Chapter 5

SEZ Development in Cambodia, Thailand and Vietnam and the regional value chains

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Abstract: Special economic zones (SEZ) in some East Asian economies over recent decades have been considered to be a successful experience. In some cases, the SEZ are seen as an important tool to attract foreign direct investment. The regional production network among the Southeast Asian countries has become more sophisticated and intensified with the multinational corporations' involvement. Changes in the pattern of international trade, with more intermediate inputs, have engaged these economies into the global value chains. We argue that the success of the SEZ development in Cambodia, Thailand, and Vietnam can be warranted if they are more spatially connected across the borders, and the linkages between firms across the SEZ are more associated with the supply chains. In addition, our analysis in the case of Cambodia shows no strong evidence for a strong link between the SEZ development and the attraction of foreign direct investment.

Keywords: SEZ, economic integration, Global Value Chains, FDI, multinational corporations, location choice JEL Classification:

1. Introduction

Over recent decades, SEZ development has been successful in some countries in East Asia when such countries were less open and less integrated into the world trade as well as the global production network. The 1980s and 1990s witnessed the enormous success of SEZ development in China, such as turning the small traditional fishing village of Shenzhen into a modern urban and industrial complex (Zeng, 2010). Vietnam has also experienced a period of large FDI inflows in the late 1990s and early 2000s into export-processing zones (EPZ) and industrial zones (IZ) (Anh, Duc, & Chieu, 2014; Cambodia, 2015). Thailand, with its export-orientated industrial development policy, has also attracted a large number of FDI projects and made the country similar to an "East Asian Miracle" (Ariff & Hill, 2012). In such cases, the relevant governments need to offer preferential incentives to attract both FDI and multinational corporations (MNC), and create a business environment which is different from the rest of the

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country – the test laboratory for institutional changes (Zhang, 2010). For instance, tax-free zones, low or exemption of corporate taxes, or other fiscal privileges.

The situation in the 21st century has changed, with more free-trade agreements and deeper economic integration between countries. The countries in the East Asia region have become more open as they rely heavily on exports. The patterns of international trade have also switched to a new trend of trade in intermediate inputs rather than finished products, more intra-industry than inter-industry trade. As the result, the structure of foreign direct investment from large MNCs is now closely associated with their global production network. The decision by MNCs to locate their affiliated plants is much more dependent on how their vertical production network is organized across different locations around the world.

This study looks specifically at SEZ development in Cambodia, Thailand, and Vietnam. While the policy on economic zones was first implemented in Vietnam in the 1990s with development of the EPZ, high-tech industrial zones (HITZ), and Border Gate Economic Zones (BGEZ), new types of economic zones have been developed in the last decade, such as some coastal economic zones, and more recently the Special Administrative Economic Zones. Cambodia first initiated its SEZ regulation in 2005, leading to fast development of almost 40 SEZ locations by 2018. In the meantime, Thailand only introduced the SEZ policy in early 2015, to be established in 10 border provinces of Thailand. Some are active, but others are only at the construction stage. The uptrend in Thailand's outbound FDI, and the shift of foreign investors to the neighboring countries where the labor costs are lower has set Thailand into a situation with the daunting question of how to increase exports and promote economic growth within the more integrated ASEAN Economic Community launched in late 2015. "Thailand Plus One" is a new business model proposed by Japanese investors, and received praise from the Thai Government. It is hoped that the geographical location of the Kingdom in Southeast Asia, its proximity to the resources and markets of Cambodia, Laos, and Myanmar, and the advanced state of the Thai economy make Thailand the logical springboard for companies to expand their operations across ASEAN, by linking the benefits of the lower labor costs in neighboring CLM and the industrial clusters of Thailand. Thereby, investors maintain their presence in the country and achieve higher export volumes.

In this paper, we argue that in the context of regional integration, the success of SEZ development is warranted if they are spatially connected to industrial hubs in the same region, and if firms in the SEZ are more integrated into the regional production network. The next question is what can the government do to realize the objective of the SEZ development and facilitate the production network? It is this location issue that affects a firm's decision rather than preferential tax incentives. It is not the problem of competition among the SEZ in different countries in the regions as a race to the bottom, but it is more about how to utilize the SEZ to facilitate the production network and industrial policy. By highlighting the typical features of the SEZ in Cambodia and Vietnam, we could make some important implications that Thailand can learn from its neighbors in developing its SEZ program in the coming years.

The report is structured as 4 main parts. Section 2, following this introduction, describes the background of SEZ development in Cambodia, Thailand, and Vietnam. Section 3 offers a brief theoretical background of the foreign investment theory by multinational corporations (. This is followed by a descriptive analysis regarding the spatial distribution of FDI projects and SEZ development in Cambodia. The analysis in Section 5 is further supported by case studies regarding supply chains by some SEZ and FDI-firms we interviewed during our field work. The report concludes by summarizing the key findings.

2. Background of SEZ development in Cambodia, Thailand, and Vietnam

A Special Economic Zone (SEZ) is a designated estate where trade laws concerning tariffs, quotas, or duties differ from the rest of the country. Local, regional, and national governments use such economic zones to strengthen the competitiveness of their cities, regions, and country. Farole and Akinci (2011) provide a broad definition of a SEZ as:

Demarcated geographical areas contained within a country's national boundaries, where the rules of business are different from those that prevail in the national territory. These differential rules principally deal with investment conditions, international trade and customs, taxation, and the regulatory environment; whereby the zone is given a business environment that is intended to be more liberal from a policy perspective and more effective from an administration perspective than that of the national territory.

In addition, approved zones receive preferential regulations, such as profit tax exemptions and import duty exemptions, as well as 'One Stop' service centers with representatives from different government departments, which process the administrative requirements for economic activity directly within the SEZ site.

Figure 5-1: Types of economic zones, stages of competitive development in ASEAN



Source: UNIDO (2015)

There are five types of economic zones, Industrial Park (IP), Special Economic Zone (SEZ), Eco-Industrial Park (EIP), Technology Park (TP), and Innovation District (ID)(UNIDO, 2015). An economic zone can be a top-down selected estate that provides non-monetary and/or monetary advantages to companies located within its area, with the goal to foster the economic development of the country, region, or an urban area.

A recent study conducted by UNIDO provides an overview of the different types of economic zones which have been used as competitive strategies by ASEAN's members (UNIDO, 201 5). The study provides evidence that due to the growing integration within

ASEAN, transnational companies are attracted to countries in the region and such economic zones are trying to leverage this integration to attract more FDI and foster local economic development in their respective regions.





Source: UNIDO (2015)

According to the same report, by May 2015, the number of SEZs in Cambodia was 11, Vietnam 18, and none in Thailand, except some pilot locations. However, Thailand has developed 6 technology parks, 3 in Vietnam, and none in Cambodia. Vietnam at the same time, is developing the first innovation district in Ho Chi Minh City. Porter (1990) suggests that there are four distinct stages of 'national competitive development: factor driven, investment driven, innovation driven, and wealth driven. The above numbers indicate that the three countries of our study are at different stages of development, namely Cambodia (factor-driven in stage 1), Vietnam (transitioning from stage 1 to stage 2) and Thailand (efficiency driven in stage 2).

The three selected countries in our study belong to the Southern Economic Corridor, one of many corridor projects flagshipped by the Asian Development Bank (ADB) in the Greater Mekong sub-region (GMS). Ishida (2009) attached the development of SEZ to the connection of countries in the GMS region through a system of economic corridors. The study enumerated the candidates for SEZ in Cambodia, Laos, Myanmar, and Vietnam according to four types, the metropolitan areas, ports and harbors, border areas, and junctions or intersections. While the first two types are based on the experience of forerunning ASEAN countries, the latter two are based on the economic corridors of the GMS.



Figure 5- 3: Economic Zones in ASEAN (as of May, 2015)

Source: UNIDO (2015)

According to UNIDO's report (2015), the appropriate growth strategy for any country, region, or city depends on its location relative to the stage of its competitive development. Technological catch-up by building industrial parks and Special Economic Zones are easy solutions for low-income countries to deliver rapid economic growth. However, once a country has achieved middle-income status, the competitive priority has to move to innovation and sustainability in order to compete efficiently in the knowledge economy. Technological catch-up is much easier than building the infrastructure and creating the policies to compete in the knowledge-economy. Industrial parks are the simplest form of planned estates that appeal to countries that are at a lower stage of economic development. Special Economic Zones are more difficult to put in place, as they require appropriate infrastructure, such as airports and ports, and an efficient legal regulatory framework for customs procedures and duties. SEZ are more successful when countries are not well integrated in the global trade. As countries develop, they become more integrated within trade blocks and with multi-national organizations. As a result, the benefits stemming from SEZs dissipate. Eco-Industrial Zones are the next economic zone for countries to implement when reaching higher stages of economic development.

Farole (2011) showed that SEZs tend to take as long as 5 to 10 years before producing the expected large-scale employment benefits. Among the key factors for good development, political and macroeconomic stability are more important factors compared to tax and other fiscal incentives in attracting FDI into SEZs.

Economic zone development in Vietnam

The development of economic zones in Vietnam has experienced different periods since the economic reforms implemented in 1986. A recent comprehensive report from the Ministry of Planning and Investment (Vietnam MPI, 2017) documented in detail the success and also challenges to Vietnam in this course. In the dawn of economic reforms in the mid-1980s, foreign direct investment was one of the key policy areas promoted by the Government of Vietnam to integrate the economy into the world and the model of export-procession zones (EPZ) was adopted with the first Tan Thuan EPZ in 1991. The second period of this development was from 1994-1997, before the Asian Financial crisis. By learning from the successful experience of its southeast Asian neighbors, Vietnam initiated new industrial zones (IZ) or industrial estates, and transformed some EPZ into industrial zones to promote the export-oriented light manufacturing industries.

After the Asian financial crisis, the country aimed at some high-tech industrial zones (HITZ) and also piloted some economic zones (BGEZ) along the border with China, Laos, and Cambodia. The first border economic zone (BGEZ) was established in Mong Cai in Quang Ninh Province bordering with China in 1996. Two years later, in 1998, the first high-tech industrial zone was established in Hoa Lac, which is 40km north of Hanoi, the capital city. More BGEZ were designed and set up later after the period 1997-2003. According to the government plan in 2008, a total of 30 BEZs will be located in 15 border provinces of Vietnam (Vietnam, 2008). Among which, nine are selected to receive target investment from the central government budget during the five-year period 2016-2020.

The fourth period of economic zone development in Vietnam has witnessed an expansion of open and coastal economic zones (CEZ) with the objective of attracting heavy industries and high-tech sectors such as ICT, applied agriculture. The idea was initiated in 2003 and has been very expansive.

Up to 2017, there have been six zone models developed in Vietnam, the EPZ, IZ, HITZ, BGEZ, and CEZ. The most recent development has been a pilot for three special economic zones in Phu Quoc island (Kien Giang Province), Van Don (Quang Ninh Province) and Bac Van Phong (Khanh Hoa Province), with the aim to be the development pillars of the country during the next 10-20 years. Although all three originated from the economic zones established in 2005-2006, the law on SEZ development was recently approved by the National Assembly in 2018. As the model requires special administrative government, they will be special administrative and economic zones (SAEZ).

There has been much controversy on the birth of these three SAEZ (Vu, 2018), arguing that the country has been open for over a decade so a pilot model for a more open zone is no longer necessary and the expected role of the SAEZ to be development pillars for the economy is less realistic given the bigger role of Hanoi and Ho Chi Minh cities as existing economic hubs. Moreover, the core success of such zones is by intuitional reform rather than high investment privileges, such as tax exemptions and land rental periods for foreigners. Many

concerns have been raised over the proximity of the Van Don SAEZ to China for sensitivity of sovereign issues.

In summary, the economic zones in Vietnam currently include two main types, the coastal EZ and the border EZ. The new government decree, released in May 2018, provides details on the management of each type of zone. Infrastructure is mainly financed by the government's budget and/or the local provincial budget. Some forms of build, operation and transfer (BoT), build and transfer (BT), and public – private partnership (PPP) has been discussed. As for the border gate economic zones (BGEZ), the BGEZ in Vietnam are defined as areas set up at the land border and surrounding areas with the main or key international borders, and incorporating the procedures, conditions, and relations specified in the above conditions. The first border gate economic zone (BGEZ) as mentioned before, was established in Mong Cai in Quang Ninh Province bordering with China in 1996, with several preferential policy mechanisms. This pilot was later expanded into other central border provinces in Tay Ninh with the Moc Bai BGEZ near Cambodia, and in Ha Tinh in the Lao Bao Trade Zone near the Laos borders in 1998. Until 2001, there were a number of governmental decisions concerning the policy governing the operation and the financial management of BGEZ.

The BGEZ in Vietnam were selected based on a certain number of characteristics, such as the inclusion of international border gates, or key border gates with neighboring countries, and as such they are geographically farther from the country's economic and political center, so that there were differences in the socio-economic and environmental conditions as well as the quality of life. There also needs to be some interaction between the local people in the border zones and the residents from the countries beyond the border, who share cultural and religious similarities. A certain level of cooperation and completion of economic activities and trade and investment are necessary. The key objective of establishing the BEZ was to improve the infrastructure in the remote border zones, connecting them to other regions of the country, therefore promoting border trade and investment to improve the livelihood of the local people in the border areas.



Figure 5-4: Industrial zones and economic zones in Vietnam

Source: UNIDO (2015)

Another important feature of the preferential policy promulgated in 2005, was establishment of the tax-free zone inside each BGEZ in order to make them more attractive to foreign investors, while the government was committed to fund the infrastructure development. The development plan for Vietnam's border economic zones to the year 2020 was approved in early 2008, with the target of 30 BEZs in 15 border provinces along Vietnam. Among those 30,

nine of BEZs have been committed with the appropriate integrated infrastructure, organizational structure, and regulatory mechanism.

In early 2018, a new regulation was released which considered a restriction on BEZ development, stripping away most of the tax privileges given to SEZ. It was in 2005 when the tax-free zones were first permitted in BGEZ, and commitments were made by the central government to develop the infrastructure for the BSEZ. The new policy reflects the redirection of the government's emphasis on resource allocation away from the border zones in the context of free-trade areas applied to the whole economy of Vietnam with the neighboring countries through trade agreements.

Special Economic Zone development in Cambodia

The importance of enhancing the investment environment has been the focus of the Royal Government of Cambodia over the past decade of economic development. A series of reforms have been implemented to maintain its comparative advantage over regional peers such as Vietnam and Myanmar with similar competitiveness in labor-intensive manufacturing industries (World Bank, 2014). SEZ were first introduced at the end of 2005 by the Cambodian Special Economic Zone Board (CSEZB). It has been considered as one of the measures to improve the investment climate for local and foreign firms in Cambodia. In addition, the zones were seen as a tool to establish economic linkages between urban, rural, and more remote areas outside Phnom Penh (World Bank, 2011).

The Council for the Development of Cambodia ("CDC"), composed of senior ministers from the relevant government departments and chaired by the Prime Minister, is tasked with the rehabilitation, development, and oversight of investment activities, and is ultimately responsible for the creation and operation of the SEZ (Cambodia, 2015). The Cambodian Special Economic Zones Board (CSEZB), one of the four entities constituting the CDC, is in charge of the development and management of the SEZ in Cambodia.

Cambodian law defines a SEZ as "A special area for the development of the economic sector which brings together all industrial and other related activities and may include General Industrial Zones and/or Export Processing Zones. Each Special Economic Zone shall have a Production Area, which may have a Free Trade Area, Service Area, Residential Area, and a Tourism Area."¹.

According to the World Bank Enterprise Survey in Cambodia as of 2013, there were 22 SEZ authorized in the country, located mainly in the border region with Thailand and Vietnam, and in the hubs of Phnom Penh or the coastal area in Sihanoukville. However, according to the official the list of the CDC and Cambodian Special Economic Zone Board (CSEZB), by September 2015, there were 14 SEZ in Cambodia. Other data from USAID shows a higher number, but there seems to be some uncertainty about the number of SEZ in Cambodia. The

¹ Sub-Decree 148, Art 2, http://www.cambodiainvestment gov.kh/sub-decree-148-ankr-bk-on-the-establishment-and-management-of-the-special-economic-zone-final_060314.html

US State Department recorded 36 registered SEZ in 2015, but ODC's data set identified 34 SEZ as of November 2015.

The data collected by JETRO's Office in Cambodia in February 2017 showed a total number of 39 SEZ, with the concentration in the border provinces in the east with Vietnam, and some in the east with Thailand. The Phnom Penh metropolitan area has only one SEZ, but it has attracted a large number of companies. In our discussion with the Board of Management of the Phnom Penh SEZ, the list includes 89 tenants, mostly Japanese companies. The biggest SEZ in terms of the number of investors is the Sihanoukville SEZ with 102 investors, with a total investment capital of almost US\$300 million as of February 2017.

Figure 5-5 reflects the distribution of the SEZ in Cambodia, with a clear concentration near the border with Vietnam, in Phnom Penh, and the coastal provinces. A more dispersed distribution can be seen along the Southern Economic Corridor, starting from the Poipet border province with Thailand along the Ton le Sap toward Phnom Penh and Svay Rieng Province near Vietnam. Figure 5-6 also indicates the uneven distribution of SEZ across provinces. Svay Rieng, Sihanoukville, and Koh Kong are among the top three provinces for the number of SEZ and the investment capital in SEZ in total.

The Council for the Development of Cambodia (CDC), specifically the Cambodian Investment Board, offers tax Incentives for Qualified Investment Projects – QIPs. These include import duty exemption on construction materials and production equipment, import duty exemption on production materials for export industry, export duty exemption, and profit tax exemption. This corporate profit tax exemption covers the maximum trigger period (the first year of profit), or 3 years after the QIP earns its first revenue, whichever is sooner. Sometimes, the priority period is also given case by case. Other benefits include a 50-year lease of land available to foreign investors (renewable and transferable), and unrestricted currency exchange and funds transfer.

Cambodia is studying the SEZ development experience from other countries, especially China. For example, the SEZs in Sihanoukville are expected to learn from the Shenzhen SEZ model in China (UNIDO, 2018), with experience in business environment reform, opening up to market reforms, and innovations with sectoral focus on education, trade, commerce, agro-industry, and infrastructure development.



Figure 5- 5: SEZ distribution in Cambodia (by May 30, 2016)

Source: <u>https://opendevelopmentcambodia.net/profiles/special-economic-zones</u> Accessed on October 15, 2018





Source: National Institute of Statistics of Cambodia (2014)

Special Economic Development Zones in the border regions of Thailand

Although Thailand has been successful with many industrial estates and exportprocessing zone over the decades of its development, the policy on special economic zones (SEZ) was only introduced in early 2015. The Government of Thailand aims at some targeted areas in the border region to develop such disadvantaged districts in order to reduce regional inequality. Ten SEZ were announced in 10 border provinces of Tak, Sa Kaeo, Trat, Mukdahan, Songkhla, Chiang Rai, Kanchanaburi, Narathiwat, Nakhon Phanom, and Nong Khai, divided into two phases of development. The first phase includes 6 provinces - Tak, Nong Khai, Mukdahan, Sa Kaeo, Trad, and Nong Khai, where industrial estates started the development in 2018 and will operate in 2019 (IEAT, 2018).

Figure 5-7: SEZ planned in10 border provinces of Thailand



Source: BoI (2015)

The development of border provinces has been the intention of the government to prepare for opening of the ASEAN Economic Community (AEC) in 2015. Given the situation of the labor shortage in Thailand and the relocation of foreign investors to neighboring countries seeking lower labor costs, the government also aims to attract labor-intensive industries into the border SEZ.

In the meantime, a new business model, often discussed within Japanese-Thai business forums, is known as the "Thailand Plus One" model. This is a business model in which

Japanese companies operating in industrial clusters in Thailand transfer the labor-intensive parts of their production process to special economic zones (SEZ) in Cambodia, Laos, and Myanmar near the border with Thailand. The model is in fact derived from the fragmentation of world trade and investment over the past decade, but it differs from traditional models in that it links the small- and medium-sized cities in the border areas (Oizumi, 2013). The model has been strongly supported by the Government of Thailand. In late 2015, Thailand proposed a drastic change regarding its industrialization strategy given the launch of the AEC in December 2015. The strategic repositioning as the strategic base in the center of the Greater Mekong Sub-region. The concept of "Thailand Plus One" has been received enthusiastically by the Government of Thailand who views it as the perfect instrument to attract a new-wave of overseas investment into the country (BoI, 2015).

Under this policy, foreign entrepreneurs who invest in Thailand will be offered the chance to gain a business foothold in the neighboring countries as well. The government would provide them with investment information and support (BoI, 2015). It is hoped that the geographical location of the country in Southeast Asia, its proximity to the resources and markets of CLM, and the advanced state of the Thai economy could make Thailand the logical springboard for companies to expand their operations across ASEAN.

Target Industries	Tak	Sa Kaeo	Trad	Mukdahan	Songkhla
1. Agriculture and fisheries	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
2. Ceramics	\checkmark				
3. Textiles and Leathers	\checkmark	\checkmark			\checkmark
4. Furniture	\checkmark	\checkmark			\checkmark
5. Jewelry and Gems	\checkmark	\checkmark			
6. Medical Equipment	\checkmark	\checkmark			
7. Automotive and machinery	\checkmark	\checkmark			
8. Electronics	\checkmark	\checkmark		\checkmark	
9. Plastics	\checkmark	\checkmark			
10. Pharmaceuticals	\checkmark	\checkmark			
11. Logistics	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
12. Industrial Estates/Zones	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
13. Tourism	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Table 5-1: Target industries and business in six SEZ in the 1st phase

Source: BoI (2015)

There are 13 target businesses and industries which the government has designated for these SEZ. These are mainly logistics, border trade business with warehouses, distribution centers for exports, service business, tourism-related business, labor-intensive factories, manufacturers using raw materials from neighboring countries, and so on. Each SEZ will have a different target depending on each location's development potentials and the province's strategy as shown in Table 5-1.

Business and industry that can benefit from the incentives and measures in the SEZ, including tax and non-tax incentives, such as generous financial incentives, comprehensive trade facilitation measures, and governmental efforts to ramp up the physical and institutional infrastructure, including the One-Stop Service (OSS) facility.

The incentive measures come from the BOI as well as the IEAT. For example:

- General activities under the BOI's list of eligible activities' exemption of corporate income tax for a period of 3 years, but some target activities can have a longer exemption to 8 years.
- Double deduction from the costs of transportation, electricity, and water supply.
- 25 percent deduction of the project's infrastructure installation/construction costs from the project's capital.
- Exemption of import duties on machinery.
- Exemption of import duties on raw or essential materials used for manufacturing export products.
- Permission to employ foreign unskilled labor.
- Other non-tax incentives. such as land ownership and bringing in foreign skilled workers and experts.

Since the deadline for registration in the 6 SEZs has been extended to the end of 2018, there is no operation by companies in any SEZ. However, the flourishing trading and investment in some SEZ, like Mae Sot and Sa Keao, have made these areas a de facto SEZ (ADB, 2015). This means that in the absence of the governmental policy to set up SEZ in these zones, the economic activities are still vibrant as market forces are in place. It is claimed that the SEZ would not be effective in enhancing competitiveness of the border areas in terms of attracting more investment from Thai or foreign firms. The advantages of the areas are already there, with labor intensive industries such as garments, food processing, and logistics. Labor supply from Myanmar and Cambodia and the availability of agricultural resources support the development of such industries.

Cooperation or competition among SEZ across borders

The overview of SEZ development in the three countries shows that each government has their own policy objective when establishing such economic zones that share the same purpose of attracting foreign and domestic investment. Each country and region has its own advantages to lure investors, plus government tax and non-tax incentive measures. Competing to offer greater preferential privileges can be a big fiscal loss for the local and central government revenues. We have seen little evidence of cooperation at the national, provincial, or SEZ level for some types of cooperation among SEZs across the borders. For example, the Phnom Penh SEZ has become a public company and is investing in a new SEZ in Poipet at the border with Thailand, called the Poipet Phnom Penh SEZ. This SEZ is expected to bring investors cross the border from Thailand and closely connect to the existing factories the current Phnom Penh SEZ by catering to the light industries that serve the Thai manufacturers. Benefits are predicted from the strategic location of the SEZ near the border. With the insufficiency and instability of electricity supply in Cambodia, this newly developed SEZ also

joined with B. Grimm Power Plc. – a Thai energy giant for the Poipet PP SEZ's power transmission and distribution development (B. Grimm, 2017).



Figure 5-8: The connection of border SEZs along the Southern Economic Corridor

Source: IEAT (2018)

However, there have been several proposals for cooperation and coordination between the SEZ in the region. In 2015, UNIDO's report suggested a formal regional institution within the ASEAN framework, called the ASEAN Economic Zone Authority (AEZA), which can be designed to address the lack of coordination in promoting economic zones among the countries in the region who have achieved different levels of economic development. Each member has strengths and weaknesses that differentiate one country against another, but most countries in ASEAN lack the promotional structure and critical mass to promote themselves overseas. As a result, foreign investors invest in economic zones in India or China and bypass ASEAN because of its lack of coordination in promoting the various economic zones. The AEZA can provide investors and transnational companies a clear picture of the investment opportunities in ASEAN. The AEZA will also monitor economic zones in ASEAN, promote ASEAN's economic zones overseas, and guide economic zones to adopt best practice principles. It is expected that a platform such as AZEA can give a strong signal to foreign investors regarding ASEAN's capacity to work toward greater integration while enhancing competitiveness.

Similarly, an ADB report in 2016 on the role of SEZ in improving the effectiveness of the GMS economic corridors provides policy recommendation for GMS ministers on how the SEZ at the borders can build the competitiveness of the economic corridors and promote economic development (ADB, 2016).

3. Theoretical background for MNC investment location

Foreign Direct Investment Strategy by MNCs and Global Value Chains

The theoretical background in this section attempts to understand the existence and behavior of multinationals. It emphasizes the horizontal, vertical, and export-platform motivation of multinationals. The theoretical literature on multinationals (Markusen (1984), Brainard (1993), Markusen and Venables (1998) and many others), agrees on the fact that the existence of trade costs is the main source for the emergence of horizontal multinationals, i.e. firms having different plants in different countries. In the words of Markusen and Venables "The decision to engage in multinationals' (multi-plant) production is the tension between the added fixed cost of a second plant versus the trade cost of serving the foreign market by exporting" (Markusen and Venables 1998, p. 184).

The horizontal FDI view represents FDI as the replication of capacity in multiple locations in response to factors such as trade costs, as in Markusen (1984), Brainard (1997), and Markusen and Venables (2000). The vertical FDI view represents FDI as the geographical distribution of production globally in response to the opportunities afforded by different markets, as in Helpman (1984), and Yeaple (2003).

As shown in a vast collection of theoretical literature, there is a variety of distinctively different mechanisms through which transport cost and geographical friction in general could influence FDI decisions, and this interaction evolves in the integration and sourcing strategies of multinational firms. First, the nature of the effect depends critically on the specific motives to invest abroad. While high transportation costs may promote the incentive to replicate production across countries (horizontal FDI) (Hanson, 2003), a reduction in transportation costs will allow firms to better exploit cross-country cost differences and engage in vertical or complex FDI strategies where trade and FDI interact with each other (Alfaro and Chen, 2017)

Antras and Foley (2011) extended a simple three-country extension of the model of FDI with heterogeneous firms developed by Helpman, Melitz, and Yeaple (2004), in order to analyze the effects of the formation of regional trade agreements on the level and nature of multinational firms' activity. A model in which heterogeneous firms from a source country decide how to serve two foreign markets is employed. Following a reduction in tariffs on trade between the two foreign countries, the model predicts the growth in the number of source-country firms engaging in foreign direct investment, the growth in the size of affiliates that are active in the reforming countries, both before and after the tariff reduction, and an increase in the extent to which the sales by the affiliates in the reforming countries are directed towards other reforming countries. The model helps to explain the expansion of horizontal FDI by MNC within the ASEAN region. It also incorporates the firms' level heterogeneity and introduces the possibility of export-platform behavior into a model that is similar to the one in Helpman, Melitz, and Yeaple (2004). The main innovation of this model is the introduction of third-market sales, and our main theoretical result concerns the response by multinational firms based in one country (in the west) to a reduction of trade barriers between the other two

countries in the model (in the south and the east) which is interpreted as regional trade integration between these other two countries. The model predicts an increase in the number of western firms engaging in FDI in the South-East area. Furthermore, the model indicates that there should be growth on the intensive margin in that affiliates that operate before and after the regional trade agreement should expand. The theory also predicts that regional trade agreements lead to gross entry and exit of Western affiliates operating in the South-East area, with the net effect depending on the distribution of productivity across firms. With a Pareto distribution of productivity, gross entry exceeds gross exit and the extensive margin responds positively to the agreements. The model also has clear implications for the effect of the regional trade agreements on the sales by the Western affiliates to countries other than their host country. In particular, lowering trade barriers between the East and the South increases the share of an affiliate's sales going to third countries for three reasons. First, new Western affiliates in the South-East area sell more to third markets than the average Western-owned affiliate does. Second, some Western firms that were active in both South and East before the agreement consolidated their activity in one of these countries after the formation of the free trade area to serve the country they leave through regional trade. Finally, affiliates of U.S. parents that are active in only one market (South or East) before and after the regional trade agreement also increase the share of affiliate's sales going to third markets. On the empirical side, the study examines firm-level data that captures the response of U.S. multinational firms to a specific change in trade costs due to the formation of the ASEAN free trade agreement and yields results that are consistent with the model's predictions.

Outward FDI by MNCs from the emerging economies

In a feature article on FDI and economic development, Ozawa (1992) argued that there is a tendency of "increasing factor incongruity" in those export-led, outward- looking countries, i.e. the newly industrialized countries - NICs, which were once endowed with abundant labor yet scarce capital, when their economies have rapidly transformed into capital abundant, labor scarce ones, and their wage rates have become relatively higher than those of other LDCs. To maintain their comparative advantage in the world market, these NICs must concentrate their outward FDI in the sectors which have lost trade competitiveness in the world market as measured by the declining revealed comparative advantage (RCA), and destined to those LDCs which still enjoy comparative advantage as evidenced by the increasing RCA. Hence, the NIC would reach a "stage-compatible order of sequencing structuring upgrading", under which the comparative advantage augmented type of outward FDI would become a catalyst of structural transformation in the NIC.

Ozawa (1992), further argued that the transition from the investment-driven to innovation-driven stage would simultaneously generate bi-directional foreign investment, with inward FDI engaged in technology-intensive industries and outward FDI in intermediate goods industries. While Ozawa's evolutionary path of structural transformation and its concomitant FDI was initially addressed to the industrialization of Japan in the post-war period, a similar investment development path in the NIC was elaborated by the stage approach of development by Narula and Dunning (2000), under which the industrial structure was moved from the

Hecksher-Ohlin sectors, through undifferentiated Smithian and then differentiated Smithian sectors, and finally reached innovative Schumpeterian sectors. During the transitional stage, outward FDI in the NIC would focus more on efficiency-seeking, market-seeking, and asset-augmenting types of activities amid the shifting economic structures in the NIC.

By incorporating the levels and patterns of trade into the investment development path in Korea and Taiwan, Dunning et al (2001) argued that as countries proceeded along their development path, both intra-industry trade and intra-industry FDI would rise as GNP per capita increases, with the growth of intra-industry FDI lags that of the intra-industry trade. Hence, it would be interesting to empirically examine the extent to which the changing composition of trade commodities and structural transformation in Taiwan was affected by the increasing flow of outward FDI since the 1980's.

4. Descriptive analysis of SEZ and FDI spatial distribution in Cambodia

This empirical analysis attempts to explore the distribution of FDI companies across the provinces in Cambodia. The spatial distribution is based on two sets of data collected by the National Institute of Statistics (NIS). One is called the Economic Census in 2011, and the most recent one in 2014 is called the Cambodia Inter-censal Economic Survey. Both data sets are believed to be the most reliable sources of information on enterprises in Cambodia (excluding street business). Unfortunately, we do not have access to the micro data, but we used the summarized results reported by the NIS across the provinces.

There are many good details from these two censuses by which we can detect some changes during the three-year period. The total number of provinces during both periods is 24. We start with some GIS maps to observe the distribution of establishments (both Cambodian and FDI establishments) in different provinces for the two periods. Overall, there were 508,133 establishments in 2014 across the Kingdom, an increase of 44,770 from the total recorded in 2011.

There are different cut-offs in categorizing the provinces by the number of establishments. In 2011, the highest category includes provinces with 30,000 or more establishments, while the benchmark was 50,000 in 2014. Similarly, there is an increase in the lowest category, from less than 5,000 in 2011 to less than 10,000 in 2014. At the top level, it can be seen that six provinces, Battambang, Siem Reap, Kampong Cham, Takeo, Kandal and Phnom Penh city in 2011 were the locations for over 30,000 establishments each. After three years of development, only Phnom Penh and Kampong Cham at the border with Vietnam to the east have reached the new benchmark of 50,000 establishments by 2014. In fact, these two provinces have already accommodated over 50,000 establishments since 2011, with the corresponding numbers of 84,730 and 52,234 respectively. The remaining four provinces are now in the second category (20,000-49,999). However, there is no other provinces with over 30,000 establishments added to the list.

At the other extreme, the provinces with a low concentration of economic activity appear to remain unchanged. The lowest category with less than 5,000 establishments include six provinces, Koh Kong, Modul Kiri, Stung Treng, Otdar Meachey, Kep and Pailin. Three of these six provinces border with Thailand (Koh Kong, Pailin and Otdar Meachey) and two border with Vietnam to the northeast (Stung Treng and Modul Kiri). In 2014, although all six provinces belong to the category of less than 10,000 establishments as set by the NIS, two provinces near the Thai border, Koh Kong and Otdar Meachey, have increase the number of establishment to over 5,000. The change and growth rate in the number of establishments are further analyzed in Figure 5-10. More dynamic change can be observed in the provinces in the two middle categories.





Source: National Institute of Statistics of Cambodia, Economic Census of Cambodia (2011) and Cambodia Inter-censal Economic Survey (2014)

Figure 5- 10: Top ten provinces with a high increase in establishments between 2011-2014



Source: The Author's own calculations from NIS data (2012, 2015)

Figure 5-10 shows Phnom Penh as the only metropolitan hub of the country has continued to attract more investment, with nearly 11,000 new establishments, given its strong base in 2011, which accounted for over 24 percent of the total change across the country (44,770 establishments). This increased the density of firms in Phnom Penh to almost 100,000 by 2014, due to the city's location advantage, agglomeration, and urban lifestyle. However, Siem Reap is the outstanding province with the highest growth rate of 34 percent over the 3-year period, with 9,507 new establishments, but starting from the lower base of almost 28,000 firms compared to the number in Phnom Penh. The high growth rate in the number of firms can also be seen in some Thai border provinces, such as Pursat (29.7 percent) and Otdar Meanchey (20.1 percent). Kampong Chhnang to the northwest of Phnom Penh also witnessed high growth (22.8 percent).

Given the overall picture of changes in establishment, we noted a significant change in foreign investment in Cambodia over the same period, which has reduced by almost 800 establishments. While the total number of firms in the country as a whole has increased considerably, such reduction in foreign establishments has caused a reduction in their share from 1.1 percent to 0.9 percent of the total number.

Figure 5-11 demonstrates that only seven provinces among the 24 have increased the number of foreign establishments. The largest increase can be seen in Siem Reap, Kratie, and Stung Treng provinces. The two latter provinces are located in the northeastern part of the country toward the border with Vietnam. On the western border with Thailand, there is also Banteay Meanchey and Koh Kong, with a smaller increase in

the number of foreign firms. It should be noted, that the change in the number of firms needs to be analyzed in parallel with the change in investment capital to fully understand the story.



Figure 5- 11: Provinces with a higher number of foreign establishments between 2011-2014

The findings from our descriptive analysis do not seem to support the conclusion from previous studies. For example, the study by the Asian Development Bank (2016) found that the SEZ in Cambodia have attracted significant levels of foreign investment into the country that would not have been present otherwise. These investments have created around 68,000 jobs, with equal or better pay and better prospects than the alternatives that would otherwise have existed, and thus raised the economic welfare of the workers concerned. The study also found that the SEZ have somehow contributed to the government's objective of industrial diversification. It should be made clear that while the role of FDI in generating employment and welfare for workers as well as its contribution to the industrial development of Cambodia are undeniable, the causation between the SEZ and FDI needs more cautious examination. The two-way correlation between these two variables is often discussed in the investment literature in the case of China's SEZ (Wei (1995), Wang (2013)). The development of the SEZ with favorable regulations to investors and convenient infrastructure can attract more foreign investment into the country. In the meantime, the large influx of foreign capital may cause more SEZ to open. We need data across time and provinces to detect the appropriate causation between these two factors.

The share of foreign-invested establishments was around 1.1 percent in 2011. Our analysis aims at detecting any link between the SEZ and FDI projects. Among seven provinces in Figure 5-11, only Siem Reap built a new SEZ during the period 2011-2014, apart from the existing two SEZ already established, and Koh Kong province also has

Source: The Author's own calculations from NIS data (2012, 2015)

established one SEZ since 2008, the other five provinces do not have any SEZ developments. It is a very surprising fact to suggest that provinces may not need SEZ to attract foreign investment, while bearing in mind that there is also a high number of industrial estates across Cambodia which do not received benefits from the government's preferential SEZ policy, but provide the necessary infrastructure for foreign investors.

In addition, we cross-checked our analysis with the macroeconomic data for Cambodia to confirm that between 2011-2014, the net inflow of FDI into Cambodia did not change much (US\$1.37 billion versus US\$ 1.72 billion) as shown in Figure 5-12. In fact, 2014 experienced a reduction in FDI inflows from a higher level of US\$1.87 billion in 2013. However, by 2016, the net inflow was recorded at US\$2.78 billion (World Bank, 2018).

If we look into the composition of the total investment in Cambodia by the nationality of investor in 2016, it is very clear that Cambodian investors rank at the top with US\$ 942 million, followed by the two largest foreign investors, Japan and China, with an equal amount of US\$ 825 million, out of the US\$ 3.41 billion total investments (Figure 5-13). It is understandable that for local investors, establishing plants inside the SEZ may not be necessary given their local knowledge of the facilities and regulations.

Figure 5- 12: Foreign direct investment, net inflows (BoP, current US\$ million) 1992-2017



Source: https://data.worldbank.org accessed on November 13, 2018



Figure 5-13: Investment amount (US\$ million) by investor nationality in 2016

Source: Cambodian Investment Board from (JETRO, 2018)

Figure 5- 14: Year-by-year investment in the SEZ and outside the SEZ during 2010-2016



Source: Cambodian Investment Board from JETRO (2018)

The other fact to add to this story is the amount of foreign investment capital in each SEZ by province. Unfortunately, we do not have access to the micro data to perform

such an analysis. However, the macro-level data from the Cambodian Investment Board shows that the dominant share of investment in Cambodia has been made outside the SEZ. Cambodia recorded the highest level of investment amount over the last two decades in 2011, with a total of nearly US\$ 7.19 billion, of which US\$ 7.01 billion was made outside the SEZ. Only US\$ 183.3 million was invested in the SEZ, with 182 of Qualified Investment Projects (QIPs). Although the number of QIPs has increased slowly over the years to 209 by 2013, but has reduced to around 151-158 in recent years, the share of investment capital made inside the SEZ has been in the range of 2.5-7.8 percent, except in 2014, when over US\$2 billion of new investment into the SEZ that surpassed the US\$ 1.6 billion of investment outside the SEZs as shown in Figure 5-14.



Figure 5-15: Investment by Japanese companies in Cambodia during 2010-2016



Source: Cambodian Special Economic Zone Board and Cambodian Investment Board from (JETRO, 2018)

From the perspective of the investors' nationality, we also found an interesting fact regarding the preferences of investors between investment inside and outside the SEZ. There has been a strong nationality dominance in a few SEZ. For example, the majority of tenants in the Phnom Penh SEZ are from Japan, while almost all the investors in the Sihanoukville SEZ are companies from China. Figure 5-15 clearly indicates that Japanese firms prefer to locate inside the SEZ, as infrastructure is more complete and the One-Stop-service and preferential regulations are provided. Exceptional projects are the two AEON malls located in the center of Phnom Penh implemented in 2012 and 2016. In this case, the attraction of the SEZ for Japanese FDI projects is clear.

5. Supply chains and the regional production networks: some case studies

Case study 1: Strong linkage with between subsidiaries in the region – Thailand Plus One model

CompanyZ International Asia Pte., Ltd – a part of the giant CompanyZ Japan MNC – has been operating in Cambodia since 2011. After the pilot period, a subsidiary called CompanyZ Cambodia Co., Ltd was established in the Phnom Penh SEZ in April 2013. The investor is the mother company in the region with its headquarters in Thailand. The regional hub includes another 6 manufacturing subsidiaries and one sales subsidiary as show in Table 5-2.

THAILAND	ASIA REGIONAL HEADQUARTERS IN THAILAND						
	CAMBODIA	VIETNAM	MYANMAR	INDONESIA			
6 manufacturing subsidiaries	1 manufacturing subsidiary	1 manufacturing subsidiary		1 manufacturing subsidiary			
1 sales subsidiary	1 after-sale service subsidairy	l Hamaden subsidiary	1Asmo group subsidiary				

Table 5-2: Subsidiaries of CompanyZ International in ASEAN

Source: The Author's compilation from interviewing the company's management

CompanyZ has been in Thailand for over four decades, but actually became more concerned on the limitation of Thailand's market and started research to find another market in 2011. Part of the reason for this movement was the devasting flood in Thailand in 2011, that made the company think about another production base in addition to the existing one. There was a concern that the company would face a shortage of factory areas in the near future. However, safe zones in Thailand by that time had become very expensive.

The company has it own criteria and benchmark when choosing an investment location. At the country level, a number of indicators, such as market size (GDP per capita, population); labor (the workforce, minimum wage, and average wage); taxes (profit tax, import duties, and SEZ benefits), and infrastructure (investment restrictions, exisiting SEZ, international ports, land route to neighboring countries and electricity supply stability) are considered. Cambodia was chosen over Myanmar from that research, although Myanmar has a high potential with a growing population of over 51 million people and over 33 million in its work force. However, its infrastructure was not strong enough and the routes connecting with Thailand were in very poor condition, and unstable electicity supply, were the main concerns.

Within Cambodia, many SEZ were under consideration. The company looked at their location in metropolitan Phnom Penh, near the border with Vietnam, and near the border with Thailand, as well as consulted a number of Japanese companies already there. With the regional hub in Thailand, the connection by road to Thailand was paid special attention.





Source: The Author's compilation from interviewing the company's management

Figure 5- 17: Path toward manufacturing high-end products by CompanyZ in Cambodia & Thailand



Source: The Author's compilation from interviewing the company's management

CompanyZ's decision to expand their activities beyond Thailand in order to avoid single-country risk was by choosing to locate in Phnom Penh reflect the connection with their buisness in Thailand. The strong linkage between the regional headquarters with a nearby subsidiary is more evidenced in the production and transfer phases. The two diagrams below describe the process. Figure 5-16 shows each stage of production, there

is an involvment by the Thai regional headquarters to assist the infant factory in Cambodia. The Thai subsidiary was gradually phased out as the Cambodian subsidary expanded.

Figure 5-17 describes the pathway for the products made in Thailand and Cambodia at different points in time. By 2020, the Cambodian factory will be able to produce mature product with some medium level of automation and technical difficulty. Meanhile, by that time, Thailand should be able to produce more higher-end products.

Case study 2: CompanyY Gloves Co., Ltd - China Plus One export platform model

The case study of CompanyY Gloves in Cambodia can be considered as an example of the flying-geese model, which has been very popular to explain FDI activity in East Asia led by Japanese MNCs. CompanyY is a medium company with its head office in Kanagawa Prefecture in Japan, producing different types of gloves. Overseas operations have been located in China, Vietnam, and Indonesia before setting up the plant in Cambodia. There are 4 factories in China and 3 in Indonesia which are 100% owned by the Japanese company, and a joint-venture in Vietnam. China is regarded as the regional hub for all CompanyY's plants in the area, with over 80% of the production volume made in China compared to the small output capacity of the Cambodian plant. However, 90 percent of the production in Cambodia is exported back to Japan, and dominated by the giant Japananese retailer Uniqlo Group. With the rising labor costs in China, this can be considered as a model for a China Plus One subsidiary.

The company has been in operation since 2012, in the Bavet Tai Seng SEZ near the border with Vietnam. It is only 5km from the Moc Bai international border crossing to Vietnam. The location of the Bavet Tai Seng SEZ is very advantagous, since it is right on the ASEAN Highway No. 1, and very close to Ho Chi Minh City (80 km away from Ho Chi Minh City's international seaport and 65 km from Ho Chi Minh City's airport).

There were few foreign firms located in Svay Rieng Province in Cambodia at the time of the company establishment in 2012. The Mahattan SEZ was another locaton choice for the company at that time. Both offered very competitive rental rates of US\$20 per square meter. Apart from the location and land rental cost, the labor cost was another key factor for the investor in CompanyY' labor intensive industry. By 2011, many Japanese companies were already established in Vietnam, and there was fierce competition for labor supply as a result. The wages in Vietnam at that time were already much higher than the level of US\$60 per month in Cambodia. In addition, the preferential treatment for LDCs in Cambodia to enter the market of the developed economies (GSP) was another advantage. However, the company did not considerit seriously.

As for the production inputs, no materials are sourced from Cambodia, except some supplementary inputs like packaging, which is also supplied by Taiwanese or Chinese

firms in Cambodia. The main source of material is controled by the regional hub of the company in China. It is reported that there is a smart in-house procurement system among the Japanese head office, the China hub, and the affliates in the other Asian countries. The China factory import big lots of materials and distributes them to regional plants according to the orders from each plant, and at the market price rather than the in-house price. Some materials are provided by suppliers in Vietnam and Thailand, but mostl come from China. CompanyY Cambodia is autonomously in charge of their costs and sales within the network.





Source: The Author's own compilation from interviewing the company's management

Logistical arrangements are critical in the business operation of CompanyY Cambodia, as they are involved in lots of export and import activities. The main gateway they use is Ho Chi Minh City's seaport. For exports, gloves are sold at FOB Saigon price to markets in Japan, the US, the EU, and Australia. The cost of a 40-foot container from Baver to Ho Chi Minh City's port ranges from US\$ 900-1,000 including truck transportation and forwarding services at the port. Meanwhile, imported goods are often in small shipments rather than full container loads from Ho Chi Minh City to Ba Vet. Sometimes, materials are also transported from Thailand by road, but this location is far away from the Thai border.





Source: The Author's compilation from interviewing the company's management

Tax incentives are attractive. However, there are many complaints about corruption by the investors in this SEZ. Companies are also adversely affected by the irregular power. This service has improved over the last few years with more supply coming across the border from Vietnam.

Figure 5- 20: Logistical arrangement by CompanyY Gloves trading activities



Source: The Author's compilation from interviewing the company's management

Case study 3: No strong link with the regional supply chains - Traditional model of FDI with a headquarters linkage

The traditional model of FDI by the developed economies to the developing countries in the 1990s, especially in East Asia, was to set up factories producing similar products as those manufactured at the headquarters. This type of horizontal investment applied mostly to simple manufactures or the assembly more sophisticated products. The key point of this type of investment was to take advantage from lower labor costs, preferential fiscal

and investment incentives offered by the host country, as well as market-seeking. These features particularly fit the case of Cambodia's SEZs where foreign investors can find exactly these benefits. However, this is very different from the two cases mentioned above, where the foreign investing firms are more closely connected to those in the nearby country or region.

Our research team had the chance in June 2018 to visit CompanyX (Cambodia) Wiring Systems Co., Ltd., located in the Phnom Penh SEZ. This is a 100% investment from Japan (CompanyX Wiring Systems Co., Ltd.) with the investment capital of over US\$18 million in Cambodia, and established in June 2011. The Cambodian CompanyX Wire Harness has been in operation for about 6 years, producing wiring harnesses for automobiles. The CompanyX Group is also the only customer (100% of the products are exported back to Japan). On the distribution side, CompanyX Denko completely controls the sales of the company for both prices and quantity. Basically, CompanyX Cambodia has no information on how the products are distributed from Japan all over the world by the headquarters. Apparently, there are no sales of their products in the Cambodian market, as there is currently no car assembly plant in the country.

On the production side, since all orders are decided in Japan, the headquarters is also the main supplier of material inputs. We are told by the management of the company that in the past over 70 percent of the materials were imported from Japan. These are the key and high quality materials, such as copper. However, there is a decline in the trend of supplying materials from Japan, which is about 40 percent currently. Another important material is aluminum wire. In short, the essential materials to ensure the product's quality are supplied from Japan in order that the headquarters can be assured of high quality, but some less important materials have been imported from nearby countries such as Thailand, Vietnam, and the Phillipines. Again, there is no connection in terms of materials supply from local suppliers in Cambodia.

The parent company is also responsible for all logistical arrangements, including land transportation from the factory to the Saigon port and ocean shipment from Ho Chi Minh City to Japan. The company uses container services once a week, and it has been a smooth process without difficulty. The finished wire harness products are loaded into containers, and from the Mekong waterway port the containers are sent to Saigon port. The whole process is arranged by the headquarters, such that CompanyX Cambodia has no information on the actual logistical costs. As for the logistical arrangement for imported materials, this depends on the type of materials, the quantity, and the amount that the supplier can guarantee the shipment within a specified time. It takes 2-3 days for land transportation by truck from Leamchabang port in Thailand, which has a lower cost than from Vietnam. The company is also considering Shihanoukville's port, but the distance from Phnom Penh to that port is one of the concerns among others, including its

capacity and transit time uncertainty.



Figure 5-21: Linkage in the FDI model of CompanyX (Cambodia) Wiring System

Source: The Author's compilation from interviewing the company's management

CompanyX Cambodia is not the only foreign affiliate of CompanyX Wiring Systems in Southeast Asia. This Japanese MNC have also been operating 3 factories in Vietnam (to the north of Hanoi) and another 3 in the Philippines. They are all larger than the newly established plant in Cambodia with a combined output over 20 times higher than that in Cambodia. We are told that there is no connection between CompanyX Cambodia with other factories in region, because different types of wire harness are used for different models of cars, and the headquarters decides which plant will produce which type of wire harness to suit each market. In other words, we observe that the production network in Southeast Asia of the company is not closely linked. There are only linkages between individual affliates with the headquarters in Japan rather than among themselves.

Any backward linkage to the domestic economy in this case is merely the labor supply. This is also the main reason that the CompanyX Group decided to establish a plant in Cambodia. The headquarters conducted reseach in 2010, looking at China, Vietnam, Thailand, Lao PDR, and Myanmar and other countries around the region. In their evaluation, Laos has no access to a seaport and a limited labor supply, whereas Myanmar's political uncertainty and poor infrastructure were the main concerns. For China and Thailand, the labor costs and minimum wage levels were already high compared with those in other countries in the region. Cambodia was eventually chosen also because of its policy incentives in the SEZ, as well as a better business environment and infrastructure development. In particular, the minimum wage in Cambodia at the time of the research project was less than US\$70, and the current level of US\$170 is still not

high from the company's viewpoint.

Howerver, the most challenging issues for the company is the labor quality. Workers are provided with a two-month training before starting production line work with the company, since they are mostly less than lower-secondary level school graduates. The future plan of the company in Cambodia for the next 10 years is considered by the management as stable and secure given the low labor costs, but in the next 20 years, they will likely need to address some new challenges.





Source: The Author's compilation from interviewing the company's management

Our observations from this case study is summarized in the Figure 5-22, which shows how the company is connected and positioned within the production network set by the CompanyX Wiring Sytems and its linkages to the domestic and foreign economies. This is a type of horizontal investment but with differentiated products because different types of wire harness are produced for different models of car. FDI was not for the purpose of market seeking but primarily for the cost avantages of lower labor costs and the investment incentives. There is a concern that once these advantages dissappear in the future, there is no strong linkage from the domestic or regional eonomies to attract the investor.

6. Summary

1. The old form of cross-border trade duty-free commerical zone is no longer applicable in the new economic development and regional integration in the border areas. Border zones in the case of Vietnam are on the way to transform into more so-called Border Economic Zones, with less privileges than before, but with more diverse investment and production activities ranging from trade, industrial development, service expansion, and residential services to become modern urban complexes.

- 2. Infrastructure, utilities, and connections between locations are key factors for investors, and land rental costs and labor resources are key attractions in the border provinces. They all accumulate to the long-term cost for the investors. Tax exemption for a limited number of years is not as important as in the past. Similarly, a tax-free zone is not as crucially important as it used to be due to many tariff reductions through trade agreement between the countries in the region.
- 3. The SEZs would be attractive to foreigners if they are a really special in the sense that similar regulations or institutional infrastructure cannot be found outside these enclaves. The example of the corruption-free environment in the Phnom Penh SEZ is a typical example of how a SEZ can offer advantages to improve the business environment.
- 4. The low-cost of labor is certainly a short-term advantage in the course of development. SEZ developments. It can only retain investors when there are strong linkages with the domestic economy, thus creating a strong base for the MNCs maintain their operation in the host country.
- 5. SEZ developments can be effective tools to attract investment, if such FDI is linked with GVC. The case study of CompanyZ Cambodia and CompanyZ Thailand clearly shows that there are opportunities to grow together and this can be sustainable. The governement in each country can design specific policies to attract certain types of investment to promote the industries or business it is targeting using the SEZ tools. Together with the above conclusion, it is possible that the developing economies need to further develop their domestic value chains in manufacturing to attract GVC-FDI. Building strong backward and forward linkages among domestic manufacturing firms could help facilitate more GVC-FDI from multinationals.
- 6. The opportunity of more cooperation between SEZs across borders is worth exploring. This could be particularly relevant to avoid the race of offering more preferential incentives to investors who no longer see these as a critical benchmark for their investment decision. Benefitting from spatial proximity, sharing utility such as electricity supply and logistical initiatives could a be format for improved cooperation.

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