

FDI AS A DRIVER OF CAMBODIA'S EXPORT SOPHISTICATION AND DIVERSIFICATION

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* Opinions and findings in this paper are those of the author. They do not reflect the views of the institution that the author is affiliated with.

Abstract

Despite debates over relationship between trade and growth, significant contributions of trade on Cambodia's robust economic growth are undeniable. Cambodia has integrated her economy into regional and global markets for nearly three decades, allowing Cambodia to attract foreign direct investment (FDI) and increase export. It is convinced by many scholars that export is important for growth, yet what a country exports is even more important. Hence, this paper aims to study how Cambodia can export better by upgrading sophistication and diversification of her export structure. The study found out that Cambodia has gradually upgraded sophistication and diversification of export as a result of an increase in inward FDI in garment industry. Given the context of global value chain or fragmentation strategy of firms, Cambodia can further upgrade export structure by attracting FDI supplying parts and components to mother firms in neighboring countries, especially Thailand. To attract such FDI, it is necessary for Cambodia to reduce costs of service links and make products under code 85 as a priority in the investment policy as well as the Industrial Development Policy.

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FDI as a Driver of Cambodia's Export Diversification and Sophistication

I. INTRODUCTION

After the 2008 global financial crisis, Cambodia's robust annual growth rate is around 7%. Two major drivers of growth are garment in industry sector and construction in service sector, which contribute 1.73% and 1.25% respectively to Cambodia's GDP growth rate (Ministry of Economy and Finance, 2016). Footwear, garment and textile products are the country's top exports (COMTRADE Statistics). Such a strongly positive contribution of garment export to growth is highly consistent with the classical economic theory of Adam Smith which claims that trade promotes specialization, further leading to high productivity and growth. However, countries participating in international trade do not get the same share of fruits. Hausmann, Hwang, and Rodrik (2016) argued in their research paper "What you export matters" that countries are what they export. Rich countries export high-value manufactured products while poor countries export primary and resource-based products. Due to the fact that diversification and sophistication of export composition matters for growth, it is crucial for Cambodia to upgrade sophistication and diversification of her export structure. There is also a number of studies showing positive relationship between foreign direct investment (FDI) and export composition as FDI builds firms' capacity to export through technology spillover (Zhu and Fu, 2013; Lectard and Rougier, 2018; and Hayakawa, Macikita, and Kimura, 2010). That results in many policy recommendations on how to improve business environment to attract FDI in general, not specifically FDI of global value chains. Therefore, this research paper mainly focuses on the neglected area by studying how to diversify and upgrade export structure of Cambodia through FDI in the context of firms' fragmented production process in global value chains. In addition, the study is highly relevant to policy agenda of the Royal Government of Cambodia, particularly the Industrial Development Policy (IDP) which aims at diversifying and industrializing Cambodian economy. The paper will also contribute to policy recommendations on how Cambodia can maximize benefits of globalization by participating in global value chain or production network given the fact that Cambodia is highly integrated into regional and world markets.

The paper will start the next section with a literature review on a concept of export sophistication and diversification, composition of export structure, previous studies on relationship between export sophistication and growth, and key drivers of export sophistication and diversification. The literature review section will be followed by a brief review on fragmentation theory which is used as a theoretical framework for this study. Next, the paper will build evidences using data on economic structure, export composition and FDI from the government's and international organizations' sites, such as Ministry of Economy and Finance (MEF), Council for Development of Cambodia (CDC), COMTRADE, International Trade Center (ITC), World Trade Organization (WTO), UNCTAD, etc.

The evidence section also includes a study on a good practice of Thailand in attracting FDI into high-value secondary industries. Lastly, the paper will draw a conclusion and provide recommendations on how Cambodia can upgrade sophistication and diversification of export through FDI.

II. LITERATURE REVIEW

This section will review previous studies on three areas, including composition of export structure; why upgrading export sophistication and diversification is crucial for growth; and relationship between FDI and export-structure upgrading.

There are many factors that can explain why some countries are rich and some are poor, one of which is composition and evolution of export (Anand, Mishra, and Spatafora, 2012; Hausmann and Rodrik, 2007). Greater export sophistication is also associated with export diversification. Export sophistication refers to export of high-valued products and services while export diversification is a development of new and higher-tech products and services. Export structure is composed of three categories of products and services, namely primary and resource-based products, manufactured products, and services. Similarly, FDI by industry is also classified into primary, secondary and tertiary sectors (International Trade Center, WTO). Manufactures (secondary) are classified into low-tech, medium-tech, and high-tech. Services (tertiary) include traditional and modern services¹. However, this paper will focus on only goods component of export, specifically manufactured goods

Anand, et al., 2012 argued that exports of high-income countries have relatively more concentration on manufactured products while exports of low-income countries have relatively higher share of primary and resource-based products compared to manufactures and services, few new primary products, failed modern services, and static evolution. Therefore, low-income countries can catch up with high-income countries through upgrading sophistication of export from primary to manufactured products. Regarding the evolution of export sophistication, all countries tend to upgrade their export structure overtime. However, export sophistication and diversification of low-income countries evolves less and slower than that of high-income countries.

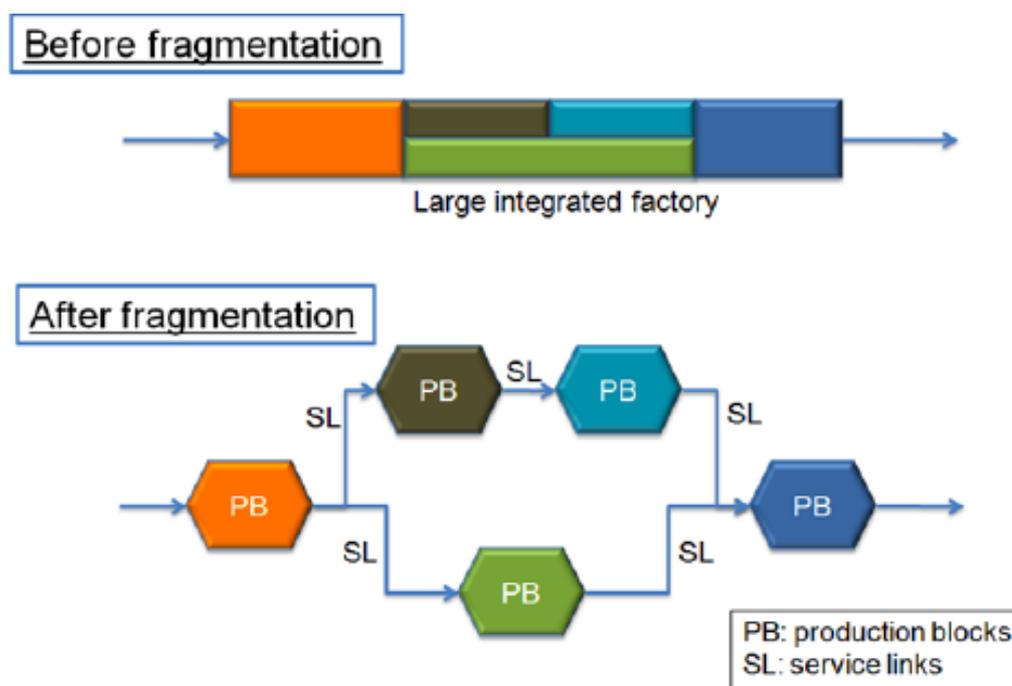
Given the significance of export sophistication for promoting growth, it is important to study key determinants of export upgrading. Many studies provide possible drivers of export sophistication that can be classified into internal and external forces. Export sophistication can be driven by internal factors, such as human capital, size of labor force, R&D, information flow, economic liberalization, overall macroeconomic policy, quality of institution, (Anand, et al., 2012; and Hausmann, Hwang, and Rodrik, 2006;). However, human capital is concerned with reverse causality while institutional

¹ Traditional services include insurance; travel; transportation; communication; personal; cultural and recreational services. Modern services are comprised of business consulting, accounting and financial services, business-processing services, remote access services, education, medical-record transcription, production services, entertainment, design, and marketing.

characteristics of a country like institution quality shows insignificant effects (Hausmann et al., 2006). For external forces, there is a strong argument supported by a number of researches that FDI positively contributes to export diversification and sophistication (Zhu, et al., 2013; Lectard, et al., 2018; and Hayakawa, et al., 2010). FDI have both direct impacts and indirect impacts on export sophistication and diversification. For indirect impacts, FDI generates technology spillover and transfer to local firms, leading to increased capabilities of local firms regarding capital equipment, specific labor skills, know-how, working practices, and so on. In addition, local firms can absorb spillover effects from FDI through 4 paths, including imitation, skill acquisition and proliferation, competition, and export (Hayakawa, et al., 2010). Thus, all else being equal, this paper will emphasize only the key role of FDI in driving Cambodia’s export sophistication and diversification within the fragmentation theory of firms’ production blocks and service links.

III. THEORETICAL FRAMEWORK: FRAGMENTATION THEORY

Figure1: The Fragmentation Theory: Production Blocks and Service Links



Source: Kimura and Obashi, 2011

Jones and Kierzkowski (1990) developed a theory of fragmentation theory which points out that production blocks connected by services links of a given production process can be allocated in different locations (countries or regions). Production blocks refer to characteristics or classifications of a particular production process. Some production blocks are capital intensive while some are labor intensive. Regarding service links, it refers to bundles of activities that consist of administration, communication, coordination, transportation, and financial services. As can be seen in the figure 1

below, before fragmentation, a production process of a firm producing final products is integrated in one place (one country). When the firm achieves increased outputs, return and specialization, it can switch its integrated production process to a fragmented production process in which production blocks are connected by service links. Firms pursue fragmentation of production process for 2 main economic reasons: i. large production cost per production block can be saved and ii. costs of service links that connect fragmented production blocks in different locations are low due to decreased transportation and communication costs (Jones et al., 1990; and Kimura and Obashi, 2011).

The concept of fragmentation of production process is relevant to Ricardo's theory of comparative advantage. Since different countries have different productivity levels and factor prices for different production blocks, firms should allocate each production block to a location or a country with compatible comparative advantage. Similarly, fragmentation theory is also consistent with Heckscher-Ohlin theorem of factor endowments. Different production blocks have different factor endowments, so do different countries. Thus, each production block should be located in a country with matching factor endowment. By doing so, more countries will be able to participate in international trade. It is beneficial for developing countries because they have relatively more abundant and cheaper labor endowment.

Fragmentation of production process can be used for production of one final product, intra-industry trade, and different industries. The second and third applications of fragmentation potentially increase international specialization. For instance, in the case of automobile, the production of one component (anti-lock breaking system) can be used in a variety of products.

Therefore, through participation in fragmentation of production process, developing countries like Cambodia have a chance to industrialize their countries. Particularly, given abundant and cheap labor endowment, developing countries can first attract labor-intensive production block of a given production process in the form of FDI. After acquiring learning-by-doing sets of skills, developing countries can upgrade by participating in higher-technique production blocks (Kuroiwa, 2016).

IV. EVIDENCE

4.1. Cambodia: economic structure, export structure, and FDI

4.1.1. Industrialization of Economic Structure

For the last 2 decades, Cambodian economy has been gradually industrialized and diversified. Before the 2008 global financial crisis, Cambodia achieved 2-digit growth rate of 13.3% in 2005 (Ministry of Planning, 2016). After the crisis, Cambodia's average growth rate is around 7% annually. The robust growth has been driven by three main economic pillars, namely agriculture, industry and service. Cambodia's economic structure has been transformed into an industrialized economy as a result of a decline of agriculture share and a rise of industry share in GDP. The GDP share of

agriculture sector, which used to be a dominant sector, has been significantly declining from 44% in 1998 to 22% in 2019; industry sector, dominated by garment sector, has been increasing from 17% in 1998 to 33% in 2019; the service sector, driven mostly by tourism, has maintained its share of roughly 40% (Ministry of Economy and Finance, 2019). Despite the fact that garment sector is a key driver of industry sector, diversification within industry sector has also started due to emergence of other industrial sectors, such as food and beverage and light manufacturing. Despite dominance of garment sector, growth rate of this sector has been slow down from 68% in 2000 to around 10% in 2015 and projected to continue falling while growth rate of new industry sectors has been rising from less than 1% in 2000 to nearly 10% in 2015 and projected to continue growing.

4.1.2. Sophistication and Diversification of Export Structure

Besides industrialization of economic structure, Cambodia's export structure has also been gradually upgraded and diversified. Table 1 below compares Cambodia's top 10 export products in 2001 with that in 2018. According to the table, by 2001, the export structure had already been shifted from primary to secondary products as the composition of top 10 exports in 2001 consisted of only one primary product, which is code 03 (fish and crustaceans, molluscs and other aquatic invertebrates) while the rest is secondary products. Since then, Cambodia's export structure has been upgrading from low-tech to medium-tech manufactured products. Within secondary products, garment products have remained the top export of Cambodia since 2001 with a dramatic increase in exported value. As can be seen in the table, garment products, such as code 61 (articles of apparel and clothing accessories, knitted or crocheted) has been the top 1 export product, whose exported value has been significantly increased from approximately 1 billion US\$ in 2001 to nearly 9 billion US\$ in 2018; code 62 (articles of apparel and clothing accessories, not knitted or crocheted) and code 64 (articles of apparel and clothing accessories, not knitted or crocheted) have been in the top 10 export list for almost 2 decades. In addition, garment products have also been upgraded from low-valued to higher valued products. As illustrated in the table, the 2018 list includes higher and more sophisticated garment products, particularly code 42 (Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles ...), which was not in the 2001 list. Besides, it is important to note that export of secondary products has been upgrading from low-tech to medium-tech manufactured products, reflecting existence of sophistication and diversification of Cambodia's export structure. As shown in the table, low-tech secondary products, such as code 49 (Printed books, newspapers, pictures and other products of the printing industry; manuscripts, ...), code 40 (Rubber and articles thereof), code 44 (Wood and articles of wood; wood charcoal), and code 03 (Fish and crustaceans, molluscs and other aquatic invertebrates) were in the top 10 exports of 2001, but no longer exist in the top list of 2018. Those low-tech secondary products have been replaced by medium-tech secondary products (light-manufacturing products), such as code 85 (Electrical

machinery and equipment and parts thereof; sound recorders and reproducers, television ...) and code 87 (Vehicles other than railway or tramway rolling stock, and parts and accessories thereof).

Table1: Cambodia's Top 10 Exports in 2001 and 2018

Top 10 Exports in 2001 (USD thousand)			Top 10 Exports in 2018 (USD thousand)		
Code	Product label	Exported value in 2001	Code	Product label	Exported value in 2018
'61	Articles of apparel and clothing accessories, knitted or crocheted	1089198	'61	Articles of apparel and clothing accessories, knitted or crocheted	8834167
'49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, ...	204170	'62	Articles of apparel and clothing accessories, not knitted or crocheted	4047205
'62	Articles of apparel and clothing accessories, not knitted or crocheted	41291	'64	Footwear, gaiters and the like; parts of such articles	2212296
'64	Footwear, gaiters and the like; parts of such articles	28798	'42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles ...	892637
'40	Rubber and articles thereof	25883	'85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television ...	541974
'44	Wood and articles of wood; wood charcoal	23150	'87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	482033
'63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	13397	'07	Edible vegetables and certain roots and tubers	442158
'71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad ...	12862	'10	Cereals	416714
'65	Headgear and parts thereof	12647	'08	Edible fruit and nuts; peel of citrus fruit or melons	347365
'03	Fish and crustaceans, molluscs and other aquatic invertebrates	6078	'43	Furskins and artificial fur; manufactures thereof	283198

Source: ITC calculations based on UN COMTRADE statistics.

4.1.3. Foreign Direct Investment (FDI)

There are many possible factors that drive the gradual upgrading and diversification of Cambodia's export structure which is demonstrated in the previous section. However, according to the scope of this paper, it will discuss only the role of foreign direct investment within the context of fragmentation in promoting sophistication and diversification of Cambodia's export structure.

Due to government policies regarding economic and trade liberalization, Cambodia's inward FDI has been significantly increased. Table2 below shows an overview of FDI and values of both types of FDI in Cambodia. As can be seen, FDI inward flows have been increased from nearly 600 million US\$ before the 2008 crisis to 3 billion US\$ in 2018. Similarly, FDI inward stock has been accumulated from only 350 million US\$ to 23.7 billion US\$ in 2018. Regarding entry mode of FDI, most FDIs enter Cambodia in the form of greenfield investment project rather than cross-border merger and acquisition as data from the table shows that the net value of the first form has been increased relatively greater than that of the later form.

Table2: Foreign Direct Investment (FDI) overview and types

Foreign Direct Investment (FDI) overview, selected years (Million of dollars)					
FDI flows	2005-2007 (pre-crisis annual average)	2015	2016	2017	2018
Inward	577	1823	2476	2788	3103
Outward	5	88	79	115	124
FDI stock	1995	2015	2016	2017	2018
Inward	356	15690	18166	20838	23741
Outward	139	536	623	869	993
Cross-border merger and acquisition overview, 2005-2007 average, 2016-2018 (Million of dollars)					
Sales (net)					
Economy	2005-2007 (pre-crisis annual average)	2015	2016	2017	2018
Cambodia	4	243	274	98	N/A
Announced greenfield investment project overview, 2005-2007 average, 2016-2018 (Million of dollars)					
As destination					

Economy	1995	2015	2016	2017	2018
Cambodia	516	4881	1905	3056	23741

Source: World Investment report 2019, UNCTAD

Theoretically and empirically, FDI is positively correlated with export through FDI spillover effect on both intra-industry and inter-industry firms in host countries (Hayakawa, et al., 2010). Therefore, all else being equal, Cambodia's expansion of export volume is associated with the country's largely increased inward FDI. Then, to understand how the current sophistication and diversification of Cambodia's export structure has been driven by FDI and how to further upgrade the export structure through FDI, looking at Cambodia's FDI magnitude could provide a good explanation. As discussed in the previous session regarding Cambodia's export composition since 2001, the country's export of secondary sector is composed of i. garment products as dominant products; ii. emerging light manufacturing products; iii. less high-value-added manufacturing products; and iv. other manufacturing products. Possibly, it is because Cambodia has attracted greenfield FDI in garment sector the most and relatively less FDI in other manufacturing industries. Table3 indicates sector with potential to attract investment in Cambodia, Vietnam, and Thailand; and compare number of inward foreign affiliate in Cambodia between 2001 and 2018. As can be seen in the table, the number of FDI in Textiles, clothing and leather industry, has been increased from 13 in 2001 to 34 in 2018. In both periods, Textiles, Clothing and Leather industry attracts the most FDI not only among the secondary sector, but also among all the three sectors (primary, secondary, and tertiary). In addition to an increase in number of foreign affiliates in Garment industry, there is also an existence of 3 inward foreign affiliates in Machinery and Equipment industry in 2018, which did not have a presence in 2001. Also, the number of inward foreign affiliates in Electronic and Electrical Equipment industry and Motor Vehicles and other Transport Equipment industry has increased from 1 and 0 in 2001 to 2 and 3 in 2018 respectively. Such a FDI magnitude reflects that Cambodia's export structure, especially secondary sector, is less sophisticated and diversified because it is dominated by garment products despite the fact that it has been shifted from primary to secondary sector. To sum up, we can observe that export composition and inward FDI by industry in Cambodia share a similar magnitude. Hence, attracting more FDI into higher-tech or higher value-added manufacturing sector, such as machinery and equipment and Electrical and electronic equipment could be a key to upgrade sophistication and diversification of Cambodia's export structure. The next section will explain why Cambodia attracts less FDI into higher value-added manufacturing industry, particularly machinery and equipment and electrical and electronic equipment by examining MFN applied tariff rate.

Table3: Sector with Potential to Attract Investment (Values in US\$ million)

FDI		Countries		
		Cambodia	Vietnam	Thailand
	FDI Inflow 2018	3,102.60	15,500.00	10,492.60

		FDI Inward stock 2018	23,740.70	144,991.30	222,733.20
		Chg. p.a. since 2015	14.80%	12.10%	6.70%
Foreign Affiliates 2018					
	Industry	Number 2001	Number 2018	Number 2018	Number 2018
Total (merchandise and services)		27	120	2,309	2,422
Primary	Agriculture and hunting	-	2	9	3
	Forestry and Fishing	-	2	4	4
	Mining and quarrying	-	-	7	
	Petroleum	-	2	17	50
Secondary	Food, beverages and tobacco	3	6	136	64
	Machinery and equipment	-	3	252	335
	Electrical and electronic equipment	1	2	407	413
	Precision instruments	-	-	87	68
	Motor vehicles and other transport equipment	-	2	219	319
	Other manufacturing	2	3	117	92
	Recycling	-	-	10	24
	Textiles, clothing and leather	13	34	306	136
	Wood and wood products	2	6	115	39
	Publishing, printing and reproduction of recorded media	-	3	31	23
	Coke, petroleum products and nuclear fuel	-	-	46	65
	Chemicals and chemical products	-	1	195	161
	Rubber and plastic products	2	4	151	123
	Non-metallic mineral products	-	2	72	48
	Metal and metal products	-	5	275	220
	Unspecified secondary	-	-	-	-
Tertiary	Electricity, gas and water	-	1	6	9
	Health and social services	-	3	8	17
	Community, social and personal service activities	-	2	9	20
	Other services	-	7	44	57
	Construction	-	2	68	48
	Wholesale and retail trade	-	27	340	638
	Hotels and restaurants	2	1	16	41
	Transport, storage and communications	-	20	111	109
	Finance	-	4	79	137
	Business activities	-	9	253	321

	Public administration and defense	-	3	9	9
	Education	-	-	2	2
	Mixed goods (trade data)	-	-	-	-
	Unspecified tertiary	2	-	-	-

Source: UNCTAD and Investment Map-International Trade Statistics, ITC

Notes: The number of foreign affiliates in 2001 is received from UNCTAD WID country profile while the rest is received from Investment Map-International Trade Statistics, ITC.

4.2. Cambodia's MFN Applied Tariff Rate

Exporting firms in global value chains have to import inputs or materials for production process before they can export either final goods or intermediate goods like parts and components. Exporting firms are sensitive with import tariff which is considered as a cost of production affecting their profitability. Due to firms' tariff sensitivity, it is important to note that to attract investments, particularly FDI that focuses on export, countries should lower tariff rate on import of materials assuming weak domestic supply base. Thus, this section will look at Cambodia's Most Favored Nation (MFN) tariff rate on code 85, which refers to tariff rate Cambodia promises to impose on import of products under code 85 from other WTO members.

Neighboring with relatively larger economies like Vietnam and Thailand can be both challenges and opportunities for Cambodia. Regarding challenges, Cambodia is relatively less competitive in attracting FDI compared to the two neighbors as Cambodia might have relatively smaller domestic supply base, less skilled workers, less generous investment incentives, higher tariff rate, etc. As shown in the table 3 above, within secondary sector, Cambodia's inward FDI is less diversified and largely concentrated in textile, clothing and leather industry while Vietnam's and Thailand's inward FDI is highly diversified and goes to different industries, especially machinery and equipment and electrical and electronic equipment. The difference in FDI diversification between Cambodia and its neighboring countries can be explained by different tariff rates. Countries with lower tariff rates are more likely to attract more FDI since most FDI is export-oriented. Table 4 below shows MFN applied duty rates on code 85 (electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles) in Cambodia, Vietnam, and Thailand. According to the table, Cambodia's MFN applied duty rates on code 85 is 15% which is higher than Vietnam's and Thailand's which are 3% and 5% respectively. The relatively higher MFN applied tariff rate on code 5 could explain why Cambodia attracts less FDI in machinery and electrical parts and components under code 85, leading to less export of secondary products under code 85. Given low MFN applied tariff rates, undoubtedly, Vietnam and Thailand have attracted large number of foreign affiliates in Machinery and equipment and electrical and electronic equipment.

However, given the context of globalization and firms' production network in accordance with the fragmentation theory, Cambodia has an opportunity to participate in global value chain of sophisticated secondary products like parts and components of machinery and electronics with countries in the region, especially the two neighboring countries. In the next section, the paper will review good practice of Thailand in attracting FDI into high-value-added secondary sector, particularly machinery and equipment and electrical and electronic equipment.

Table4: MFN applied duty rates

Code	Description	Cambodia	Vietnam	Thailand
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	15%	3%	5%

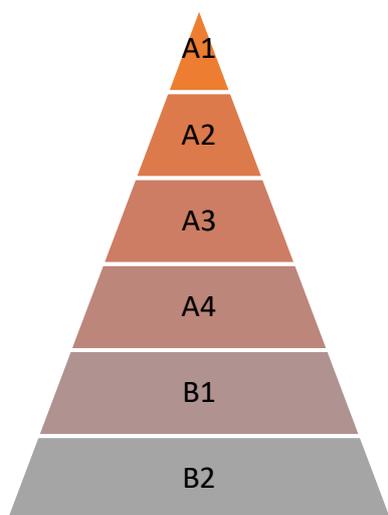
Source: World Trade Organization

4.3. Good Practice in Thailand

Besides relatively low MFN applied duty rate, Thailand also has generous investment scheme, attracting more inward FDI. This section tends to study Thailand's policies to attract FDI, particularly FDI in machinery and equipment and electrical and electronic equipment industry.

Thailand Board of Investment (BOI) is the Thai government agency to promote foreign direct investment in Thailand through various investment regime and incentives. BOI designs liberal investment regime and attractive investment incentives which include policy, tax incentives, and facilitation. Under the BOI's investment regime, foreign investors in Thailand can enjoy 100% foreign ownership, no local content requirement, no export requirement, and no restriction on foreign currency. BOI provides generous tax incentives, such as import duty exemptions/reductions, corporate income tax exemption for up to 8 years, 50% reduction of corporate income tax for up to 5 years, double deduction on utility costs, and deductions for qualifying infrastructure costs. In addition to investment policy and tax incentives, BOI also provides facilitation regarding land ownership rights and work permit as well as visa. BOI has been working to promote 8 main activities or product categories, including agriculture and agriculture products; mineral, ceramics, and basic metals; light industry; metal products, machinery and transport equipment; electronic and electrical appliances industry; chemicals, plastics and paper; and services and public utilities. BOI's provision of tax incentives are based on activities and merit. Regarding activities-based incentives, BOI classifies activities into 6 categories, including A1, A2, A3, A4, B1, and B2 (description below). A1 and A2 activities received the most generous tax incentives from BOI, which is up to 8-year exemption of corporate income tax. Such a generous incentive for activities under A2, including machinery and electrical equipment is more likely to attract more FDI in machinery and electrical equipment as well

because generally tax exemption can increase firms' profits. As can be seen in the table 3 in the previous section, the top 3 attractive secondary-industries for inward FDI by foreign affiliates in Thailand are Electrical and Electronic Equipment (413), Machinery and Equipment (335), and Motor vehicles and other transport equipment (319).



A1: Knowledge-based activities, focusing on R&D and design to enhance the country's competitiveness

A2: Activities in infrastructure for the country's development, activities using advanced technology to create value added, with none or very few existing investments in Thailand

A3: High technology activities which are important to the country's development, with a few investments already existing in Thailand

A4: Activities with lower technology than A1-A3 but add value to domestic resources and strengthen supply chain

B1-B2: Supporting industries that do not use high technology but are still important to value chain

	Example Activities	Exemption of Corporate income Tax	Exemption of Import Duty on Machinery	Exemption of Import Duty on Raw Material Imported for Use in Production for export	Non-tax
A1	Micro electronics design, embedded software/embedded system design, data center, cloud services, software park, training center	8 years (No Cap) + Merit	✓	✓	✓
A2	Telecommunication devices, electronics control and measurement instruments, security control equipment, solid state drives, automation machinery, high risked medical device, medical food, bio plastics	8 years + Merit	✓	✓	✓
A3	Enterprise software, digital content, electrical appliances with internet of things, other telecommunication devices, HDD, semiconductor, flat panel display, thin film, photonics devices	5 years + Merit	✓	✓	✓
A4	Audio visual, LED, PCBA, airlines, international distribution center, tourism related business, selected plastics products	3 years + Merit	✓	✓	✓

B1	E-commerce, printing products	0 year + Merit (for some activities)	✓	✓	✓
B2		-	-	-	-✓

Source: Thailand Board of Investment

V. CONCLUSION AND RECOMMENDATIONS

To sum up, Cambodia's economic structure has undergone gradual industrialization process from agriculture-based to more industry-oriented as a result of the government's economic liberalization policy. Export of industrial products largely contributes to the country high growth and industrial development. As supported by many studies, upgrading and diversifying export structure is more crucial for growth. One of the keys to upgrade sophistication and diversification of export structure is to attract FDI into higher value-added industries, which is made possible by firms' fragmentation strategy. Cambodia has upgraded and diversified export composition from primary to secondary industries as Cambodia has attracted more inward FDI into secondary industry. However, sophistication and diversification in secondary sector is still limited. Cambodia's export of secondary products is mainly garment products which are low-value-added due to the fact that most FDI inflow in Cambodia is concentrated on garment industry. Although there is a slight increase in the number of foreign affiliates in other light manufacturing industries, such as Electrical and Electronic Equipment, Machinery and Equipment, and Motor vehicles and other transport equipment, a lot more work from the government is required to attract more FDI inflow in to diversified and higher-valued industries.

Drawing from a good practice in Thailand that has performed very well in attracting FDI into high-value industries, there are some lessons learned for Cambodia. Instead of attracting FDI with a whole supply chain, Cambodia should participate in global value chain by attracting FDI that supplies machinery and electrical parts and components to mother firms in neighboring countries, particularly Thailand (Kuroiwa, 2016). To do so, Cambodian government should further reduce the service link costs, including set up cost, trade and transportation cost, and operational cost for FDI. For example, Cambodia should lower MFN applied tariff rate on products under code 85 (Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles). As discussed above, Cambodia's MFN applied rate is 5 times and 3 time higher than Vietnam's and Thailand's respectively. Since firms are profit-oriented, low MFN applied rate can make Cambodia an attractive destination for export-oriented FDI. In addition to lowering tariff rate, generous and attractive investment scheme should be specifically designed based on priority industries in secondary sector. Thailand's BOI prioritizes specific activities or industries in Thailand's investment policy. Hence, Cambodia should set priority industries, particular those under code 85 and design kind investment scheme to attract FDI inflow

into those industries. For future research purpose, the scope of this paper could be expanded to cover an analysis on how Cambodia approaches bilateral free trade agreement (FTA), accelerating deeper economic integration through reduction of tariff barrier and non-tariff barriers, promoting investment and cooperating to reduce negative impact of global pandemic on global value chains, to upgrade export structure.

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