas far from Bangkok, while retaining the advantage of tax privileges. These labor intensive industries, in which the bulk of costs consist of salary and welfare, plan to move to or invest in the trans-boundary areas around Thailand, seeking low labor costs.

The chief executive officer[3] who manages local garment companies in Yangon, Hpaan and Bago told an interviewer that the average wage in Myawaddy is almost the same as in Yangon. The basic monthly salaries in Yangon are significantly lower than those in Bangkok, as shown in Table 2 (JETRO, 2013).

Table 2. Basic Monthly Salary (USD, 2013)

	Yangon (Myanmar)	Bangkok (Thailand)	Sydney (Australia)
Manager	433	1,574	8,785
Engineer (Middle class)	138	698	6,895
Worker	53	345	4,615

(Source) Prepared by authors from Japan External Trade Organization [JETRO], 2013

Nevertheless, the Minimum Wage Policy does not seem to be properly enforced around the border area in Myanmar. We conducted interviews in the Mae Sot district in Thailand, which borders the Myawaddy district and contains approximately 400 garment factories and approximately 20,000 Burmese migrant workers (Limskul and Taguchi, 2012; Taguchi, 2012). We interviewed a garment factory in Mae Sot which is the subsidiary of a company whose head office is located in Hong Kong[4]. This company distinguishes between three position classifications: their management consists of two staffs from Hong Kong, with 30 Thai managers, and approximately 700 Burmese migrant workers. Their main clients are companies in Hong Kong, Shang Hai, and Japan. The managing director stated in the interview that he had no intention to make FDI in Myanmar. He reasoned that the factory had already implemented low-cost operations by procuring Burmese migrant workers who come from Myanmar to earn money temporarily in Thailand.

Next, we had interviews with the Burmese workers who belong to the product process division in this factory, where the female workers make up more than 90 percent of the workforce. The interviewees were three female workers: one in her 20’s and the other two in their 30’s. The following paragraph is a summary of the information learned in these interviews.

Almost all of the Burmese workers are from Myanmar, and have come seeking jobs and high salaries in Thailand. They send part of their salaries back to their families in their hometowns. They live in a dormitory located in the factory area, in which they are provided with staple foods. Their monthly salaries depend on their work experience; workers with more than 10 years experiences earn over 10,000 baht, and workers with less than 10 years experiences can earn from 5,000 to 10,000 baht. One of the interview subjects concretely answered that their own salary was 5,000 baht. Food and other miscellaneous expenses are deducted from their salaries, and the remainder is remitted to their hometowns. They are eager to return to Myanmar and live with their families, as their living in Mae Sot, Thailand is strictly for work.

3 Interviewee: The chief executive officer of local garment companies in Yangon, Hpaan and Bago. (September 5. 2013)

4 Interviewee: Managing director of the Hong Kong-based company. (February 18. 2014)

Managing director insisted that his company observes the Thai minimum wage policy: 300 baht per day. However, one of the interviewees answered that her monthly salary was 5,000 baht. Assuming there are 26 working days with 4 holidays a month, the monthly salary should be at least 7,800 baht under the minimum wage policy, and up to 8,000 to 8,500 baht including overtime allowances.

If we accept managing director's answer, our interpretation is as follows: when a Thai garment factory employs Burmese migrant workers around the border area, the management usually offers a dormitory as a residence, and explains that there is no payment expected from the workers. Despite being in a foreign country, the migrant workers can concentrate on their work, because they are living in a dormitory for free, and the factory provides some food. Almost all of them are illegal workers who have no working permits, so they are satisfied to get any job in Thailand.

At the same time, the factory reports their expenses which include not only direct payments like salary, welfare and miscellaneous expenses, but also indirect payments like room charges and food, which are all included on the company's tax declaration. As these indirect payments qualify as welfare, each wage is claimed to meet or exceed 300 baht per day. This means the factory (or company) has observed the minimum wage policy, and the management has secured their profits by increasing expenses on their tax declaration, which finally leads to savings on their actual tax payment as well.

Because of this situation, these companies which manage garment factories have the intention to stay in the border areas of Thailand, and can earn profits by utilizing the nationwide minimum wage policy. They are given no motivation to venture into trans-boundary FDI to Myanmar where the language and culture are different.

4. The Potential of Development in the MIA

As stated above, the central government of Myanmar has not made plans to actively invite FDI to the MIA, and Thai factories located at the border areas have little intention to invest in Myanmar. How can we evaluate the potential of development in the MIA?

In developing the industrial cluster in the MIA, labor force is a key issue. In Kayin, there are many unemployed workers because of a civil war[5] in which ethnic minorities fought the army of the central government. The factories in the MIA can procure these workers to make up their labor force, but the number of potential workers is insufficient. Assuming the number of workers needed in a labor intensive factory is from 500 to 1,000, and the number of factories in this area is from 50 to 1,000, then the MIA would create jobs for approximately 25,000 to 100,000 people. It is difficult to procure this number of workers in the Myawaddy district.

Under the military regime in Myanmar, many Burmese refugees left their country and sought jobs in other countries. According to research in 2012, there were approximately 1,130,000 Burmese migrant workers in Thailand (Limskul and Taguchi, 2012). Almost all Burmese migrants in Mae Sot are refugees from Kayin in Myanmar, who fled to escape civil war. They have no visa, passport or certification from Kayin, due to the nature of the struggle with the central government over a period of many years. Nor could they acquire a working permit in Myanmar. In fact, they work at garment factories as illegal workers, and make up approximately 20,000 of an estimated 260,000 workers in Mae Sot (Kudo, 2010).

To work in Thailand, the Burmese illegal workers need to pay approximately 3,000 to 3,800 baht per year to agents who receive temporary working certificates from the Thai government (Ito, 2010). Their living environment is poor, so they hope to return to their hometown in Kayin and live with their families. The state government of Kayin has now agreed on cease-fire terms, so if any jobs were created in Kayin, these workers would be likely to move back to their hometowns. Considering that prices in Myanmar are cheaper than in Thailand, it would be possible for the Burmese workers to maintain or improve their standard of living in their hometowns despite their low salaries. The repatriation of the Burmese migrants currently in Thailand would increase the labor force in the MIA.

The development of infrastructure in Myanmar would attract high technology industries such as electrical appliance, electronic apparatus and automobile parts manufacturers, which are currently located far from Bangkok, Thailand. They lost their competitive advantage of low costs after the enforcement of the minimum wage policy. Consider the multinational operations of the labor intensive process: for example, a MNC in Thailand sends materials to a factory in Myanmar, which produces the intermediate materials through labor intensive work, and sends them back to the main factory in Thailand, where they will be completed as finished goods and exported to other countries. However, MNCs do not intend to employ illegal workers such as Burmese migrants, because they need to carefully manage their reputations. In the past, Nike, Inc. was boycotted throughout the world when a subsidiary company was found to

[5] The war between the Karen National Union in Kayin state and the central government of Myanmar ended in a cease-fire in 2012 and remains the longest-running civil war in the world. Many Karen-populated parts of the country were devastated by the Second World War and have been affected by armed conflict since 1949. (South, 2011)

employ illegal workers, which subsequently caused a major loss of profits. In short, they do not invest in the border area of Thailand, because they reject employing illegal workers from the viewpoint of compliance and CSR (Corporate Social Responsibility). In 2014, the suppliers of Toyota investigated the surrounding area of Thailand: Myawaddy in Myanmar, Poi Pet in Cambodia and Savannakhet in Laos. AFTA will drive multinational operations and trans-boundary economic activity in 2015. On the other hand, the Hong Kong-based company interviewed by the authors does not seem to be interested in CSR. The company will likely continue to operate in the border area of Thailand, employing illegal migrant workers. The Hong Kong-based company is a good example of the types of businesses in the area, in that they are generally not interested in CSR. So, this Hong Kong-based company is operating under little responsibility to the ideals of CSR, which shows a major difference between MNCs that might, in the future, invest in MIA.

If a Duty Free Zone (DFZ) is established in the MIA, it will drive multinational operations and transnational economic activities. In the DFZ, many of the factories are those producing intermediate products through labor intensive production process, while much fewer are producing final products from raw material. The DFZ may be divided into two categories: one is an Export Processing Zones (EPZs), established in NIEs, and another is *maquila* (Tajima, 2006; Taniura, 2001). A major difference between an EPZ and *maquila* is the structure of tax exemptions. An EPZ exempts factories located within a limited area from taxation, while *maquila* does not limit the geographic area from which factories are exempted (Tajima, 2006).

The ILO (International Labor Organization) and the UNCTAD (United Nations Conference on Trade and Development) illustrated the characteristics of an EPZ in 'The typical life cycle of an EPZ' (ILO, UNCTAD. 1988). It summarized that in an EPZ the amount of exports increases over time, while simultaneously, the ratio of domestic procurement increases and as a result the amount of imports falls (Figure 2)[6]. This is the reason why the government facilitated the import-substitution industrialization of domestic procurement as a national policy, so that the amount of domestic procurement increased and the amount of imports fell accordingly (Fujimori, 1978, 1990; Hirata, 1978; Tajima, 2006).

In Mexico under *maquila*, however, the domestic market did not mature. The amount of domestic procurement did not increase and the number of imports increased according to export increases (Figure 3)[7]. Watanabe indicates this reason: a shortage of production capacity caused by low technology and capital shortage, a shortage of supply materials, an insufficient number of high quality laborers, and a lack of awareness about quality, cost and efficiency (Watanabe, 1983). Added to these reasons, Wilson points out that there was a dearth of information linking *maquiladora* factories and domestic companies (Wilson, 1992). *Maquila* in Mexico did not develop as the EPZ in NIEs because there are few domestic supporting industries which supply the needed intermediate materials to factories.

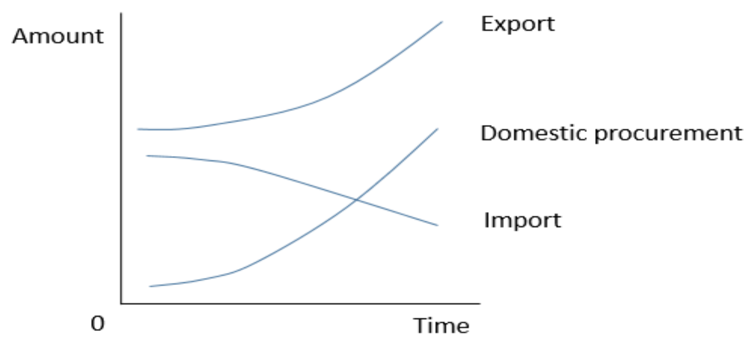

Figure 2. Changes of Export, Import and Domestic procurement in EPZ

[6] The proportion of domestic inputs among assembly plants in export-processing zones rose from 13 percent in 1972 to 32 percent in 1977 for South Korea and from 5 percent in 1967 to 27 percent in 1978 for Taiwan. Singapore's proportion of domestic inputs remained rather flat but very high: 40 percent in 1972, peaking at 45 percent in 1977, followed by 43 percent 1979. (Wilson. 1992)

[7] In *Maquiladoras*, exports and imports, in terms of USD, in 1980 was 2,519 Million USD and 1,747 Million USD, respectively. Until 1994, both exports and imports rapidly increased to 26,269 Million USD and 20,466 Million USD, respectively. As a result, the ratio of imports to exports increased from 70 percent to 77 percent during the period, decreasing the share of domestic procurement from 30 percent to 23 percent. (Tajima. 2006)

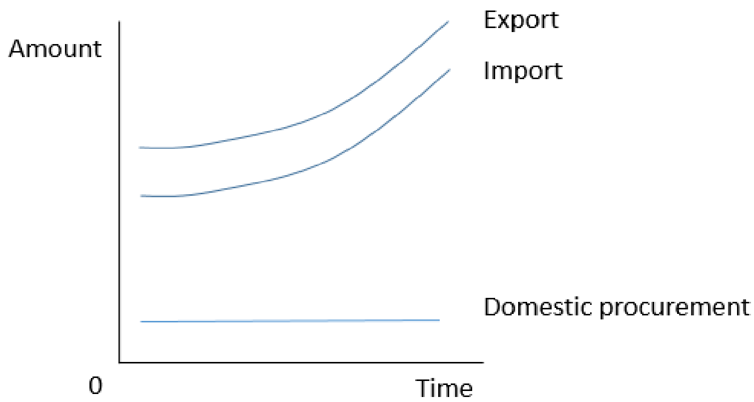

Figure 3. Changes of Export, Import and Domestic procurement in *Maquiladoras*

The DFZ in the MIA will be expected to follow in the steps of *maquila* when it matures, but not the EPZ in NIEs, because there is no demand in Myanmar for the intermediate materials which the supporting industries produce. In other words, there is a chance for the MIA to contribute to the industrialization of Myanmar, provided it follows the examples of the EPZ and the development of *maquila*. At the beginning of *maquila* in Mexico, there was a cluster of low technology industries such as garment, shoes, and leather goods producers. However, after the Mexican government utilized *maquila* as a means of export-oriented industrialization, high technology industries such as transportation equipment, electrical appliances, electronic apparatus, accessories and automobile parts producers arrived. In 1985, under *maquila*, the ratio of low technology industries was small: textiles (7%), shoes / leather goods (2%), whereas the ratio of high technology industries was large: transportation equipment (28%), electrical appliances (23%), and electronic apparatus / accessories (25%) (Tajima, 2006).

To attract high technology industries, industrial areas generally have infrastructure facilities for power supply, water supply, wastewater treatment, industrial waste, etc. Moreover, to transform an industrial cluster from low technology to high technology, the industrial area needs governmental policy as well as infrastructure development. In the case of *Maquiladoras*, domestic procurement did not mature because the government did not implement policies which would raise and support domestic supporting industries, until finally imports kept increasing. In contrast, in the case of the EPZ in NIEs, governments implemented policies to aid domestic supporting industries, so that they could substitute imported intermediate materials with domestic ones. It may mean that NIEs governments facilitated not only export-oriented industrialization but also import-substitution industrialization as to increase domestic procurement. To sum up, the mature domestic supporting industries were the actual driving force behind the economic boost.

In Myanmar, the Central Government will preferentially approve SEZ applications for three big industrial areas: Thilawa (developed by a Japanese fund), Dawei (developed by a Thai fund) and Kyaukpyu (developed by a Chinese fund) and EPZs will likely be established in the three areas, but it will not do so for Myawaddy. The central government of Myanmar recognizes Myawaddy as a military sensitive area adjoining Thailand. Although the central government opened Myawaddy for economic integration as a member of ASEAN countries, they are still very cautious to invite MNCs and permit foreign workers to enter. In addition to this, they have not completely settled the conflicts related to the civil war with Kayin, where Myawaddy is located.

However, if the central government applies the *maquila* system to the MIA, this would allow them to select and approve individual foreign factories which they deemed safe regarding national security. As it is, the MIC (Myanmar Investment Committee), which operates under the authority of the central government, grants permission to whole industrial areas. It would be practical and efficient for Myawaddy to apply *maquila* rather than establishing another EPZ. At the same time, the central government of Myanmar should facilitate the establishment of infrastructure to attract high-tech industries to Myawaddy.

After the economic integration of ASEAN through AFTA in 2015, it may be expected that Thai MNCs will invest in Myanmar. Therefore, we suggest that the central government of Myanmar facilitate the domestic supporting industries with governmental leadership such as NIEs, and at the same time implement *maquila*. It took approximately 30 years to implement economic integration through NAFTA with *maquila* in Mexico, which achieved export-oriented industrialization. It would be necessary for the MIA to embrace *maquila* and economic integration simultaneously.

5. Conclusion

The SEZ law in Myanmar was issued in January of 2011 and revised in January of 2014 to encourage and promote high technology industries. This law, however, has shown itself to be insufficient for Myanmar to drive its national economy as ASEAN has started economic integration in inland areas such as the East-West Economic Corridor and competition among industrial zones will likely become more intense. The central government of Myanmar needs to enhance FDI in the MIA, the important traffic border area between Myanmar and Thailand, to harmonize with AEC (ASEAN Economic Community). However, the central government has hesitated to establish special working areas for foreigners in the MIA in military-sensitive areas. Therefore, to mitigate the military risk, we suggest adopting a *Maquiladoras* system in the MIA, which would allow them to give approvals to factories individually.

Myanmar must currently buy electricity from Thailand for the MIA, but IPP (Independent Power Producer) will complete construction of a gas turbine combined cycle station in Mawlamyaing, which is approximately 100 km from Myawaddy, and will be capable of supplying electricity to the MIA in 2017. The central government will also complete building a hydro power station in this mountain area in 2020. These improvements in infrastructure will allow the MIA to establish a large scale industrial area, similar to a SEZ, in 10 years' time. If foreign factories which do not require large amounts of electricity and industrial waste processing equipment are approved under a *Maquiladoras* system in the MIA, they will make contributions facilitating development after the domestic power supply becomes sufficient. In this respect, *Maquiladoras* seems to be a better way to drive the MIA.

Taguchi & Tripetch (2014) concluded that the "*Maquila*-wise system is definitely required in Thai-Myanmar border development both for job creation on Myanmar's side of the border and for industrial reformation on Thailand's side". So, for the MIA, the correct path would be to focus on job creation. However, as mentioned above, introduction of the "*Maquila*-wise" system alone would not stimulate domestic supporting industries. Lessons from *Maquiladoras* in Mexico suggest that industrial development should not be expected as long as the supporting industries are immature. Furthermore, the present labor force, technology, and infrastructure in Myanmar are far less developed than those in Mexico when the *maquila* system was successfully implemented during the 1980s. Myanmar also has some latent conditions, as the military government did not allow trade with foreign countries and abandoned the idea of introducing supporting industries up until 2011. As a result, there are few supporting industries now. The supporting industries is too immature to expect substantial industrial development as seen in NIEs.

To escape the same fate as the unsuccessful *Maquiladoras* in Mexico, we suggest that the central government of Myanmar develop supporting industries at the same time as it establishes *Maquiladoras* in the MIA. Specifically, they should provide support that will enable SMEs to attain skilled workers and subsidies which will allow SMEs to develop technology so that they can supply intermediate goods to MNCs. Eventually, with the growth of supporting industries, domestic procurement will increase, and FDI by MNCs will drive economic development. In short, the central government has to interfere in *Maquiladoras* by way of export-oriented industrialization, and in supporting industries with import-substitution industrialization.

Generally speaking, a neoclassical economics approach emphasizing export-oriented industrialization operates under a market principle which denies governmental intervention (Esho 1997). In the case of the MIA in Myanmar, it is realistic to promote export-oriented industrialization, but it is also necessary for the government to actively implement policies, as the supporting industries are not yet mature. It should be concluded that the MIA needs to promote export-oriented industrialization by governmental intervention, and eventually establish an EPZ in the future.

FDI in *Maquiladoras* might be encouraged by MNCs in Thailand, because they are facing the nationwide 300 baht minimum wage policy, and have an incentive to invest. Yet, the Thai government is also trying to hold onto the MNCs which are now located in Thailand by establishing a SEZ in Mae Sot, which is located across the border from the MIA. The Thai government is also considering giving certain privileges to MNCs when they invest in Thailand's SEZ. Subsequently, the MIA and the Mae Sot SEZ might compete to procure labor forces.

To achieve *maquila*, FDI is necessary. The nationwide 300 baht minimum wage policy in Thailand resulted in creating an incentive for FDI. The central government of Myanmar should make positive use of this opportunity to drive its own industrialization, which was inadvertently induced by the minimum wage policy in Thailand.

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