Cambodia's FDI: Determinants and Effectiveness

Sothevy Mom and Jinhwan Oh

Abstract

Cambodia has been one of the outstanding developing countries that have captured significant foreign direct investment (FDI) for the last two decades, and has observed fast growth in various export oriented sectors, especially the garment sector. FDI contribute a significant growth to the Cambodia economy. Moving up from zero, Cambodia has been designing different investment policies in accordance with its economic status and development objectives over times.

The main objectives of this study are to pinpoint the determinants of inflow of FDI to Cambodia using the Gravity Model. A set of panel-data used in this study covers a period of 16 years from 2000 to 2015 along with a sample of 45 investing partner countries. It also inspects foreign direct investment flows between the distance of the sample countries to Cambodia. In addition, this study addresses key investment policies that aiming to attract FDI to the garment industry as well as its impact on the participation of female labor.

The results of this study show that inflows of foreign direct investment to Cambodia is significantly influenced by geographical distance and the size of export volume of investing partner countries. Therefore, the GDP of the respective countries is a factor that impacts decision-making on whether to invest in new a destination. For policy implementation, tax incentive has attracted plentiful attention from investors.

I. Introduction

Foreign direct investment (FDI) is an essential component in the national development process. It is a magnet that pulls external funding, technologies, jobs, and skills. It also pushes a developing economy to a transition-economy and further. Global investment capital was for $1.23 trillion in 2014 even after declining 16 per cent in 2013. Developing economies captured as much as 55% of global investment capital in 2014 (UNCTAD 2015). However, investment capital is expected to keep growing due to trade liberalization.

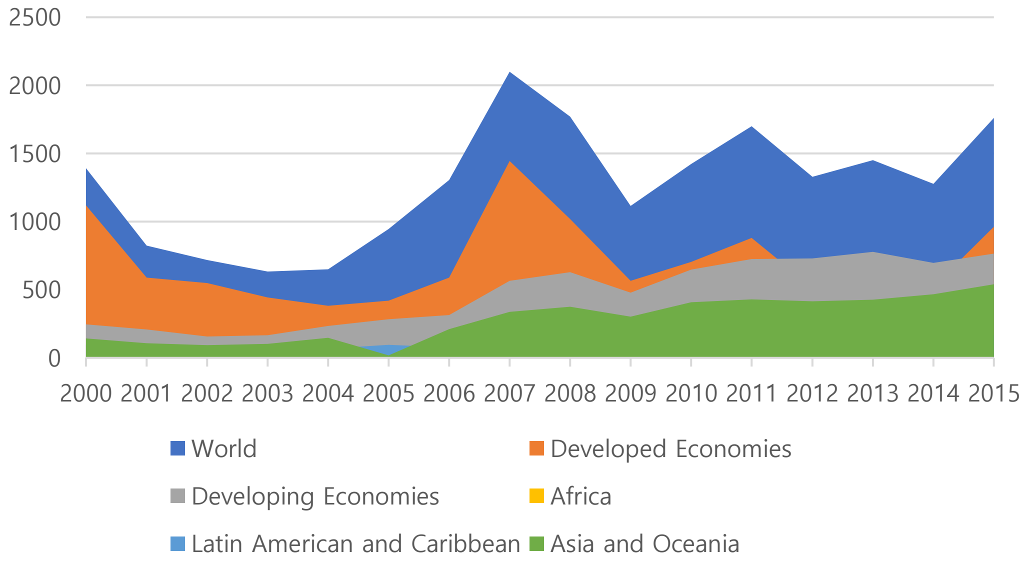
This study has three main objectives: (1) to estimate the determinants of foreign direct investment (FDI) flows in Cambodia using the gravity model, (2) to determine the effects of existing FDI policies in Cambodia's on garment sector from 2000 to 2015 using panel data from this period, and (3) to examine the effects of foreign investment policies on women's participation in the garment sector. To the best of my knowledge, I could not find many studies on the effects of investment policy on foreign direct investment. Furthermore, the effects of Cambodia's investment policies on women participation in garment sector from 2000 to 2015 (sixteen years) has not been reported. This research particularly chose to study these 16 years for the following reasons: (1) The Royal Government of Cambodia (RGC) started to have a solid National Strategy Development Plan (NSDP) gave more priority to private-sector development. Rectangular strategy, a spider web of Cambodia development strategy[1], was created in 2004 to collaborate with the NSDP to point out more precise areas for immediate development consideration. Each phase of the rectangular strategy was targeted for review every four years. Thus, it allows the RGC to adjust potential obstacles to private-sector development thickly or point out what areas the RGC should strengthen in order to keep up with investment trends globally, (2) Additionally, the RGC dived deep into critical investment issue using existing policy as baseline measurement for the first time, and (3) research is available on the effects of specific investment policies (SEDP 2001-2005 to NSDP 2014-2018). Knowing the results of each implementation period is very beneficial for both private and public sectors because potential investors

---

1 Refer to Appendix 1

can follow the success story of existing investors or set up business strategies ideal for Cambodia's investment environment. The public sector can also measure the effectiveness of policy implementation in each phase yield while the government can continue to fill supported factor while stepping away from areas that do not need to be strengthened now.

Figure 1.1 FDI flow by region and Economy, 2000-2015 (US$ billion)



Source: World Investment Report (2000-2015)

Figure 1.1 shows a FDI inflow trend categorized by region and economies from 2000 to 2015. During that period, FDI to developing countries consistently increased although there were moderate drops in 2002, 2009, and 2014. Among those developing economies, Asia has been the darling destination for FDI. since the steady growth of FDI took place from 2006 up until 2015 (UNCTAD 2015).

Table 1.1 FDI Inflows to Region and Economies 2000-2015 (US$ billion)

Year	World	Developed Economies	Developing Economies	Africa	Latin America and Caribbean	Asian and Oceania
2000	1,393	1,120	246	8	95	142
2001	824	589	209	19	84	107
2002	717	548	156	13	51	93
2003	633	443	167	19	47	102

2004	649	381	234	19	68	148
2005	946	419	284	19	95	17
2006	1,305	590	315	30	76	210
2007	2,100	1,445	565	63	164	338
2008	1,771	1,019	630	72	183	375
2009	1,115	566	749	58	116	303
2010	1,422	703	548	47	189	409
2011	1,700	880	725	48	244	430
2012	1,330	517	729	55	255	415
2013	1,451	566	778	57	292	426
2014	1,277	522	698	58	170	467
2015	1,762	962	764	54	167	540

Source: World Investment Report (2000-2015)

Table 1.1 shows that in 2000 the majority of FDI flows to developed economies accounted for almost 80% of all global FDI inflows. The remaining 20% that flowed to developing economies were distributed among developing economies in Africa, Latin American and the Caribbean and Asia and Oceania and more than 50% of FDI inflow to developing economies went to Asian and Oceania. A decade later, the growth of world FDI inflow was not remarkably huge; however, the distribution of FDI has shifted from developed economies to developing economies. Global inflows FDI increased from US$ 1,393billion in 2000 to US$ 1,422 billion in 2010 with US$ 548 billion flowing to developing economies which is almost double the amount received in 2000).

Domestic investors are still the dominant players in the Cambodia ‘s economy since they almost always have the largest share of investment capital over the last 10 years. In 2011, domestic firms were ranked first, possessing 41.24% of total investment capital. The same trend continued until mid-2016 when China’s investment capital was ranked the first, having 38.07% of the total investment capital at US$ 2.1 billion. From 2011 to mid-2016, Korean FDI had 2.91%, 9.89%, 1.67%, 1.66%, 0.21%, and 0.99% of the total investment capital at 5.7, 2.9, 4.9, 3.9, 4.6, and 2.1 billion US dollars, respectively (Suon. N.d). The above growth is believed to be due to various effective laws and policies created in 1994 and amended in 2003 (UNCTAD 2017). The investment law was passed in 1994 soon after Cambodia had its very first election after Khmer Rouge coup.

Cambodia has created a generous policy foundation so that investors can repatriate revenue freely. Reinvestment of profits is encouraged with exceptional depreciation incentives (the RGC 2003). In the process of reforming the economic environment, the Council for Development of Cambodia (CDC) was designed to be a one-stop service where investors could get all necessary investment information, apply for their investment projects, and for visa and work permits for foreign workers as well as handle customs duties, and tax exemptions work, and company registration (CDC. n.d). In the past, investors had to obtain investment information, file investment application, and wait for approval from the CDC. They then had to visit the General Department of Customs and Excise (GDCE) to obtain tax exemptions on imports of machinery and equipment, visit the General Department of Taxation (GDT) for tax holiday approvals, and visit the Ministry of Commerce (MOC) for their company registration. Additionally, Cambodia is one of the most liberal investment countries among ASEAN developing countries as foreign investors are allowed to own 100% of their businesses. In addition, Cambodia has a wide range of investment fields, although foreign investors are not allowed to invest in some industries[2]. Investors are eligible for generous offer of nine years of tax holiday and an import tax exemption on machinery if their investments projects are export-oriented or approved as a qualified Investment Project (QIP).

Although remarkable reforms have been made, some international spectators are skeptical about these efforts. However, Cambodia is still attracting significant considerations from international audiences. Giants outfit chains such as NIKE, Levis, and the GAP of the US, ZARA of Spain, and H&M of Sweden have sent their orders to sub-contractors in the Kingdom of Cambodia. Multinational Corporations (MNC) such as Coca-Cola first began its operations here in 1993. Later, it decided to expand its 12-hectare land to build new plants in the Phnom Penh Special Economic Zone (PPSEZ) which also houses other well-known companies such as American Licorice, Tiffany & Co., and the Japanese pioneer ball bearing producer Minebea (Prak 2016, U.S. Department of States 2015 & profile 2014). Over the last decade, Cambodia has captured investment from many countries from America,

2 Refer to Appendix 2: Investment Activities Prohibited by the Relevant Law and Sub-Decree

European Union, Europe, and Asia. Most foreign investors are from Australia, Brunei, China, France, Japan, Republic of Korea (ROK), Malaysia, Seychelles, Singapore, Thailand, United Kingdom, United States, and Vietnam.

However, Cambodia did not manage to attract large investment capital from some of the leading economies in Asia such as Korea and Japan. Investments from these two particular countries are less than those from a few emerging economies such as Malaysia, Thailand, and Vietnam. Share of capital investment from Korea and Japan to Cambodia fluctuated over the past few years (Suon n.d.).

These existing investments mentioned above are sending signals that: 1) Cambodia has extensive opportunities 2) its economy welcomes all investors from around the globe and 3) that this country is positively transitioning. Cambodia's success in attracting foreign direct investments is mainly due to continuous amendment of investment policies in order to remain friendly to foreign investors.

Cambodia's investment policies have been designed and revised to fit global trends. Therefore, the contribution of investment policies to FDI growth in Cambodia is an interesting topic to study. The influx of FDI can be elucidated through the Gravity Model to explain how certain variables such as distance, the amount of ODA, and the size and health of the economy can affect the inflow of investment capital to Cambodia. It is extremely useful for policy makers to know what policies can attract more FDI regardless of the distance from origin countries and host country, the health of trade activities, or the economic size of economy of country. At the same time, such knowledge can protect domestic investors, labors, the environment, and the social order. Otherwise, set policies favoring FDI might bring disadvantages to local investors and resources.

Since several studies have reported on foreign investment policies as they developed over time in Cambodia, this study will only discuss four important policies: foreign ownership, tax incentive, the Single Window Service (an administrative reform of investment institutions), and capacity building for skilled-labor. This study will determine the effect of policies established or revised during 2000-2015 under four major development strategies, including the Socioeconomic Development Plan (SEDP) 2001-2005, the National Strategy Development Plan (NSDP) 2006-2010, NSDP 2009-2013, and NSDP 2014-2018.

This research shows that geographical distance significantly influences the decision making of investors concerning invest in Cambodia. Although there are ten countries in ASEAN territory, only countries with fast economic growth and share a border with Cambodia investment more in Cambodia. Thus, the size of an economy matters since richer countries and countries with large export capacity tend to practice outward investment more. Over the period of 2000 to 2015, the growth of garment factories in terms of physical number and investment capital inflow to garment sector was proved to be stable and moving upward. Such healthy growth is partly due to support from National Strategy Development Plan with specific reforms and incentive policies. Investment policies played a vital role in triggering female workers to work for garment factory in export-oriented industry. Different forms of harassment to female garment workers still exist. They have to be eliminated both inside and outside a work setting. Policies to empower female workers are in place along with availability of immediate support. Thus, the number of female garment workers is continuously increasing despite discriminations and other issues may still exist.

The motivations of using the Gravity Model lies on a few reasons. Frist, after its origin development Tinbergen (1960), the Gravity Model has been applied in thousands of published article and journals. Second, the Gravity Model has been used in many studies that employed panel data and yield the same results. Third, this model is very popular in international trade which matches to one of the explanatory variable in this study, the export. The discussion of these motivations are explained further in applications part in Chapter IV.

The remainder of this research is organized in chronological order as follows: Section II provides a literature review for the effects of investment policies on FDI influx in Cambodia from 2000 to 2015 along with some specific investment policies. Section III gives a brief country background on recent economic trend and the investment environment of Cambodia. Section IV covers model, data and the methodology that explain and present the regression results of the gravity model. Section V shows the effect of investment policies on the garment sector and the participation of female workers. Section VI provides the conclusion and limitation of this study and wraps up this research.

II. Literature Review

FDI is not a totally new phenomenon. FDI was along key components of international trade, though it was disturbed by World War I and World War II. The spread of FDI was accelerated by globalization and it often flows from capital-rich countries to capital-scarce countries (Sethi et al. 2003). FDI is seen to have crucial role in boosting economic growth, especially in developing countries. This is why policy-makers in many developing counties strive to elaborate the importance of investment to the government and seek a common ground when creating FDI-friendly-policies. Government of developing countries enter the competition to attract FDI since it will help their economies transform from developing economies to transition economies and ideally further.

Along with FDI policies endorsement, filter what would be the elements that determine inflow of FDI inflow saves developing countries a lot of time and resources. Gravity model is often used by economists and policy-maker to study the effect of international trade and find out relationship of a bunch of variables that they think might positively or negatively affect international trade between one country to their potential partners or the rest of the world.

A. Empirical Review of Gravity Model

The Gravity Model was often used in the past few decades due to the following three reasons. First, the gravity model is applicable to translation relationship with economic sphere. Second, it supports various types of data used. Third, many studies have confirmed that the Gravity Model can be effectively used to explain trade agreement variable (Baier and Bergstrand 2007).

The Gravity Model can explain regional trade blocs among countries in sub-region of Asia (Frankel, Stein, and Wei, 1997). After determining the distance between capital cities of two countries and adding dummy variables such as shared border and languages to sample region, it has been shown that countries trade more when they have common language and when they are geographically close to each other (Frankel, Stein, and Wei 1997).

In study by Reinert (2009), GDP and distance are standard variables in the Gravity Model. Elasticities of product of GDP and distance were found to move closer to 1.0 in which distance served as a proxy for economic integration among countries. Distance can also explain border effect of economic geographically. Reinet concludes that the Gravity Model is an efficient tool that can guide us through complications of trade activity and economic flows.

Based on results of Linnemann (1961), Mello-Sampayo (2007) has studied determinants that affect the decision of US MNEs to select a country as an extension of the parent company in another country. Based on the results of the regression used in the Gravity Model, Berthelon and Freund (2008) and Brun et al (2005) have added the effect of distance based on transportation cost. Guttmann and Richards (2006) have performed similar studies using distance as a variable to explain the lower trade activity of Australia compared to other countries in OECD community. Cross-country sectional was used in their study. Their results suggested that Australia trade was generally less compared to the rest of the world due to it isolated geographical situation on an island. In the current study, both cross-country and cross-time variables were used. Therefore, the current study has more accurate results in terms of time change.

Portes and Rey (2005) and Bergstrand (1989) have determined that the distance between financial centers and capital cities matters and revealed similar results. Consequently, geographic distance in this research denotes the maneuverable distance between Phnom Penh, the capital of Cambodia, and cities of foreign investor partners. Distance functions as a proxy for promising infrastructure and transportation. It is also associated with operational costs such as assigning personnel in a host country, costs of resident tax laws and regulations, language and cultural differences, interaction costs, and the costs of being separated from domestic linkages (Limao and Venable, 2001; Brenton, 1999). Supported by data obtained from CIB, China, the largest investor, is closer to Cambodia compared to the second, the third, and other major investors except neighboring countries such as Thailand and Vietnam among major investing partners (refer to Table 4.2). The statically significant relationship between distance and FDI in this study might be due to cost of transposition and cost of sending personnel to work abroad.

In the last few decades, the Gravity Model has been often used to estimate the determinants of FDI inflow to a host country. As suggested by Dunning (1958), the level of economic development and the distance to market are prominent factors that determine FDI. Yeaple (2001) (as cited in Haufler and Wooton (1999)) have accepted that the size of market plays an important role in determining the next investment destination. Broadman and Recanatini (2005) have conducted a study on various regions, including Central Federal District, North-Western Federal District, Southern Federal District, Volga Federal District, Ural Federal District, Siberian Federal District, and Far Eastern Federal District to capture FDI at deferent levels despite their market size. They found that the central area where Moscow was located, captured the most FDI due to its busy trading activities and market size. A study on the determinants of FDI in European regions (specifically from West Europe to Central and Eastern Europe) using bilateral trade flows has revealed that the vital elements which attract FDI are availability of labor in the market, market size, and the distance between the home and host country (Bevan and Estrin 2004).

The Gravity Model has been used to forecast changes in information and produces between distinctive places related to space between them (Erlander 1980; Rosenberg 2004). This model has also been used in social science to study human behavior and their rational decision based on information they gathered (Cheng 2002). In addition, it has been used in series of goods, trades, and services moving across regional and national borders (Pelletiere and Reinert, 2004, Deardorff 1995 and Anderson, 1979). Other studies on FDI have emphasized that there is a possible correlation between volume of inflow investment and the market size (Anderson, 1979; Dunning, 1980; Kim, 2000 and Buch et al., 2003). Based on the study of Baldwin (1994), there are four elements that determine the behavior of investors when they invest in another country: the size of the economy, the distance between origin country and host country, and the growth of domestic product.

The ODA variable has a positive coefficient with FDI; however, the association was not statistically significant. Therefore, donor and recipient relationship had no strong effect on investment inflow to Cambodia. Harms and Lutz (2006) have studied the relationship between aid and FDI by examining data of aid given to recipient countries and FDI from donor to recipient countries. Their results suggest that aid normally has a positive but insignificant coefficient with FDI. Furthermore, it had a positive and significant effect on recipient countries that accepted the conditionality of aid. Therefore, Harms and Lutz (2006) have indicated that, although the effect of aid on FDI is insignificant, it contributes significantly to infrastructure which is a factor that attracts FDI. In this sense, they have shown how aid has an indirect effect on FDI inflow to recipient countries.

Hidemi (2007) has studied the effects of foreign aid on foreign direct investment by exploiting difference effect of foreign aid and FDI. The author paired donors and recipient countries to determine whether aid from one donor attracted FDI from countries other than donors. Therefore, foreign aid was categorized by aid for infrastructure-purpose and aid for non-infrastructure-purpose which was more precise than the method of the current study. Hidemi (2007) has found the following three effects of foreign aid: (1) infrastructure effects that indirectly affect FDI, (2) rent-seeking effects, and (3) vanguard effect that can be applied to foreign aid from Japan. However, foreign aid does not generally affect FDI from other country but Japan since the business environment in recipient countries is carried out by Japanese investors. To some extent, this finding supports the results of this study, although the data used in the two studies are different. Through dataset collected in the present study, it was found that there were cases that foreign aid could positively affect FDI from donor countries.

Hajderllari et al. (2001) have studied the determinants of Danish agri-food's FDI outflow to other countries and found that Danish people tend to invest more in countries that export more agri-food. Danish has huge potential in agri-food expanded their productivity by investing more to countries having a high trend export agri-food.

Chen et al. (2005) have examined the structure of US trade in three aspects (trade of semi-final products, manufacturing of goods and services, and multinational affiliate sales ratio to exports). They concluded that the US significantly export to its multinational affiliate countries. The US exports to those countries increased from 15.6% in 1977 to 22% in 1999. The authors have used this evidence to generalize that trade is fueled by the US's outward FDI and that trade complements FDI.

US Bureau of Economic Analysis (BEA) (1995) (as cited in Türkcan (2007)) studied US trade, including both domestic trade and its extension associated with trade outside the US. The study found that 62% of export and 39% of import were created by US trade, simply implying that US had trade surplus, thus earning more.

B. OECD Investment Policies Review

Investment is a crucial element that contributes to economic growth. It generates numerous aspects to host country such as skills transferred, technology transfer, knowledge, increase competitiveness, promote export, financial capital, and employment. However, it is subject to how to effectively attract FDI? The answer lies on many components but one of which is investment policy. Each country has their own investment policies that aligns with country's development plans, comparative advantages, resources that they have in place, geographical condition or current economic situation. However, it is a trend that investment flows from capital rich economies to other parts of the world. By far, domestic investors in developing and transition economies remain the major investors; nonetheless, the movement of technology and expertise are questionable. Thus, it is important to learn about investment polices from the perspective of the OECD countries who are groups of potential investors that will bring what developing and transition economies lack of.

Being one of the most active institutions involves in economic activities, the Organization for Economic Cooperation and Development (OECD) work has a clear mission to "promote policies that will improve the economic and social well-being of people around the world" (OCED 2017).

The OECD has created a guideline known as Policy Framework for Investment (PFI) which allows host countries to promote their investment environment. The OECD believes that PFI is the most far-reaching method uses to promote investment activities. Base on this guideline, the OECD, over the times, create the investment policy review targeting to assist host country to "mobilize private investment that supports steady economic growth and sustainable development, and thus contribute to the prosperity of countries and their citizens and the fight against poverty"[3] The OECD has produced policy review for many countries, regardless the North or the South, in accordance with their current situation and needs. The investment policy review that the OECD produced for the Middle East and North Africa (MENA) after seeing MENA region was able to attract only 6% of the total FDI that flows to developing economies in 2013.

The OECD also produced investment policies review for countries in the ASEAN such as Vietnam (2009 and forthcoming 2017), Indonesia (2010), Malaysia (2013), Myanmar (2014), the Philippines (2016), Lao PDR (2017) and Cambodia (forthcoming 2017). The reviews investigate

[3] PFI Preamble, OECD

investment environment, significant improvement in regard to appropriate polices, economic health and involvement of host country government. After this process, the OECD offers recommendations to the parts that need more improvement.

1. FDI Policies of Vietnam[4]

The most recent that the OECD has produced for Vietnam was in 2009 which the OECD focus on early law on investment and its new endorsed investment law that Viet Nam put into practice in 2006. In the same year this country passed the Intellectual Property Rights and Law on Enterprise. The investment law withdrew decision making from some relevant ministries and local authority that made them has no involvement in investment activities. The power then handed over to the government to guarantee uniformity and consistency of investment law implementation.

Viet Nam had to follow some agreements stated in WTO's rule such the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), The Agreement on Trade-Related Investment Measures (TRIMs), The General Agreement on Trade in Services (GATS), Agreement on Subsidies and Countervailing Measures (SCM Agreement), the Information Technology Agreement in order to incorporate with new policies.

Before the above reform, Vietnam applied four different sets of polices from the period of Doi Moi (1986) in its investment context. The Doi Moi Vietnam from a central-planned economy to a market economy. Hoang et. al (2011) shows that one among the main elements was to take serious consideration of positive impacts that FDI would bring and targeted the openness to inflow of capital, good economic cooperation at global level and serious liberalizing of trade. During this transitioning time Vietnam investment became more liberalize that allow its trade and investment polices to focus more on private sector development.

In 1988 Vietnam has endorsed the Law of Land and the Law of Foreign Direct Investment followed by the Law on Private Enterprise that was passed in 1990. The newly passed law in 1999 was

[4] Vietnam is selected in this study because Vietnam share border with Cambodia and was the first country in the ASEAN that the OCED published review of investment policies.

the Law on Enterprise. These abrupt changes of law and policies have made many changes in Vietnam's investment activities.

From the Doi Moi period foreign investors were not treated the same way as domestic ones although Vietnam has undergone many changes. In preparation to join the WTO Vietnam again had to fulfill all criteria set by this organization, thus in mid 2000s Vietnam began to oversee foreign investor's discrimination issue. Even after adopted new investment polices Vietnam still limited foreign investors to invest in service industries until it gained full membership from the WTO in 2007 when it started to loosen up many restricted investment fields.

Prior to the time Vietnam became a member of WTO, foreign investors were covered by Law on Foreign Direct Investment while local investors practice Law on Domestic Investment Facilitation. Many contradictions happened these two sets of law which lead to lack of transparency that discourage investors. Until 2005 when Vietnamese government decided to merge laws and regulations that govern domestic and foreign investor into one set of policies targeting to have strong coherence policies (OECD 2009). Although the new Law on Investment was in place, Vietnam has not fully implemented it as of date that OECD conducted investment policies review. At one point the review shows that there was a long list of investment field restrictions that all investors were not allowed enter. There were four fields that prohibited from doing business for both foreign and domestic investors.[5] Beside those four fields the more specific sectors were prohibited from investing.[6] There were other fourteen restriction fields[7] that only applied to foreign investors unless they meet criteria such as "Ownership specification, company registration/establishment and their project exposer". These restrictions seem to limit foreign investor from entering those field than the domestic investors themselves.

Stated in those forbidden lists many prohibited field is rather broad the government can have a loose interpretation which in other word the government can manipulate investment policies although they have been passed. Base on the OECD review and sets of rule and regulations of WTO that Vietnam

[5] Appendix 3
[6] Appendix 4
[7] Appendix 5

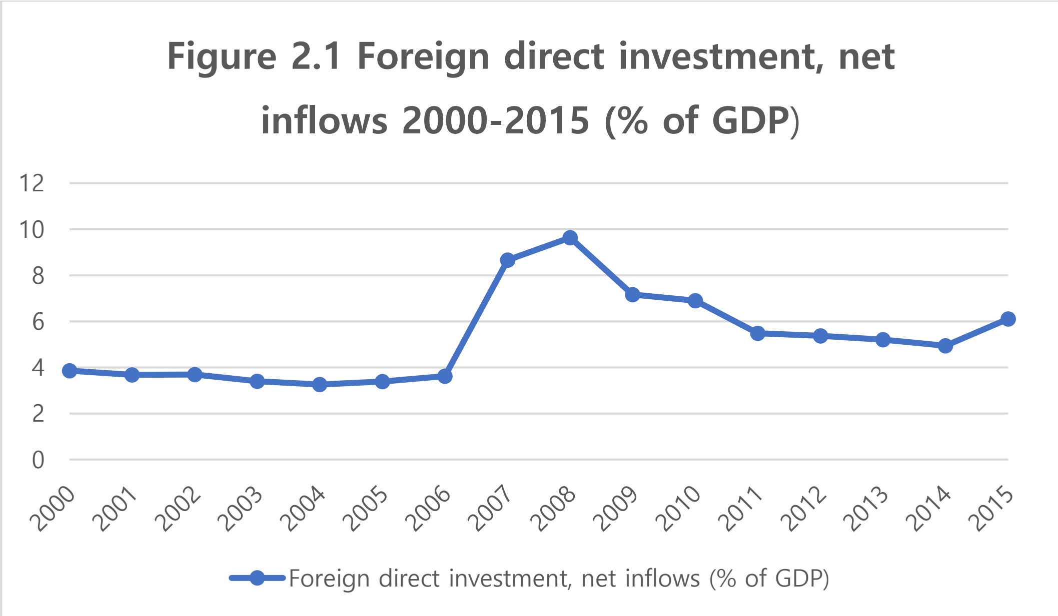
has to follow the restriction on field of investment are estimated to loosen up by 2013. However, some discriminations toward foreign investors would still exist since the local authority or government still have full coverage on their provincial law which to some extends can impact foreign investors. Addition, the government does not give a clear definition of “Conditions” that foreign investors have to fulfill then again the “Conditions” could mean anything that refrain foreign investors from investing in certain fields.

The OECD review went further that Vietnam government restrict both domestic and foreign investors from touching an important service sector such as education and training development which can be viewed as limiting knowledge and skill transfer, finance and banking and entertainment.

In term of foreign ownership, the Investment Law stipulated that at most foreign investors can own as much as 49% of total share. Foreign investors have a grow room when they invest in joint-venture with private and domestic companies.

After taking suggestion from the OECD, Vietnam has also shortened it assessment big size investment project. After the government finishing investment project assessment, registration certificate is issued by ministry in charge and/or relevant ministries if necessary. This seem to be time consuming since more registration is required at early stage of processing document. The government has decentralized its power to local government to deal with licensing issue yet limit training on handling process of assessing and issuing license have been offer to official in charge.

The same review by the OECD show that there are many different rule and regulations that cover many type of investment projects (Size, ownership status, and investment incentive) that purely apply on foreign investors only. In 2007 the Prime Minister took serious consideration in implementing the Enterprise Law and the Investment Law by forming the Task Force which aiming to assist relevant ministries and local government to effectively implement these two laws. With all the power they have in investment section, local government and relevant ministries are expected to responsible for refining investment process. They can contribute the experiences they face during the implementation; therefore, they are the hand-on implementers that encounter the obstacle and will be the ones that familiar with the solution. Thus they are expected to propose to have policies adjustment.



Source: World Bank Data 2017

Figure 2.1 above shows FDI inflows to Vietnam has responded greatly to new reform of investment policies, especially after revision of the Investment Law in 2006. FDI inflows increased from 3.616% in 2006 to 8.655% in 2007 then continue to hit its peak at 9.633% in 2007 before experiencing around 2% decrease in 2008. The large increase between 2006 and 2007 can reflect the positive react to newly endorsed laws. The decline in 2008 resulted from shock wave of the Global Economic Crisis. From 2011 Vietnam experienced slightly fluctuated rise and fall FDI inflows pattern.

Reflecting from the above pattern, it would be in best interest of Vietnam to scale down any restriction that have been imposed to foreign investors in the pass.

2. FDI Policies of Cambodia

Cambodia is expecting to have the very first Investment Policy Review conducted by the OECD sometime in 2017 (OECD 2017). Therefore, the section will discuss on investment policies of Cambodia which solely draws from RGC's perspective.

The RGC has passed the Law on Investment in 1994 where the Council for the Development of Cambodia responsible for the development and overnight investment activities. The law went further that within 45 days after investment project submitted, the CDC has to respond to the investors whether their project is approved or rejected. The 45 days responding period seem to be long and not friendly; however, as the first step of recovery process when Cambodia still have very limited resource the above period has been a fairly good starting point. In the investment guarantee section, all investors, regardless of foreign or domestic are treated in non-discrimination manner, except for land ownership that foreign investors cannot own unless they have joint venture investment with domestic investors that have 51%. Although foreign investors were not entitled to land ownership, yet the Law on Investment allowed them to have a long-lease land contract which as long as 70 years with renewable on request. Once again the non-discrimination keeps on practicing in the incentive section where all investor entitles the same incentive; however, the discrimination falls on sector-wide where only certain field of investment[8] that all investor can get incentive for the government. Understanding that Cambodia still have limit labor capacity to contribute to labor market, the same law paved the way for foreign workers to work in the field that local labor market would not able to fulfill.

The Law on Investment has been amended in 2003. This amended law governs the Qualified Investment Project (QIP)[9]. After three days of receiving investment project proposal, the CDC shall issue the Conditional Registration Certification (if the investment project pass first screening) or the Letter of Non-Compliance (if the investment project fail to meet criteria that QIP should has) to investors. Within 28 working days period the CDC shall issue the Final Registration Certificate following the Conditional Registration Certificate.

From 1995 to 2010 the RGC has passed 18 Sub-Decree and Letter[10] that govern the establishment of Special Economic Zones (SEZ) that believed to create friendly and convenience environment to

8 Appendix 6
9 QIP is refers to the investment project that receive the final registration
10 Appendix 7

investors since there is a smaller version of the Single Window Service located inside all active SEZs.

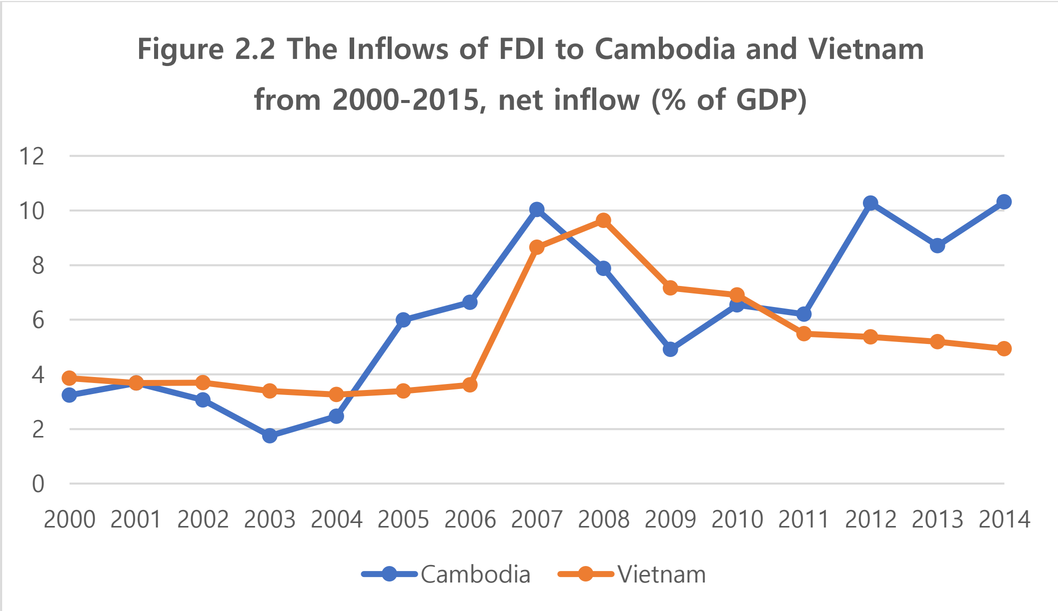
After becoming the member of ASEAN and the ASEAN Free Trade Area in 1999, Cambodia has been accepted at a member of WTO in 2003. This new status has made Cambodia further liberalize its trade and foreign ownership (Chhair and Ung n.d). The Law on Investment clearly was designed to give more room for foreign investors to do business in Cambodia since there are many generous offers such as no limit to foreign ownership except the land ownership, the attractive tax incentive, the administrative reform to push investment project approval, and open to foreign labor.

3. Comparison of Cambodia's and Vietnam's FDI Policies

According the brief study on investment law and policies of Cambodia and Vietnam, Cambodia seems to be a lead player in term of Law on Investment since many friendly offers have been made.

Law on Investment	**Cambodia**	**Vietnam**
Market	Changed to market economy since 1994	Changed from planned to market economy after joining WTO in 2007
Restriction on Investment Field	- Restrict a few investment field that believe to harm social, citizens and environment. - Restrict on field that again WTO's Law and Regulations.	- Restrict on many investment fields - Restricted field under conduction has unclear meaning
Authorization	Decentralization: Approval power is hand over to local government: Aim to speed up approval on investment project	Withdrew power from local government and ministries: Aim to have uniform of investment approval

The Law on investment is too generous that may harm local enterprises which have limit capacity to compete with foreign investors that own more advance technology. Vietnam has more close approach to FDI which seems to protect its state-owned enterprises as well as its local investor. However, by the time Vietnam started to liberalize its economy and trade, the inflows of FDI to Vietnam increased remarkably. Figure 2.2 below shows the inflows FDI trend to both Cambodia and Vietnam that effected by the investment law and policies.



Source: World Bank Data 2017

There is a decline trend FDI to Cambodia from 2001 to 2003 while FDI to Vietnam was doing pretty good. This period has nothing to do with Cambodia's investment law but it due to the global decline trend in those years; therefore, the major investors to Cambodia such as France, Japan, Korea, and the UK's outward FDI kept on declining and rose up at a small pace.

Table 2.1 FDI flows from OECD countries: 2000-2003 (US$ Billion)

Country	2001	2002p	2003e
Canada	36.1	26.4	21.6
Denmark	13.4	5.7	1.2
Finland	8.4	7.6	-7.4
France	86.8	49.5	57.3
Germany	36.9	8.6	2.6

Greece	0.6	0.7	.00
Italy	21.5	17.1	9.1
Japan	38.4	32.3	28.8
Korea	2.4	2.6	3.4
New Zealand	0.9	-1.0	-0.1
United Kingdom	58.9	35.2	55.3

Source: Hans and Bertrand 2004

Table 2.1 shows outflows FDI trend of some OECD countries that continues to drop and goes up slowly. The inactive macroeconomics of many OECD countries was the answer to this decline. It did effect only the economic in those rejoin but also have major impact on inflows of FDI to host countries (Hans and Bernard 2004).

The variety of FDI strategy reflects the level of state intervention policies. Hence, it is important for a host country to address market failures. Information is insufficient on investment process and different fields of investment that investors are interested vs. the desire of the local economy (ex: host country may want investor to invest in labor intensive industry but investor opts for tourism). Gathering clear investment information is a positive step toward successful investment. However, the lack of sufficient information or high degree of uncertainty will discourage business growth and lead to investment failure (Moran 1998). Generally, having insufficient investment information refrains foreign investors from entering the country. To accelerate the investment process, the government might want to look at levels of their interventions such as having sufficient agents to deliver investment environment or providing up-to-date information on investment incentives.

Attracting FDI cannot be used as the only indicator for the success of one policy. It has to be complemented with existing resources and the development stage of a country. Otherwise, such policy might harm the economy and become the worst-practice policy. A passive open-door policy with limited intervention tends to welcome ideas of multinational firms to the country without protecting local business under the assumption that the market mechanism can function on its own. This approach is more suitable for a developed country with strong economy where local businesses are mature enough to compete. Such country might be resistant to external shock. Beside choosing best-practice policies, a county has to look at its potential to attract certain kinds of FDI. For instance, a strong development state of a country might be able to maximize profit from export-led FDI.

Kumar (2003) has examined investment-related framework from developing economies point of view in consideration of FDI’s roles in development. He suggested that developing economies to studies pros and cons of framework that developed economies want to get involve.

C. Policy on Garment Industry

To find out what are the best-practice policies that can grab attention of the government (government in different regime have different development priorities. It is up to policy makers to find the way to deal with difference governments), a cluster of existing investment policy should be brought into discussion. Government’s intervention in economy operation was widely allowed before the World Trade Organization was created. The government was able to provide subsidies to local entrepreneurs so that they could compete with foreign entrepreneurs entering the same business sector to ensure that domestic business group could survive the harsh environment after foreign firm enters the country’s economy.

The Garment sector has been a high-potential sector since 2000 after the boom of young and cheap labor, the friendly quota from the EU, US and Canada market. Chinese-owned firms often seem to be the lead investor in this field with an investment capital worth starting around US$ 28 million in 2000 and before soaring to US$ 4,358 million in 2008 before its fluctuation and drop to US$ 240 million in 2015.

III. Country Background

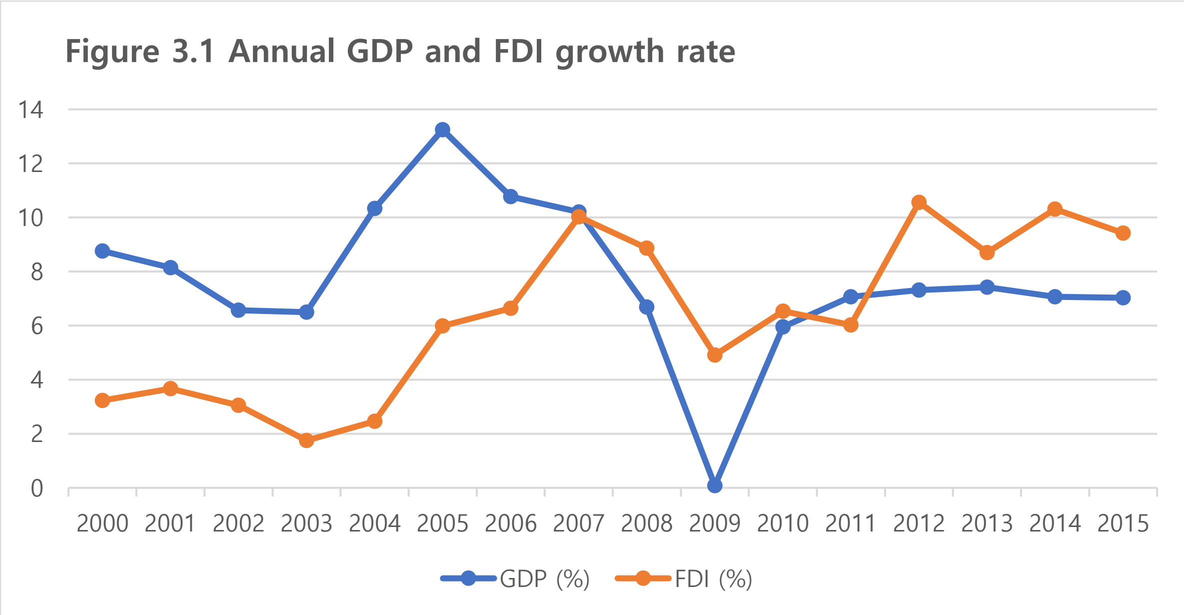
This chapter provides a brief country background of Cambodia and its economic overview; the general patterns of foreign direct investment inflow; the phases of foreign direct investment policy and the impact of investment policy on foreign direct investment inflow to this country as well as in contribution to female garment workers.

A. Economic Overview of Cambodia

The bridging period from 1975 and 1989 made up two remarkable regimes both of which The period spanning 1975 and 1989 consisted of two rival regimes both of which tailed after Marxism where economy was planned by central government. followed a Marxist ideology. Slocomb (2010) defined Cambodia in those stages as a country with revolutionary economy, where economy shifted to liberalization.

Cambodia is in an ongoing process to integrate into the global economy framework which translated to high growth rates for the past decade. While the public finance was in stable condition, the government put more emphasis on foreign direct investment promotion centering on the expands and the improvement of the capacity of small and medium enterprises since they are also the backbone of Cambodia economy.

Ever since Cambodia transformed its economy strategy from a planned-economy to a free market-economy after the first election in 1993, the Cambodia Gross National Product grew at an average rate of 6.1%, reaching from 2.2 to 3.1 billion US dollars in from 1993 to 1996. Unfortunately, the steady growth was interrupted by two remarkable events in 1997: (1) the military coup that occurred in the middle of the capital city where crowds of local and foreign business were operating, causing vast destruction to both capital investments and physical assets such as factories, houses, and other infrastructures; and (2) the Asian financial crisis that struck the vulnerable economy of this start-up country (Chheang 2008). Figure 3.1 shows the real GDP of Cambodia increased 8.76 % in 2000 after having severely hit by the Asian Financial Crisis in 1997 then rose to its climax of 13.25 % in 2005 before experienced a decreasing pattern leading to 0.087 % in 2008 when the global financial crisis hit a lot of countries around the globe (World Bank 2017). The fast recovery in Cambodia owed tremendous thanks to textile industry which continuously flourished over the years. The growth rate in 2010 was 7.07 % with inflation rate 3.12 %, less than 1 % increased from 2009 (World Bank 2017). The rapid growth resulted from the contributions of the new Triangle Strategy and Rectangular strategy that encourage, put more emphasis and solid development plan on private sectors including foreign direct investment policy. Over the past ten years, the volume of FDI flow into Cambodia enlarged rapidly.



Source: World Bank Data 2017

There was a massive increase in FDI from 2005 to 2006 from US$ 614.30 million to US$ 2.3 billion respectively. Another enormous increase from US$ 1.3 billion to US$ 6.9 billion from 2007 to 2008 occurred before sharply decrease in 2009 and 2010. On average from 2004 to 2008, Cambodia's economic growth was 10.3% (Hang, 2009). In 2011, the annual GDP growth in Cambodia was 7.07%. It continued to grow at a slow pace until 2013. It was decreased slightly in 2014 and the following year (The World Bank 2016). This positive performance placed Cambodia in the 7th rank of Countries with fast economic growth and has a bigger export per capita compare to other countries at the same level of economic development (World Bank 2009).

Being a member of these two institutions has pushed Cambodia to liberalize its trade both physical and services and foreign firms' ownership. Foreign direct investment then has taken important role in producing advance goods and to exploit chances in doing trade with advanced economy countries. Influx of FDI into Cambodia in 2000 was only approximately to US$ 160 millions then increased to around US$ 2,299 million in the course of ten years' time (CDC 2017).

B. Foreign Direct Investment in Cambodia

After post 1993 election Cambodia dismissed unsystematic economy, and started to open its economy which resulted in establishing a Council for the Development of Cambodia in 1994, an institution what function to promote FDI (CDC n.d). From 2000 Cambodia industry depended greatly on the inflows of FDI on garment sector from the China, Taiwan and Hong Kong in textile industry steadily every year for the period a decade and half and created 24,593 jobs. The promising job produced by garment industry increased by four-folds in 2015 where somewhat of 80,522 jobs placed on labor market; however, this number only extracted from formal document where factories registered or reported their workers to Ministry of Labor and Vocational Training and proved project at Council for the Development of Cambodia (CDC 2007, Ministry of Labor and Vocational Training. n.d). The sequence of FDI has changed interestingly since when China saw lavish opportunity that Cambodia can export its textile products to the EU and US under tax exempted scheme. After becoming a member of ASEAN, Cambodia's FDI is shown to be more diversified since beside ten countries ASEAN members, this association made trade deal with other countries in the region such as China, Japan and Korea (so called ASEAN+3) as well as international partner such as including ASEAN, Australia, Canada, European Union, New Zealand and the US.

Table 3.1. Inflow Investment Capital in Cambodia 2000-2015 (US$ Million)

Year	Investment	Domestic Investment	Foreign Investment
2000	218.04	57.87	160.17
2001	204.68	65.13	139.55
2002	237.66	93.06	144.59
2003	251.23	185.41	65.82
2004	229.18	75.80	153.38
2005	960.21	345.91	614.30
2006	4,434.19	2,078.05	2,356.14

2007	2,655.87	1,322.68	1,333.18
2008	10,888.97	3,932.48	6,956.49
2009	5,859.43	3,753.43	2,106.00
2010	2,690.76	391.16	2,299.61
2011	7,012.36	1,930.12	5,082.23
2012	2,271.62	902.31	1,369.31
2013	4,482.95	3,267.44	1,215.51
2014	1,8877.30	582.83	1,294.47
2015	3,920.03	3,135.48	784.55
Total	48,194.48	22,119.16	26,075.32

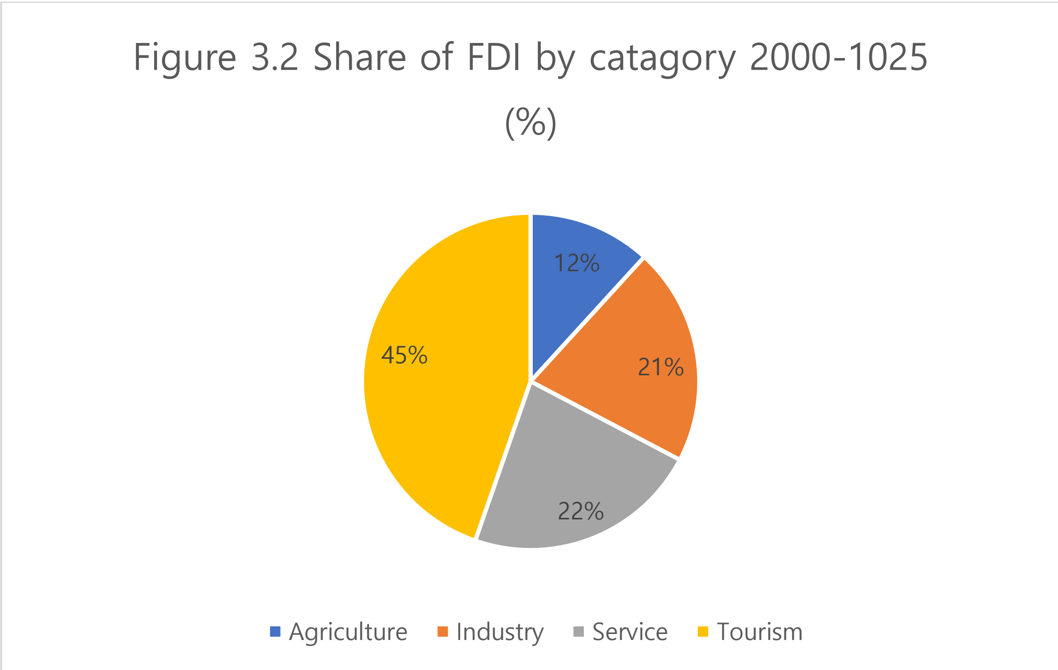
Source: Cambodia Investment Board (CIB), 2017

Table 3.1 shows the record of FDI flow to Cambodia from 2000 to 2015. Annual flow of FDI to Cambodia began to surpass US$614 in 2005 and keep soaring to US$ 2,356 million in 2006 and to the peak of US$ 6,956 million in 2008. However, respecting the growth pattern, FDI drop to around US$ 2 billion in the following 2 years then jumped to around US$ 5 billion in 2011 before declining to US$ 784.55 million in 2015. The effect of rapid growth was likely resulted from solid investment policy that the government implemented and liberal economy that Cambodia has been practicing from late 1990s.

Working to promote industrial development, the Cambodia Government awarded generous incentives to draw the attention of foreign direct investment as well as sought to export markets for manufactured merchandises. Tax exemption has been one of the incentives provided to industries that import semi-final product and same treatment to the export of finished products. ASEAN membership granted Cambodia benefit from the ASEAN Free Trade Area in 1999 and adjusted another achievement by becoming member of World Trade Organization (WTO) in 2003.

1. Influx of FDI Classified by Category 2000-2015

Over the period of 16 years, FDI inflow tourism sector in Cambodia which accounted for 45% of the total FDI then follows by service, industry and agriculture with share of 22 %, 21 % and 12 % respectively in Figure 3.2 (CDC 2017). The garment industry which is placed under industry sector constantly active each year for from 2000 to 2015.



Source: CIB 2017

Table 3.2 shows capital that has been invested in each category from 2000 to 2015. The largest investment sector in Cambodia, service sector mainly involves in Casino, resorts development, islands development, and hotels (CDC 2017). Thesis project required a long term investment before it can generate income and contribute to economic growth; however, this huge investment capital is not an export oriented industry that could attract more production based investor to come to Cambodia. Although position in the third place of total investment capital, garment sector plays a vital role in providing a large amount of jobs and consumed abandon labor force of 24,593 in 2000 then soared up to 80,522 jobs After 16 years' period. Other than that the nature of this industry is export based, thus it helps to balance trade activities in the country.

Table 3.2. Investment to Cambodia by Sector 2000-2015 (US$ Million)

Year	Agriculture	Industry	Service	Tourism
2000	8.37	98.68	27.23	79.82
2001	00	83.95	44	74
2002	13.46	36.52	111.31	69.90

2003	2.44	84.57	37.10	122.26
2004	12.35	124.01	26.44	65.36
2005	25.74	833.63	83.30	102.58
2006	504.81	911.75	2170.58	777.44
2007	371.12	320.68	652.71	1,294.50
2008	94.73	922.74	1,292.16	8,776.34
2009	589.92	922.74	410.25	3,901.17
2010	524.36	948.97	1,059.09	131.83
2011	724.95	521.65	658.05	2,759.98
2012	532.53	771.45	225.82	692
2013	997.91	1,394.28	29.47	106
2014	278.38	724.21	318.66	446.85
2015	460.95	434.24	2,730.07	98.63

Source: CIB, 2017

2. Influx of FDI Classified by Country 2000-2015

The economic performance that was pushed forward in uprising of FDI and exports have shifted Cambodia from agriculture oriented economy to manufacturing economy that enable this country to compete with the same level of economic growth countries within the region. Having granted a special treatment from WTO on export of garment products, Cambodia has attracted a good number of Chinese-owned firm and enterprise as well as countries that has huge potential in garments field to invest in Cambodia. Those investors come to enjoy investment policy establish by the Cambodian Government that in nature provide a lot of protection and incentive to any export-led industry.

Table 3.3 Foreign Direct Investment from ASEAN to Cambodia 2000-2015 (US$ Million)

Year	Country						
	Brunei	Malaysia	Indonesia	Philippine	Singapore	Thailand	Vietnam
2000	00	2.22	1.51	0.32	8.06	26.04	00
2001	00	50.60	00	1.02	00	14.71	00
2002	00	1.01	00	00	1.00	00	24.17
2003	00	5.13	00	00	3.71	6.87	00

2004	00	32.78	00	00	5.14	1.05	00
2005	00	7.15	00	00	23.23	66.29	00
2006	00	28.33	00	00	11.53	100.13	56.08
2007	00	241.44	00	00	2.04	107.68	139.05
2008	00	2.65	00	00	52.46	73.91	20.86
2009	00	7.06	2.89	00	272.49	178.10	210.04
2010	00	167.42	00	00	37.18	2.04	114.73
2011	00	235.32	00	00	13.76	00	630.95
2012	00	0.12	00	00	82.67	120.87	85.92
2013	4.25	5.90	0.88	00	54.55	28.05	241.53
2014	00	24.14	0.57	00	36.63	33.12	15.45
2015	4.48	62.93	00	00	26.78	22.37	89.34
Total	8.73	874.20	5.85	1.34	631.21	781.23	1,628.12

Source: CDC 2017

Within the ASEAN community, Vietnam is the largest investor with investment capital of around US$ 24 million in 2003 and increased to around 26 folds of amount in 2003 before plunge to US$ 89 million in 2015. Being geographically border to Cambodia Vietnamese investor find it is convenient to invest in neighboring country with abundant cheap labor force for their intensive labor industry. Thailand is the second largest foreign investor to Cambodia among ASEAN member countries. Out of the course of 16 year Thailand invested in Cambodia from 2000 with fixed assets of around US$ 26 million before disappearing in 2002 then came back again with lesser investment capital in 2003. The highest record of Thai investment Capital in Cambodia was in 2009 with Capital of US$ 178 million. This may result in a very fast recovery from global financial crisis in 2008. Over a decade and a half Thai-owned enterprises invested somewhat US$ 781 million as shown in Table 3.3 (CDC 2017).

Table 3.4 show investment inflow to Cambodia in another angle which exclude capital from the ASEAN. With investment capital more than US$ 10 billion from 2000 to 2015 China has seen to be the largest investor and often ranked 1st to Cambodia (CDC 2017). All big players in the region and global scale invest in Cambodia because of convenient distance that enable operation management is within reach.

Table 3.4 Top Ten FDI to Cambodia (exclude ASEAN) 2000-2015 (US$ million)

Year	Country									
	Australia	Canada	China	France	Hong Kong	Japan	Korea	Taiwan	UK	US
2000	2.02	1.21	28.41	5.21	4.86	0.22	19.37	18.85	16.72	11.53
2001	00	00	5.04	00	1.18	00	2.09	56.97	2.02	5.91
2002	00	3.18	2.36	00	3.33	2.19	78.97	6.83	0.56	00
2003	0.68	00	32.39	5.67	7.11	00	2.42	1.34	0.51	00
2004	00	3.13	78.71	3.25	0.61	2.16	4.93	16.80	1.68	2.37
2005	4.26	00	444.12	7.64	1.40	00	40.35	9.09	6.40	4.37
2006	00	5.26	703.58	00	10.76	2.10	1,009.82	51.78	3.54	62.21
2007	4.12	00	153.58	35.00	51.64	113.08	148.08	40.79	25.66	2.89
2008	3.25	16.27	4,358.80	6.24	8.89	7.83	1,237.98	25.09	6.10	733.72
2009	3.20	2.31	889.31	49.68	6.83	4.76	120.64	30.53	3.35	3.30
2010	49.73	6.64	712.44	00	29.61	00	1,026.95	102.11	10.52	7.06
2011	24.96	00	1,191.51	00	109.79	6.15	146.20	83.30	2,466.63	140.79
2012	1.04	5.90	262.69	3.18	112.34	212.33	280.75	97.23	37.00	12.49
2013	6.71	7.27	431.48	2.67	114.73	24.59	81.82	89.52	84.38	4.53
2014	17.75	00	681.62	3.60	100.95	3.44	65.11	34.25	86.77	00
2015	00	2.69	240.57	00	109.12	38.87	8.49	46.46	115.06	3.16
Total	127.74	53.85	10,236.60	122.15	673.16	417.74	4,273.95	710.93	2,866.90	994.33

Source: CIB, 2017

Being a country severely knocked out by war, Cambodia did not have much to offer foreign investors except for cheap labor and abundance of natural resources that could be exploited easily. Under the Law on Investment in Cambodia date in 1994, a wide range of investment activities such as pioneer or high technology, job creation, export-oriented, tourisms industry, agro-industry and procession industry, physical infrastructure and energy, rural development, environment protection and investment in special economic zone (SEZs) were encourage with available incentives (Royal Government of Cambodia 2013: V-1). The cooperate tax was as low as 9% for exploration and exploitation of natural recourses except gem stones (THE RGC 1994). Other than that 100% tax exemption was applicable on import material use in construction of export-oriented enterprise as well as company located in SEZ.

IV. Model, Data, and Methodology

A. Review of the Gravity Model and Applications

The Gravity Model has gained attention because it allows researchers to explore how one factor pulls in trade or investment to a country. Based on Isaac Newton's Law of Gravity, gravidity model can be used elaborate attractions of two factors applied to an investment perspective, pull powers are denoted by distance in kilometer, the size of economy measured by GDP, diplomatic affiliation, and the trade relationship which often depends on the size and regular ODA provided.

At its simplest point, the law of gravity explains the intensity between the masses of two objects.

Its basic formula:

$$F = G\frac{Mm}{r^2}$$

Where F is force between two objects, G is gravitation instance, M is mass of objects and r is distance between objects.

The Gravity Model in international trade has been used to predict force of trade activities between countries. The M, mass of objects, in basic formula is replaced by GDP. Many studies support that the empirical proof for this the Gravity Model in international Trade is strong for both distance and GDP variables. According to work of Krugman (1980), model in his study shows that trade flows are related to size of country. Date back a decade ago Disdier and Head discovers a minor rise in distance coefficient in their study on distance effect international trade. (Disdier and Head 2008). Chaney (2013) explained the roles of role of economic size and also the role of distance. His model shows that export of one firm depends on how distance affected by cost of creating contact.

The Gravity Model is particularly employed in this study because (1) Tinbergen (1962) conducted the first study using this model to explain import and export flows. The fundame ntal formula presents

$$F_{ij} = G\frac{M_i^{\beta_1} M_j^{\beta_2}}{D_{ij}^{\beta_3}}$$

Where F represents trade flows, M represent mass of economic, D is distance between countries and G acts as a constant.

Developed from above model and formula Anderson (1979) used gravity equation to ex plained theoretical result of commodities. Bergstrand (1985), went further and identified supply dimension in economies. Helpman (1987) used result from the study of the New Trade Theor y to support theoretical work of the Gravity Model. (2) The Gravity Model has been used in many studies that employed panel data; therefore, found significant results. Falk (2016) exami ned factors that impact FDI in hospitality industry by utilizing 2,420 investment projects in m ultiple host countries from 2005 to 2011. His study shows significant relation of market size and common language used. Using the Gravity Model, Dinh et. al (n.d) studied bilateral trade between Vietnam and 60 trade partner countries from 2000-2010. The results show that Vietn am has trade potential with its new markets namely Africa and Western Asia. (3) The Gravit y Model again has been used in many studies in international trade to see the relationship of export. Gopinath and Echeverria (2004) investigated the relationship between trade (export) a nd FDI. The results of study show that the demand for import and FDI that focus on produc tion has strong correlation with the economy for host and home countries as well as geograp hical distance. Wang and Badman (n.d) Investigated the performance of Peru’s export and atte mpted to find out economics factors that could be used to scale up trade value. The results s upport prediction of the Gravity Model that economic size has positive coefficient with trade while distance has negative coefficient. (4) The Gravity Model gives a lot of room for resear chers to test many different variables.

Although the Gravity Model is mostly used to predict trade movement (Feenstra et al., 2001), many other research studies have often borrowed this model to study the movement of FDI in the world economy (Mitze et al., 2008). It has been argued that the gravity model cannot only be used to explain phenomenon in international trade or bilateral trade, but also can be used to develop FDI pattern since trade and FDI share very similar features to certain extent (Brenton et al., 1999). The gravity model has been popularly used in studies on international trade since its first introduction by Tinbergen (1962) to create unify pattern of international trade by selecting 42 countries for a sample study. Tinbergen used dummy variables to characterize different treatment groups such as trade agreement and shared bored among sample countries.

B. Data Source

This study employed a comprehensive panel data covering 45 countries that had investment in Cambodia for 16 years from 2000 to 2015. These data including GDP and Per capita GDP were obtained from the world bank (data.worldbank.org). Import and export flows were extracted from The United Nation Conference in Trade and Development (UNCTAD). Data on Official Development Assistance (ODA) were obtained both from the Organization for Economic Cooperation and Development (OECD) (creditor reporting system) and Cambodia Rehabilitation Development Board (CRDB), one of three wings of the Council for Development of Cambodia. Foreign Direct Investment inflows were acquired from Cambodia Investment Board (CIB), another wing of CDC, covering the period of 16 years from 2000 to 20015. Labor participation in various industries was categorized by age, gender, geographic, and occupation. Data were extracted from the National Institute of Statistic of Cambodia (NIS) based on Cambodia Socio-Economic Survey (only available from 2004 to 2013).

One major challenge of this research was the lack of FDI investment data capturing inflow to Cambodia, leading to some missing values. Another challenge was the lack of ODA data from ASEAN countries.

This is because south-south cooperation in the region is still premature. In spite of these challenges, this study had enough comprehensive dataset to produce meaningful results.

C. Methodology

Empirical part of this study aimed to find determinants of FDI inflows to Cambodia. Based on the gravity model, this study used GDP and distance as major contributing factors. Other variables including ODA and ASEAN dummy were also included in this study.

The regression equation is as follows:

$$Ln\ invc_{ij} = \alpha + \beta_1\ ln\ distance_{ij} + \beta_2\ ln\ gdp_{ij} + \beta_3\ ln\ asean + \varepsilon ij \quad (1)$$

Where

***$invc_{ij}$*,** a dependent variable, is the investment capital inflow to Cambodia from country *i* in year *j*

distance is the distance from capital cities of sample counties to Cambodia measured in kilometer;

gdp_{ij} is domestic product of country *i* in year *j* to denote the country's economic size and gross output;

ASEAN acts as dummy variable where 1 is given to ASEAN member countries and 0 is given otherwise.

This study used random effect model as fixed effect could not analyze *distance*, one major variable in this study.

Hypotheses

The study has the following hypotheses:

(1) Distance from origin country to destination countries matters, so does their economic status. Closer and high GDP Countries tend to invest more in Cambodia. In this case, Vietnam and Thailand are among main investors since these countries border with Cambodia. Singapore and Malaysia also have major contributions to investment capital because their GDPs are high among ASEAN countries.

(2) Strong relationship between country of potential investors and host country is likely to create a positive bond. Being alliances, having strong diplomatic relationship, and having recipient and donor relationship will sparkle investment opportunity. China is a significant donor to investment capital of Cambodia because it provided ODA to Cambodia every year between 2000 to 2015.

(3) Positive trade activities (import and export) with many partners will pull more investment.

D. Results

In order to identify determinants for inflow of investment capital to Cambodia, this study used fitted variable such as distance, GDP, and ASEAN dummy followed by augmented models by adding ODA and export.

Based on equation (1), results of random effect regression for three models are provided in Table 4.1. Distance, product of GDP, and ASEAN (the dummy variable) were used in Model 1. In addition to distance, product of GDP, ASEAN, and other variables such as ODA and export were included in Model 2 and Model 3. As expected, FDI was negatively correlated with distance. This was robust in all three models. With distance increase of 1%, estimated effect of decreasing FDI turned out to be 0.8 to 2.6%. Geographical proximity appeared to be a very important factor determining FDI inflows to Cambodia. This indicates that distance matters. Decision to choose a particular destination is in regards of a cluster country to invest or pick a certain country out of that cluster. Deardorff (1998) has illustrated that distance between two countries can affect trade flow. Geographical distance from host country to other trade partner county also contributes to trade activity behavior.

Table 4.1. Result of Random Effect Regression

Explanatory Variable	Model 1 coef/se	Model 2 coef/se	Model 3 coef/se
ln_distance	-0.880**	-1.986***	-2.595***
	(0.415)	(0.356)	(0.366)

ln_gdp	0.220**	0.404**	-0.482*
	(0.101)	(0.201)	(0.288)
asean	-1.180		
	(0.898)		
ln_oda		0.077	0.127
		(0.139)	(0.131)
ln_exp			1.383***
			(0.340)
_cons	17.855***	22.375***	36.657***
	(4.141)	(5.370)	(6.145)

Note: .01-***;.05-**;.1-*.

This indicates that distance matters. Decision to choose a particular destination is in regards of a cluster country to invest or pick a certain country out of that cluster. Deardorff (1998) has illustrated that distance between two countries can affect trade flow. Geographical distance from host country to other trade partner county also contributes to trade activity behavior.

As predicted, the coefficients of GDP were mostly positive, implying that the size of economy was another key FDI determinant. GDP affected the total amount of investment capital from investment partner countries to Cambodia. Economic size affected investment capital's volume positively by 0.22% to 0.44%in Model 1 and Model 2. Model 3 showed a negative coefficient of GDP. However, this result was weakly significant.

Table 4.2 shows the top ten investors to Cambodia and their distances from their countries to Cambodia. Thailand and Vietnam being neighboring counties to Cambodia, invests as much as US$ 781.23 million and US$ 1,628.12 million respectively.

Table 4.2 Top 10 FDI to Cambodia and Distance Between Capital Cities

Country	Investment Capital 2000-2015, (US$ Million)	Distance (KM)
China	10,236.60	3,340
Korea (ROK)	4,273.95	3,658
United Kingdom	2,866.90	10,014
Vietnam	1,628.12	206
United States	994.33	12,719
Malaysia	874.20	982
Thailand	781.23	520
Taiwan	710.93	2,334
Hong Kong	673.16	1,572
Singapore	631.21	1,132

Source: - CIB and https://www.distancecalculator.net/, 2017

Ekanayake et al. (2010) (as cited in Oh and Zhong (2016)) have revealed that GDP has positive and significant influence on trade flow. GDP represents the economic health of both investing partners and Cambodia; therefore, the product of GDP of Cambodia kept growing fast over the years except for the times of global economic crisis that not only effected Cambodia but also the economy health of many other countries around the world. During the crisis this variable grew slowly despite going downward. This is proof that Cambodia's economic development is continuing upward and healthily enough to secure FDI.

ASEAN, the dummy variable used in this study, had a negative effect on the regression. This was in contrast with the hypothesis based on the Gravity Model that countries within ASEAN region were likely to invest more in Cambodia. FDI inflows from the ASEAN member Brunei, Indonesia, Malaysia, the Philippines, and Singapore are smaller compared to those of some countries (except Thailand and Vietnam) that are not ASEAN members. Thailand and Vietnams are members of ASEAN and they share borders with Cambodia.

This study added an ODA variable to find out whether donor and recipient relationship had any effect on the decision-making of foreign investors.

$$Ln\ invc_{ij} = \alpha + \beta_1 \ln distance_{ij} + \beta_2 \ln gdp_{ij} + \beta_3 \ln asean + \beta_4 \ln oda + \varepsilon ij \quad (2)$$

Where oda_{ij} is the amount of official development that country *i* provided to Cambodia in year *j*.

Table 4.3 Top FDI Countries and Their ODA

Country	FDI, 2000-2015 (US$ Million)	ODA, 2000-2015 (US$ Million)
China	10,236.60	2,540

Korea (ROK)	4,273.95	555
United Kingdom	2,866.90	283
Vietnam	1,628.12	0
United States	994.33	1,150
Malaysia	874.20	0
Thailand	781.23	0
Taiwan	710.93	0
Hong Kong	673.16	0

Source: CIB, CRDB and OECD (CRS data) 2017

Table 4.3 shows the top ten foreign countries that have the largest FDI inflow to Cambodia. However, in the study's time frame, not all countries provided huge amount of ODA to Cambodia compared to their investment capitals. Some countries did not provide ODA at all. China was the largest donor to Cambodia from 2000 to 2015. Unsurprisingly, FDI inflows from China to Cambodia was immense. On the other hand, Japan and the US were the second and third largest donors in the same period, but FDI flows from these countries were small.

Table 4.4 Top Donor Countries and Their FDI

Country	ODA, 2000-2015 (US$ Million)	FDI, 2000-2015 (US$ Million)
China	2,540	10,236.60
Japan	1,911	418
United States	1,150	994.33
Australia	697	128
Korea (ROK)	555	4,273.95
France	488	123
Germany	481	3.09
Sweden	341	3
Canada	120	54

Source: CIB, CRDB and OECD (CRS data) 2017

From difference angle, Table 4.4 shows top ten donor countries to Cambodia. Japan was the second largest country that provided ODA to Cambodia in the said period. However, FDI flow from Japan was in small scale among the top ten donors. In contrast, Korea invested almost four-folds of its ODA. These results can be interpreted as evidence that ODA from certain donor countries does not necessarily influence FDI flow from other countries. In other words, we cannot generalize that countries that provide huge amounts of ODA to Cambodia will invest more through FDI.

The present study also examine export as a variable to determine whether export capacity really influences investor behavior for choosing their next destination for expanding their businesses.

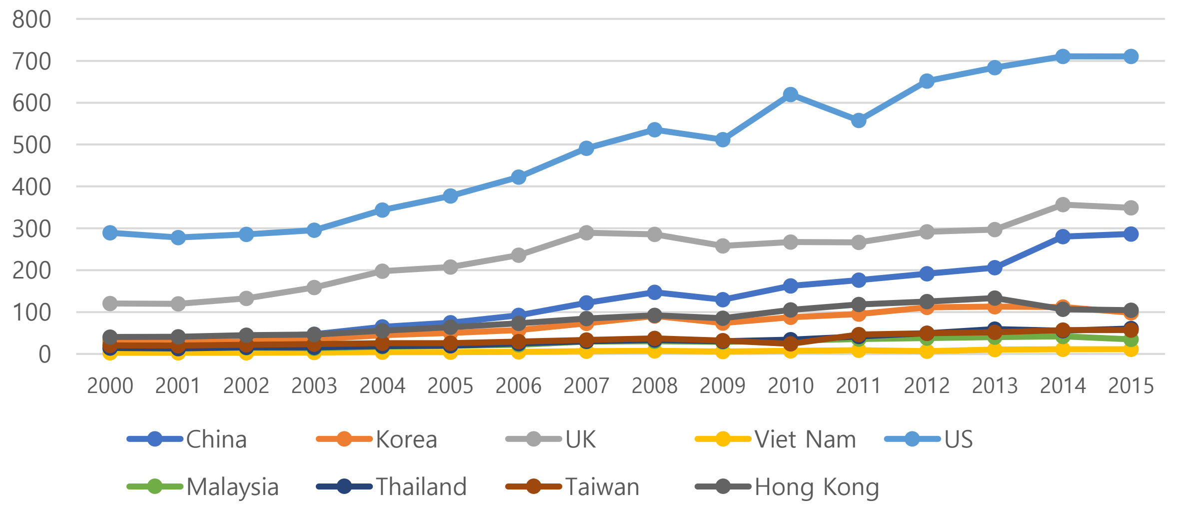
$$Ln\ invc_{ij} = \alpha + \beta_1 \ln distance_{ij} + \beta_2 \ln gdp_{ij} + \beta_3 \ln asean + \beta_4 \ln oda + \beta_5 \ln exp_{ij} + \varepsilon ij \quad (3)$$

Where Exp_{ij} refers to export of country i in year j.

Exports were found to have a positive and statistically significant coefficient in determining the inflow of investment capital to Cambodia. This result supports the hypothesis that countries with large trade volume will invest more. With an export increase of 1%, the estimated effect of increasing FDI turned out to be 2.23%. Therefore, countries with large export capacity will invest more in Cambodia.

Figure 4.1 shows export trend of the top ten countries with huge FDI inflow to Cambodia. The regression results from Model 3 (Table 4.1) showed that exports positively and significantly affected FDI inflow. However, it does not totally support the notion that a big exporter will invest more in Cambodia because this study does not extend to country-pair model where foreign investing partner countries are paired with Cambodia.

Figure 4.1 Top Ten Invstors to Cambodia and their Export Volume 2000-2015 (US$ Billion)



Source: UNCTAD database, 2017

ODA inflow and export volume to Cambodia were used as control variables in this study. The expected sign of ODA depends on whether ODA and FDI are substitutes (-) or complements (+). Export should be positively correlated with FDI. Therefore, its expected sign is positive. ASEAN is a dummy variable included in the model in order to justify hurdles of investment between countries within the ASEAN territory and the rest of the world. Its expected sign is negative.

Bibliography

Anderson, James E. 1979. "A Theoretical Foundation for the Gravity Equation." *The American Economic Review, 69*(1), 106.

Annett, Anthony. 2001. "Social Fractionalization, Political Instability, and the Size of the Government." *IMF Staff Papers, 48*(3/4), 561.

Babatunde, Shakirat Adepeju.2012. "The Impact of Tax Incentives on Foreign Direct Investment in the Oil and Gas Sector in Nigeria." *IOSR Journal of Business and Management (6)1. University Of Lagos School Of Post Graduate Studies Department Of Accounting*

Baldwin, Richard E. 1994. "*Towards an Integrated Europe*." London: Centre for Economic Policy Research

Bergstrand, Jefferey H. 1985. "The Gravity Equation in International Trade: Some Microeconomi c Foundations and Empirical Evidence." Review of Economic and Statistics 67 (3)

Bevan, Alan and Estrin Saul. 2004. "The determinants of foreign direct investment into European transition economics", *Journal of Comparative Economics*

Binh, Nguyen Nhu and Haughton Jonathan.2002. "Trade Liberalization and Foreign Direct Investment in Vietnam." *ASEAN Economic Bulletin, 19*(3), 302.

Boddewyn, J Jean. 1988. "Political Aspects of MNE Theory." *Journal of International Business Studies, 19*(3), 341.

Brenton Paul, Francesca Di Mauro, Matthias Lücke. 1999. "Economic integration and FDI: *An empirical analysis of foreign investment in the EU and in Central and Eastern Europe*. Empirica 26(2): 95-121.

Brewer, Thomas L. 1993. "Government Policies, Market Imperfections, and Foreign Direct Investment." *Journal of International Business Studies, 24*(1). P.101.

CARE. 2017. "The Prevalence and Productivity Cost of Sexual Harassment to the Cambodian Garment Industry." *"I know I cannot quit."* Phnom Penh Cambodia.

Chansey, Tomas. 2013. "The Gravity Equation in International Trade: Explanation" 1050 Massachusetts Avenue, Cambridge, MA 0213

Cheng, I-Hui and Wall Howard J .2005. "Controlling for Heterogeneity in Gravity Models of Trade and

Integration". *Federal Reserve Bank of St. Louis Review*, January/February 2005, *87*(1), p. 49-63.

Cheng, Leonard, Kwan Yum and K. Kwan. 2000. "What are the Determinants of the Location of Foreign Direct Investment?" The Chinese Experience. *Journal of International Economics, 51*(2), 379.

Chen, Hogan , Kondratowicz Mathew, and Kei-Mu Y. 2005. "Vertical specialization and three facts about U.S. International trade." *North American Journal of Economics and Finance* 16 (1), 35-59.

Christian, De La Medina Soto and Tania Ghossein. 2013. "Starting a Foreign Investment Across Sectors. *Benchmarking the ease of establishing a foreign subsidiary across economies*. International Finance Corporation (IFC). The World Bank (WB)

Chheang, Vannarith. 2008. "The political economy of tourism in Cambodia." Asia Pacific Journal of Tourism Research 13(3):281–297. doi:10.1080/10941660802280414.

Council of Europe. 2004. "Gender Mainstreaming" *Conceptual framework, methodology and presentation of good practices Strasbourg*, 2004, p.12

Council for the Development of Cambodia. n.d. "CAMBODIA INVESTMENT GUIDEBOOK" Phnom Penh, Cambodia, p.V-1

Council for the Development of Cambodia. 2000 & 2006. "Analysis Of Capital By Country." Phnom Penh: Cambodian Investment Board.

Deardorff, Alan V. 1995. "Determinants of Bilateral Trade: *Does Gravity Work in a Neoclassical World*?", Working Papers Series, National Bureau of Economic Research.

Deardorff, Alan V. 1998. "Determinants of Bilateral Trade: *Does Gravity Work in a Neoclassical World?"* in Jeffrey Frankel, ed. Regionalization of the World Economy. NBER and University of Chicago Press, pp. 7-32.

Disdier, Anne-Célia and Keith Head. 2008. "The Puzzling Persistence of the Distance Effect on Bilateral Trade," Review of Economics and Statistics, 90(1).

Dunning, Jonh H. 1980. "Toward an Eclectic Theory of International Production" Some Empirical Tests. *Journal of International Business Studies, 11*(1) p. 9.

Dunning, John H. 1977. "Trade, Location Of Economic Activity And The MNE: A Search For An Eclectic Approach". P. 395 in *The International Allocation of Economic Activity*. Palgrave Macmillan UK. Retrieved May 18, 2017 (http://link.springer.com/chapter/10.1007/978-1-349-03196-2_38).

Dunning, John H and Gray H. Pete. 2003. "Extending the Eclectic Paradigm in International Business" *Essays in Honor of John Dunning*. Cheltenham, UK; Northampton, MA: Edward Elgar.

Edmiston, Kelly D, Mudd Shannon, and Neven T. Valev. 2003. "Incentives Targeting, Influence Peddling and Foreign Direct Investment." Retrieved on September 25, 2017 from https://link.springer.com/article/10.1023/B:ITAX.0000036695.28840.34files

Erlander, Sven. 1980". Optimal Spatial Interaction and the Gravity Mode*"*. Berlin; New York: Springer-Verlag.

Farhad, Noorbakhsh, Alberto Paloni and Ali Youssef. 1990. "Low wages or skilled labour?" *Prospects for foreign direct investment in developing countries.* Department of Economics University of Glasgow

Falk, Martin. 2016. "A gravity model of foreign direct investment in the hospitality industry." Austrian Institute of Economic Research (WIFO), Arsenal Objekt 20, 1030 Vienna, Austria

Feenstra, C. Robert, James R. Markusen and Andrew K. Rose. 2001. "Using the gravity equation to differentiate among alternative theories of trade." Canadian Journal of Economics 34(2): 430-447.

Felipa de Mello-Sampayo. 2007. "The Location of the United States' FDI Under the Share Gravity Model" *International Economic Journal.* http://dx.doi.org/10.1080/10168730701529942

Gopinath, Munisamy, Rodrigo Echeverria. 2004. "Does Economic Development Impact the For eign Direct Investment-Trade Relationship? A Gravity-Model Approach" American Journal of Agricultural Economics (86)3.

Guttmann, Simon and Anthony Richards. 2006. "TRADE OPENNESS: AN AUSTRALIAN PERSPECTIVE." *Reserve Bank of Australia*

Hach Sok, Chea Huot, and Sik Boreak. 2001. "Cambodia's Annual Economic Review—2001" *Working Paper 36,* Cambodia Development Resource Institute. Phnom Penh).

Haddad, Mona and Harrison Ann. 1993. "Are There Positive Spillovers from Direct Foreign Investment?" Evidence from Panel Data for Morocco. *Journal of Development Economics,* 42(1), p.51.

Hang, C. 2009. "Cambodian Economy": *Charting the Course of a Brogher Future.* Phnom Penh: Asian Development Bank

Hans, Christiansen, Ayse, Bertrand .2004. "TRENDS AND RECENT DEVELOPMENTS IN FOREIGN DIRECT INVESTMENT" OECD, DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS

Helpman, Elhana. 1987. "Imperfect Competition and International Trade" Evidence from Fourteen Industrial Countries." Journal of the Japanese and International Economic 1 (1)

IMF .2003. "FOREIGN DIRECT INVESTMENT IN EMERGING MARKET COUNTRIES." Report of the Working Group of the Capital Markets Consultative Group. P.16, Retrieved on September 25, 2017 https://www.imf.org/external/np/cmcg/2003/eng/091803.pdf

Jefferey, A. Frankle, Ernesto Stein and Shang-Jin Wei. 1997. "Regional Trading Blocs in the World Economic System". *Institute for International Ec.* Peterson Institute, 1997

Kumar, Nagesh. 2003. "Investment on the WTO Agenda: A developing Countries Perspective and the Way Forward for the Cancun Ministerial Conference*"*. Paper presented at the Cancun Ministeri al Conference, WTO, Cancun, Mexico, Mexico.

Linnemann, Hans. 1961. “An Economic Study of International Trade Flows.” North-Holland, Amsterdam, Netherlands.

Luljeta, Hajderllari, Kostas Karantininis, and Lartey G. Lawson. 2012. “FDI as and Export-Platform: A Gravity Model for the Danish Agri-Food Industry.” FOI Working Paper 2012. Institute of Food and Resource Economics. University of Copenhagen

Ministry of Planning. n.d. “SECOND FIVE YEARS OF SOCIOECONOMIC PLAN (2001-2005).” *NATIONAL ECONOMIC GROWTH AND POVERTY REDUCTION STRATERGY.* Phnom Penh, Cambodia

Ministry of Woman Affairs of Cambodia (MoWA). 2014. “ECONOMY: Women’s Economic Empowerment:” *Cambodia Gender Based Assessment. Policy Brief.*

Mitze, Timo, Alecke, Björn and Untiedt Gerhard. 2008. “Trade, FDI and Cross-Variable Linkages:” A German (Macro-) *Regional Perspective*. MPRA paper no. 12245, University of Munich, Germany.

Modugu, Kennedy, Emmanuel Eragbhe and Famous Izedonmi. 2012. “Government Accountability and Voluntary Tax Compliance in Nigeria.” *Research Journal of Finance and Accounting* (3) 5.

Morisset, *Jacques*. 2003. “Using Tax Incentives to Attract Foreign Direct Investment.” Retrieved on September 25 ,2017 from http://www.rru.worldbank.org.documents

Moran, Theodore H. 1998. “Foreign Direct Investment and Development” Institute for International Economics, Washington, DC.

Nakagawa, Masumi. n.d. “Gender Mainstreaming in Cambodia” *Towards a Gender Equal Society*

OECD. 2002. “Foreign Direct Investment for Development” *MAXIMISING BENEFITS,* MINIMISING COST. Head of Publications Service, OECD Publications Service.

OECD. 2009. “Investment Policy Review: Vietnam” Retrieved November 02nd, 2017 http://www.oecd.org/countries/vietnam/vietnam-investmentpolicyreview-oecd.htm

OECD. 2017. “Our Mission” Retrieved on November 02nd, 2017. http://www.oecd.org/about/

Omar, Bargawi. 2005. “Cambodia’s Garment Industry – Origins and Future Prospects” Overseas Development Institute London. P.5.

Pelletiere, Danilo, Kenneth A. Reinert. 2004. “Used Automobile Protection and Trade: Gravity and Ordered Probit Analysis”. *Empirical Economics, 29*(4), 737.

profile, View. 2014. "Mncs And Setting Cambodia's Minimum Wage". *data:blog.title*. Retrieved May 6, 2017 (http://ipezone.blogspot.kr/2014/07/mncs-and-setting-cambodias-minimum-wage.html).

Prak, Chan Thul. 2016. "Coca-Cola Opens New $100 Million Plant In Cambodia". *Reuters*. Retrieved May 12, 2017 (http://www.reuters.com/article/us-coca-cola-cambodia-idUSKBN13U0UU).

Reis Ana Balcão. 2001. On the Welfare Effects of Foreign Investment. *Journal of International Economics, 54*(2), p.411.

Rosenberg Matt. T. 2004. "Gravity Model: Predict The Movement of People and Ideas Between Two Places." Retrieved September 10, 2017 http://geography.about.com/library/weekly/aa031601a.htm?iam=dpile_1&terms =gravity

Royal Government of Cambodia. 2014. "National Development Strategy Plan 2014-2018." Ministry of Planning. Phnom Penh, Cambodia.

Royal Government of Cambodia/ Ministry of Economy and Finance. 2013. "Laws And Regulations Related To The Establishment And Management Of Special Economic Zone." Phnom Penh.

Sanna-Randaccio Francesca. 2002. "The Impact of Foreign Direct Investment on Home and Host Countries with Endogenous R&D". *Review of International Economics, 10*(2), p.278.

Sethi, D, S E Guisinger, S E Phelan, and D M Berg. 2003. "Trends in foreign direct investment flows: A theoretical and empirical analysis." Journal of International Business Studies 34(4):315–326. doi: 10.1057/palgrave.jibs.8400034

Scott L. Baier and Jeffrey H. Bergstrand. 2007. "Bonus Vetus OLS: A Simple Method for Approximating International Trade-Cost Effects using the Gravity Equation." Journal of International Economics, Vol. 77(1), pp. 77-85, (Feb 2009), Elsevier. http://www3.nd.edu/~jbergstr/Working_Papers/BVOLSOctober2007.pdf.

Slocomb, M. 2010. "An Economic History of Cambodia in the Twentieth Century." Singapore: National University of Singapore Press

Sophal, Chan and Sothea Oum. 2011. "Impact of Garment and Textile Trade Preferences on Livelihoods in Cambodia." *Oxfam America Research Backgrounders Series*, http://: oxfamamerica.org/publications/impact-garment-textile-trade-preferences-cambodia.

Te Velde, Dirk Willem. 2001. "FDI, Human Capital and Education in Developing FDI, Human Capital and Education in Developing Countries." *GOVERNMENT POLICIES TOWARDS INWARD FOREIGN DIRECT INVESTMENT IN DEVELOPING COUNTRIES: Implications for human capital formation and income inequality.* OECD

Tinbergen, Jan. 1962. "Shaping the World Economy: Suggestions for an International Economic Policy." New York: Twentieth Century Fund. The first use of a gravity model to analyze international trade flows.

Türkcan, Kemal. 2007. "OUTWARD FOREIGN DIRECT INVESTMENT AND INTERMEDIATE GOODS EXPORTS" Evidence from the usa. *Economie internationale* 2007/4 (112), p. 51-71

UNCTAD. 2015. "World Investment Report" 1st ed. New York: United Nations.