



Determinants of Vietnam's outward direct investment: The case of Cambodia

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ABSTRACT

This research focuses on the determinants of Vietnam's outward FDI by studying simultaneously the influence of two pull factors and push factors. In addition, the work examines the differences in assessing the impact of two factors groups on investment decisions by market entry method. The authors conduct qualitative research interviewing six experts as the managers have an important role in the decision to invest directly abroad for their business and quantitative research by multiple regression methods studying samples consisting of 248 enterprises. Push factors group from Vietnam includes competitive pressure of Vietnam market, monetary policy, interest rates of Vietnam, regulations and procedures for licensing investment abroad of Vietnam, incentive policy, and investment incentives to overseas. Pull factors group from host country includes culture-geography, macroeconomics and market, infrastructure, regulations and policies related to investment. Through two groups of factors, the authors withdraw into four groups that impact the Vietnam's FDI abroad including: (i) culture-geography, (ii) infrastructure; (iii) the macro-economic and market; and (iv) regulations and policies related to investment. The results indicate that two groups of factors, both pull factors and push factors, have impact on Vietnam's FDI abroad.

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1. Introduction

At the end of 20th and the beginning of the 21st centuries, one of the characteristics of the process of international economic integration was the intensification of direct investment abroad, not only the industrialized countries, but also developing countries (OECD, 2008). Many scientific studies explain the role of offshore direct investment for investors seeking to find effective returns from attractive returns in markets (Agarwal, 1980; Moosa, 2002); or to make diversification (Markowitz, 1959; Moosa, 2002; Rose et al., 2005); or affected by the output and market size of the host countries (Moore, 1993; Wang et al., 1995). Kerinin et al. (1999) concluded that "protection of market share is the most important motive for FDI".

About the role of FDI in attracting countries, according to the OECD (2008), FDI creates a spillover effect on technology, supports human capital investment, contributes to international trade integration, helps create competitive business environment, and increase the development of business. All of them contribute to boosting economic growth and is seen as an effective tool for economic growth in developing countries. Grossman et al. (1991) and Hermes et al. (2003) found that FDI plays an important role in modernizing and promoting the development of the economy in the recipient country. Johnson (2005), in the study of the impact of FDI on economic growth, concluded that FDI impacts on receiving countries, especially developing country groups, are mainly through physical capital and technology. In particular, technology is the key factor. Kemp's (1962) with marginal productivity theory explained that capital mobility is due to differences in marginal productivity. Capital moves from low margin to high margin. This theory is based on the perfect market assumption that there is no risk, so profit is the only variable of the investment decision. As a result, a country with abundant capital has a lower return on capital than a country with limited capital. However, this theory does not explain why capital flows are moving away from a country, and theories do not explain why countries lack capital and high technology like Vietnam where companies directly invest abroad? What are the factors from the capital exporter and from the capital importer impact on direct investment from one developing country to another developing country? What factors affect the intention to invest abroad of enterprises from developing countries that have little capital, technology is not high and have not built up a valuable brand? We need research for exploring these and then contributing to the richness of economic science in various aspects.

Recognizing the benefits of OFDI, since 1989, when Vietnam did not have regulations on investment activities abroad, the first project with a total investment of nearly 564 thousand USD invested in Laos. By October 2015, Vietnam has had 1032 investment projects in 65 countries and territories of all five continents. Among the countries that Vietnam investing overseas, the Kingdom of Cambodia is the second largest country in terms of total number of projects and investment capital. By the end of October 2015, Vietnamese businesses have

registered 184 projects and more than \$3.6 billion invested in Cambodia, accounting for 17.8% of total projects and nearly 16,8% of the total registered investment capital of Vietnam. However, according to the survey of the Association of Investors in Cambodia and the comments of the consultative group of direct investment activities of Vietnamese enterprises in Cambodia, these results still have many problems, the investment results commensurate with the potential for offshore investment of Vietnamese enterprises. Therefore, the study to find out the factors that affect the impact of the investment of Vietnamese enterprises in Cambodia is very significant. To date, there have been many studies in the world that investigate factors affecting OFDI (Goh, 2011; Masron et al., 2010; Gammeltoft, 2008; Cheng et al., 2007; Deng, 2004; Andreff, 2003). However, all of them often focus on push factors or focus on pull factors, which are relatively few study examines the synergies of both groups (Aykut et al., 2004). Therefore, with the desire to consider the impact of both push and pull factors on investment decisions abroad, the authors propose to study the topic: *"Determinants of Vietnam's outward direct investment: The case of Cambodia"*.

2. Theoretical background

According to the OECD (2008), Foreign Direct Investment (FDI) is a category of investment that reflects the objective of establishing a lasting interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor.

Many theories try to explain the activity and development of FDI, such as perfect market theory, imperfect market theory, internationalization theory, locational theory, etc. According to the perfect market theory, FDI enterprises to seek different return rate in the market (Agarwal, 1980; Moosa, 2002) or to make the diversification (Markowitz, 1959; Moosa, 2002; Rose et al., 2005) or be affected by output and the market scale of capital flow (Moore, 1993; Wang et al., 1995). Locational theory assumes that the FDI exist due to the immobility of a number of factors of production such as labor, natural resources, etc. (Horst, 1972; Wheeler et al., 2001).

Besides studying the internal factors of the business, there are many studies to examine the external factors impacting FDI (Lu et al., 2011; Goh, 2011; Masron et al., 2010; Gammeltoft, 2008; Cheng et al., 2007; Deng, 2004; Andreff, 2003). In that trend, two research ways have been taken place which are the researches focus of the promoting factors from domestic countries (Lu et al., 2011; Masron et al., 2010; Kayam, 2009; UNCTAD, 2006) and the researches focus on attracting factors from foreign countries (Anil et al., 2014; Duanmu et al., 2009; Dunning, 2002; Sun, 2002).

In 2009, Kayam conducted empirical research to test domestic factors that motivate offshore direct investment firms. Through the results of linear regression with secondary data, he suggests that there are differences between the factors motivating Asian, African

and African companies to decide to invest abroad. In particular, the level of competition in the domestic market will positively affect the offshore direct investment of Asian, American and African companies. But, the labor-population ratio has a negative impact on OFDI in Asia and Africa. Infrastructure has significant implications for FDI from Asia. Inflation and economic development have a negative impact on OFDI from the Americans.

In the same study, Masron et al. (2010) looked at factors influencing Malaysian and Thai firms' offshore investment decisions during the period 1980–2006, consisting (i) market conditions; (ii) cost of production; (iii) domestic business conditions; and (iv) government policy. The results of the linear regression analysis show that all four factors affect the decision to invest abroad. In particular, domestic market conditions play the most important role in economic factors, followed by government incentives.

With his research results, Lu et al. (2011) also stated that there are three factors affecting the decision to invest abroad of Chinese enterprises. They are the resources of the business itself, the domestic market and the support of the government in the country. In particular, the support of the government is the strongest factor influencing the decision to invest abroad. The Lu et al.'s research model was tested using a Structural Equation Modeling (SEM) with 883 companies from seven provinces in China responding to the survey.

In conclusion, according to this research, researchers believe that the incentive for enterprises to invest in foreign countries may be because the domestic market is no longer attractive (Lu et al., 2011; Masron et al., 2010; Kayam, 2009; UNCTAD, 2006), the cost of doing business in the country is too high (Masron et al., 2010; Kayam, 2009), the resource is increasingly exhausted or difficult to reach (Masron et al., 2010; UNCTAD, 2006), infrastructure (Kayam, 2009). In addition, for FDI enterprises to have favorable conditions to invest abroad, they need a great deal of support from local governments in making regulations and policies (Lu et al., 2011; Masron et al., 2010; UNCTAD, 2006).

In 2002, Dunning conducted an empirical study of the factors influencing the choice of locations for offshore direct investment by firms. By analyzing UNCTAD statistics from 1985 to 2001 in conjunction with expert interviews, Dunning pointed out that there are three factors influence the choice of investment location as below:

(i) Policy on attracting investment, including: political-economic stability; preferential policies in fdi; private sector development policy; visa entry and exit regulations; customs policy; tax policy; open economy policy, integration level;

(ii) Group of economic factors, including: investment engines of multinational corporations; the market size; the market demand; production resources; labor costs and skills; business infrastructure; cost and business efficiency; education and training;

(iii) Group of utility factors for business, including: Post and telecommunication system; financial and banking services system; administrative procedures; corruption situation; social utility; protection of intellectual property rights and investors.

Duanmu et al. (2009) conducted a study examining the factors that attract foreign direct investment from India and China. The factors considered are: (i) market; (ii) depreciation of foreign currency; (iii) good institutional environment; (iv) geographical distance; (v) political stability; and (vi) natural resources. With the research results, the authors conclude that there are differences between the factors that attract investment from India and China. In particular, the geographic distance and natural resources are not significant for the attraction of investment from India. In addition, natural resources have no meaning in attracting investment from China.

Anil et al. (2014) provided valuable information on investment attraction in emerging or transitional countries. With data from seven Turkish companies investing in Romania, the results show that there are four factors that motivate businesses to invest in foreign countries: (i) operating costs; (ii) institutions (political stability, cultural identity, international integration); (iii) resources; and (iv) attractive market. In general, the findings of this study help to better understand the behavior of businesses as they invest in emerging markets or transitions.

Focusing on attractiveness factors, researchers argue that firms that decide to invest in a foreign country may derive from the attractiveness of the market in which they intend to invest (Buckley et al., 2007; Dunning, 2002; Sun, 2002), low operating costs (Anil et al., 2014; Dunning, 2002; Sun, 2002), geographically near or similar in culture (Anil et al., 2014; Duanmu et al. 2009), business infrastructure (Dunning, 2004), business support by local government (Anil et al., 2014; Duanm et al., 2009; Buckley et al., 2007; Dunning, 2002; Sun, 2002), or good international economic integration (Anil et al., 2014; Dunning, 2002).

In addition to these studies, Aykut et al. (2004) concluded that there are two groups of factors influencing direct investment decisions abroad, including push and pull factors. By using FDI inflows from the World Bank and the International Monetary Fund during the 1994-2000 period of three groups (OECD member countries, non-OECD countries, developed countries), the analysis shows that when deciding to invest directly in foreign countries, enterprises are affected by the following factors:

(i) Push factors group includes abundant domestic capital, rising labor costs, fierce competition, low profitability and growth rates, regulations and policies. The government encourages investment abroad.

(ii) Pull factors group includes large and rapidly growing markets, close geographical and cultural similarities, cheap labor costs, abundant raw materials, development infrastructure, open investment policy and many incentives.

Summarizing works close to the topic of the study, we found that in addition to Aykut et al. (2004), the majority of scientists studied in two separate directions in explaining the causes of investment directly offshore (Figure 1). The first is the push factors (viewed from the capital-exporting countries). The second is the pull factors attract foreign firms (viewed from the capital-importing countries). Two these factors groups are summarized in Table 1

and Table 2 below:

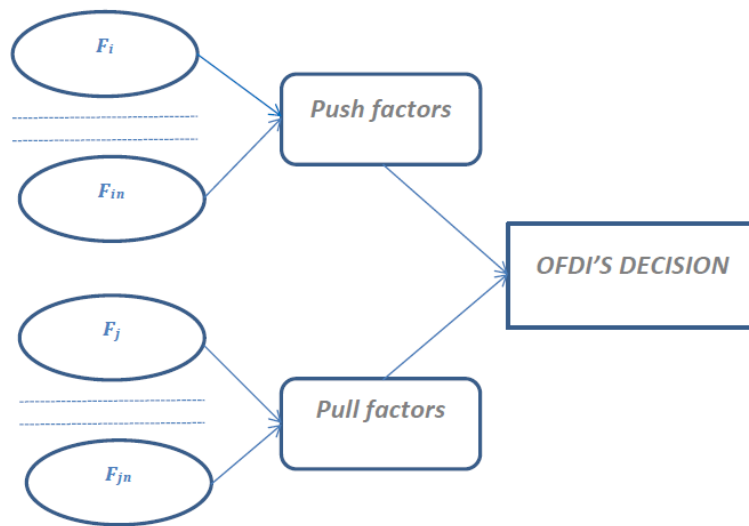


Figure 1. Simulation of factors affecting FDI's decisions of enterprises

Table 1

Factors promoting investment from home country (push factors)

No	Push factors from the capital outward country	Group	References
1	The size of the market of the capital exporting country is not large enough for development		Masron et al. (2010), UNCTAD (2006)
2	The growth rate of domestic market not meet expectation	Market Condition	Lu et al. (2011), Masron et al. (2010), UNCTAD (2006), Aykut et al. (2004)
3	The competitive pressure is very high, making domestic business difficult		Lu et al. (2011), Masron et al. (2010), Kayam (2009), UNCTAD (2006), Aykut et al. (2004)
4	Labor cost is high	Business costs	Masron et al. (2010), Kayam (2009), Aykut et al. (2004)
5	Cost of input raw materials is high		Masron et al. (2010)
6	The transport system between the capital exporting and the capital importing countries	Infrastructure	Kayam (2009)

No	Push factors from the capital outward country	Group	References
7	Availability of resources: land, water, minerals are reduced, difficult assessing	Natural resources	Masron et al. (2010), UNCTAD (2006)
8	Regulations and procedures for licensing investment abroad		Lu et al. (2011), Masron et al. (2010), UNCTAD (2006), Aykut et al. (2004)
9	The incentive and incentive policies for overseas investment of exporting countries	Regulations and policy relating to investment	Lu et al. (2011), Masron et al. (2010), UNCTAD (2006), Aykut et al. (2004)
10	Regulations on natural resource exploitation increasingly tight, difficulties		Lu et al. (2011), Masron et al. (2010), UNCTAD (2006), Aykut et al. (2004)

Table 2

Factors attract investment from host country (pull factors group)

No	Pull factors from the capital importing country	Factors group	Findings sources
1	Market is available for a development of some sectors		Anil et al. (2014), Dunning (2002)
2	The market's growth rate is fast		Anil et al. (2014), Duanmu et al. (2009), Aykut et al. (2004), Dunning (2002), Sun (2002)
3	The competitive pressure is quite low	Market condition	Duanmu et al. (2009), Dunning (2002)
4	Labour cost is quite low		Anil et al. (2014), Aykut et al. (2004), Dunning (2002), Sun (2002)
5	Cost of input raw materials is quite low	Business costs	Anil et al. (2014), Dunning (2002)
6	Availability of resources: land, water, minerals are reduced, difficult assessing	Natural resources	Anil et al. (2014), Duanmu et al (2009), Aykut et al. (2004), Dunning (2002), Sun (2002)

7	Regulations and procedures for licensing FDI are convenient		Duanmu et al. (2009), Aykut et al. (2004), Dunning (2002), Sun (2002)
8	Regulations on natural resource exploitation easing.	Regulations and policy relating to investment	Duanmu et al. (2009), Aykut et al. (2004), Dunning (2002)
9	Ownership of private property is ensured		Duanmu et al. (2009), Aykut et al. (2004), Dunning (2002), Sun (2002)
11	Geographical location of capital importing countries compared with capital exporting countries	Culture - geography	Duanmu et al. (2009), Aykut et al. (2004)
12	Cultural similarity		Anil et al. (2014), Aykut et al. (2004)
13	Transport system develop		Aykut et al. (2004), Dunning (2002)
14	Good Infrastructure for industrial zones/export processing zones	Infrastructure	Aykut et al. (2004), Dunning (2002)
15	Reach closer to the customer		Anil et al. (2014), Sun (2002)
16	Serving local businesses investing in importing capital country (providing supporting materials...)	Marketing and sale	Anil et al. (2014), Sun (2002)
17	International economic integration (member of WTO, enjoying general preferential tariffs, bilateral and multilateral trade agreements, etc.)	International integration	Anil et al. (2014), Dunning (2002)
18	Government stability, corruption, racial discrimination, etc.	Political risk	Anil et al. (2014), Duanmu et al. (2009), Vichea (2005), Dunning (2002)
19	Good political relations with capital exporting countries		Anil et al. (2014), Vichea (2005), Dunning (2002)

According to the theoretical study on FDI and Aykut's research model as well as related empirical research (Table 1, Table 2), we identify two main groups influencing investment activities of Vietnamese enterprises to Cambodia: push factors from Vietnam and pull factors from Cambodia. We identify seven sub factors in these two groups, which jointly affect the decision to invest in Cambodia (Figure 2): macroeconomics and markets (Anil et al., 2014; Lu et al., 2011; Masron et al., 2010; Duanmu et al., 2009; Kayam, 2009; UNCTAD,

2006; Aykut et al., 2004; Dunning, 2002; Sun, 2002), labor costs, raw materials (Anil et al., 2014; Masron et al., 2010; Kayam, 2009; Aykut et al., 2004; Dunning, 2002; Sun, 2002); infrastructure (Kayam, 2009; Aykut et al., 2004; Dunning, 2002), regulations and policies related to investment (Maslow et al., 2010; Duanmu et al., 2009; UNCTAD, 2006; Aykut et al., 2004; Dunning, 2002; Sun, 2002), culture and geography (Anil et al., 2014; Duanmu et al., 2009; Aykut et al., 2004), and political risk (Anil et al., 2014; Duanmu et al., 2009; Vichea, 2005; Dunning, 2002). The model hypotheses are as follows:

H1: Macroeconomic and market impact positively on investment decisions in Cambodia.

H2: Labor costs and material resources impact positively on investment decisions in Cambodia.

H3: Infrastructure impacts positively on investment in Cambodia.

H4: Resources impact positively on investment decisions in Cambodia.

H5: Regulations and policies related to investment impact positively on investment decision in Cambodia.

H6: Culture-geography impacts positively on investment decision in Cambodia.

H7: Political risk impacts positively on investment decision in Cambodia.

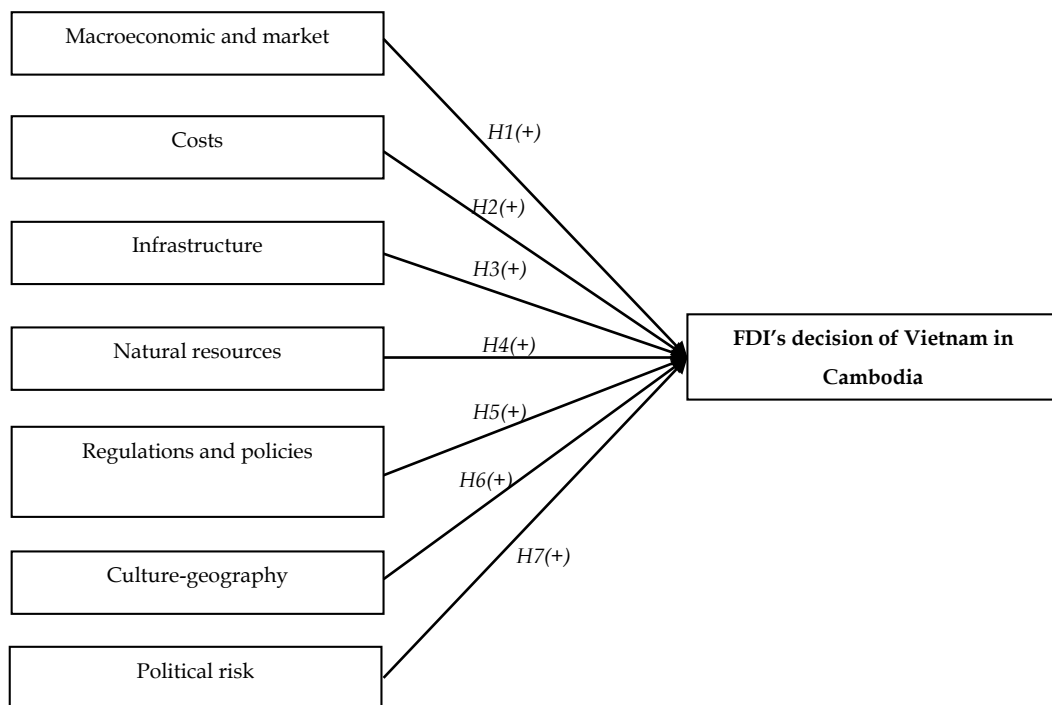


Figure 2. Proposing research model

3. Research method

The study used a combination of two methods: (i) qualitative research; and (ii) quantitative research.

Qualitative research was conducted through group discussion with six experts who have been investing directly in Cambodia. This study aims to adjust the scale. Specifically, in addition to adjusting words and meanings for the observational variables to suit the Cambodian market, the qualitative study added three observation variables for the macroeconomic and market scale and cost scale. The results from the first 40 observations, after the focus group discussions, enabled the authors to add three observation variables. Finally, scales include the observable variables as shown in Table 3. The scales used in the model are inherited and adjusted from Anil et al. (2014), Masron et al. (2010), Aykut et al. (2004) and Dunning (2002). Specific scales are used as follows:

- Macroeconomics and markets: using scale of Aykut et al. (2004) and Dunning (2002).
- Cost: using scale of Masron et al. (2010), Aykut et al. (2004), Dunning (2002).
- Infrastructure: using scale of Masron et al. (2010), Aykut et al. (2004) and Dunning (2002).
- Natural resources: using scale of Aykut et al (2004) and Dunning (2002).
- Relevant regulations and policies: using scale of Aykut et al (2004).
- Culture-geography: using scale of Aykut et al (2004).
- Political risk: using scale of Dunning (2002).

Table 3

Scales after adjustment through qualitative research

Variables	Definitions
Macroeconomics and markets	
KT1	Cambodia market size is big enough for Vietnamese businesses to expand their investment abroad
KT2	The low competitive pressure of the Cambodia market
KT3	Growth speed of the Cambodia market is fast
KT4	The macroeconomic environment of Cambodia is stable
KT5	Competitive pressure in the Vietnamese market increasing
KT6*	The monetary policy, interest rates of Vietnam or adverse changes for investors
KT7*	Cambodia enjoys a lot of tariff preferences of other countries than Vietnam (GSP program, Import Tax = 0)

Costs

CP1	The cost of employing unskilled labor in Cambodia is low
CP2	The cost of using human resources and social insurance in Vietnam increased
CP3	The cost of transport and using infrastructure in Vietnam is increasing.
CP4	The cost of using infrastructure and mining in Cambodia is relatively low
CP5	The cost of implementing FDI projects in Cambodia is not high (applying for licenses, administrative procedures to deploy FDI projects)
CP6*	The cost of skilled labor (governance and specialists) in Cambodia is relatively low

Infrastructure

HT1	The traffic system (bridges, ports, yards, vehicles ...) of Cambodia is convenient
HT2	Transport system connecting Vietnam and Cambodia is convenient (water, air, ...)
HT3	Information system, internet of Cambodia are convenient
HT4	Cambodia's electricity and water supply system meets the requirements of FDI enterprises
HT5	Human resources in Cambodia meet the project requirements of Vietnam
HT6	Cambodia medical services meet the requirements of FDI enterprises
HT7	The traffic system (bridges, ports, yards, vehicles ...) of Cambodia is convenient
HT8	Entertainment services of Cambodia meet the requirements of foreign investors

Natural resources

TN1	The availability of seafood in Cambodia is plentiful
TN2	The level of scarcity of marine resources in Vietnam is increasing
TN3	The availability of forest products in Cambodia is plentiful
TN4	The availability of agricultural products in Cambodia is plentiful
TN5	Minerals in Cambodia meet the mining requirements
TN6	Water resources in Cambodia are abundant
TN7	The availability of land for production and business in Cambodia is plentiful

Relevant regulations and policies

QC1	Regulations and procedures for licensing investment abroad of Vietnam is increasingly convenient
QC2	Regulations and procedures for FDI licensing of Cambodia are easy
QC3	The incentive policy, investment incentives to overseas, especially with Cambodia of Vietnam increasingly improved

QC4	Cambodia's low resource regulation
QC5	The incentive policy, investment incentives for FDI of Cambodia are increasingly improved

Culture - Geography

VD1	The attitude, religious beliefs of the two countries are quite similar
VD2	Both cultures and cuisines are quite similar
VD3	Customs and practices of the two countries are similar
VD4	Customs and practices of the two countries are similar
VD5	Cambodia and Vietnam are geographically close to each other

Political Risk

RC1	Cambodia and Vietnam have close political relationship
RC2	Cambodia's image is increasingly enhanced
RC3	Politics in Cambodia is becoming more stable
RC4	Racism in cambodia has been declining
RC5	The corruption of Cambodia is less and less

Investment decision in Cambodia

DT	Enterprises will invest/increase investment in Cambodia
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*: Observed variables are supplemented by experts.

From corrected scales, the formal questionnaire is established. The authors selected five-level Likert scale, with: (i) completely disagree; (ii) disagree; (iii) neutral; (iv) agree; and (v) completely agree. Each sentence is a statement about a certain criterion in a concept of the model. The formal questionnaire consists of 44 observational variables corresponding to eight scales in the research model. Given the survey method, direct interview method is considered the method that has the highest response rate. In addition, this method allows the authors to clarify obscene statements with the respondent as well as reducing possible deviations. For the above reasons, this study uses direct interview method to collect data. However, with this method, the cost of implementation is quite high. Due to time constraints, cost of implementation, research samples were selected according to the convenient method and seed development. Accordingly, the survey was sent to businesses in Ho Chi Minh City that have invested in Cambodia. Then, they would support information about other businesses also investing or intending to invest in Cambodia through the question for clarification (direct investment in Cambodia, intention to invest directly in Cambodia, or no intention to invest directly in Cambodia).

The main data analysis method used for this study is the multiple regression analysis

(MLR). To obtain reliable estimates for this method the sample size should be large (Raykov et al., 1995). However, at present the determination of how big the sample size is remains unclear. In addition, the sample size depends on the method used for estimation (ML, GLS, ADF, etc.). According to Hair (2010), the sample size is at least 100 to 150. According to Hoelter (1983), the sample size is at least 200 (Nguyen et al., 2011). In addition, Bollen (1989) considers that the sample size is at least 5 for an estimated parameter (Nguyen Dinh Tho et al., 2011). In this study, all 44 parameters were estimated, so the sample size was at least 220. However, the larger the sample size, the less the sampling deviation. Therefore, this study produced 300 questionnaires for businesses operating at the Cambodia-Vietnam Friendship Association and the Association of Investors in Cambodia, and questionnaires were sent directly to Enterprises participating in the 3rd and 4th Vietnam-Cambodia Investment Promotion Conference (600 delegates of government officials and enterprises participating each time). From the results 248 valid votes were cast. Through the questionnaire, the samples identified were those who have invested in the Cambodian market and those who intend to invest in Cambodia (whose business is in Cambodia import, export, transportation, tourism, etc.). Specifically, the sample structure is as follows:

Table 4

Sample description

	Number of enterprises	Percentage (%)
Invested, is investing directly	33	13.3
Intent to invest (import, export, service)	215	86.7
Total	248	100

The collected data were processed and analyzed using software SPSS 20. Through this data, the scales were evaluated for reliability using the Cronbach's Alpha coefficient. The scale is accepted when the Cronbach's Alpha coefficient is greater than 0.6 (Nunnally & Bernstein, 1994; Nguyen, 2011) and the coefficient of correlation-total ≥ 0.3 . Next, observable variables are validated through factor analysis (EFA). Factor loads are less than 0.35 and weight differences less than 0.3 (Hair et al., 2009) will continue to be rejected. The method used to extract the coefficients is Principal Components with Varimax rotation. The scale is accepted when the deviation total is $\geq 50\%$ (Nunnally & Bernstein, 1994; Nguyen, 2011).

The linear multiple regression model (with Stepwise method) is used to determine what factors actually influence the decision to invest in Cambodia of Vietnamese enterprises and consider the magnitude of this impact.

4. Analysis results of official research

4.1. Data description

Research data series have slight variation between mean value, maximum value, minimum value and standard deviation. Most observational variables have left-handed distributions, except for KT2, CP1, CP2, CP3, QC4 (skewness greater than 0). In terms of distribution shape, all the observation variables are low in shape and imprisoned with two long tails.

Table 5

Research data description

	N	Min	Max	Mean	Std. deviation	Skewness	Kurtosis
KT1	248	1	5	3.06	0.758	-0.101	-0.047
KT2	248	1	5	3.42	0.744	0.027	0.350
KT3	248	1	5	3.23	0.845	-0.304	-0.261
KT4	248	1	5	3.35	0.771	-0.439	0.642
KT5	248	1	5	3.16	0.746	-0.153	-0.302
KT6	248	1	5	3.67	0.822	-0.599	0.759
KT7	248	1	5	3.81	1.125	-0.592	-0.471
CP1	248	3	5	4.37	0.515	0.195	-1.160
CP2	248	3	5	4.46	0.508	0.053	-1.773
CP3	248	3	5	4.44	0.505	0.167	-1.742
CP4	248	2	5	4.13	0.758	-0.670	0.291
CP5	248	3	5	4.43	0.535	-0.107	-1.158
CP6	248	3	5	4.21	0.571	-0.018	-0.272
HT1	248	1	5	3.12	0.968	-0.371	-0.081
HT2	248	1	5	2.79	0.905	-0.175	0.017
HT3	248	1	5	3.07	0.973	-0.085	-0.289
HT4	248	1	5	3.00	0.975	-0.282	-0.370
HT5	248	1	5	3.21	0.831	-0.230	0.270
HT6	248	1	5	2.85	0.975	-0.207	-0.269
HT7	248	1	5	3.04	0.836	-0.210	0.401

	N	Min	Max	Mean	Std. deviation	Skewness	Kurtosis
HT8	248	1	5	3.82	1.129	-0.607	-0.471
TN1	248	1	5	3.28	0.940	-0.267	-0.287
TN2	248	1	5	3.21	0.727	-0.209	0.583
TN3	248	1	5	3.10	0.945	-0.348	-0.108
TN4	248	1	5	3.30	0.901	-0.534	0.436
TN5	248	1	5	3.35	0.860	-0.320	0.158
TN6	248	1	5	2.87	0.883	-0.234	0.316
TN7	248	1	5	3.18	0.805	-0.099	0.420
QC1	248	1	5	3.29	0.884	-0.143	-0.195
QC2	248	1	5	3.54	0.814	-0.440	0.284
QC3	248	1	5	3.54	0.843	-0.447	-0.095
QC4	248	1	5	2.94	0.882	0.118	-0.228
QC5	248	1	5	3.15	0.927	-0.217	-0.282
VD1	248	1	5	3.67	0.683	-0.385	0.590
VD2	248	1	5	3.32	0.769	-0.357	0.343
VD3	248	1	5	3.21	0.784	-0.345	-0.400
VD4	248	1	5	3.60	0.752	-0.334	0.142
VD5	248	1	5	3.43	0.963	-0.600	0.023
RC1	248	1	5	3.80	1.034	-0.896	0.458
RC2	248	1	5	3.87	0.913	-1.093	1.479
RC3	248	1	5	3.77	0.949	-0.835	0.640
RC4	248	1	5	3.44	1.059	-0.510	-0.387
RC5	248	1	5	3.75	0.948	-0.783	0.448
Y	248	2	4	3.23	0.334	-0.408	0.191

4.2. General assessment of scale reliability and factor analysis

After the scales are included in the assessment, the results show that six variables are excluded due to ineligibility (corrected item total correlation < 0.3). Excluded variables are KT7, CP4, HT3, HT8, TN1 and TN2. The Cronbach's alpha coefficients for these seven scale groups are also eligible (Table 6). Thus, 37 observations of these seven scale groups are

further included in the factorial exploratory analysis (EFA) for validity testing.

Table 6

Result of scale's reliability

	Scale mean if item deleted	Scale variance if item deleted	Corrected Item - Total Correlation	Cronbach's Alpha if item deleted
Macroeconomics and markets: $\alpha = 0.798$				
KT1	16.84	7.874	0.588	0.759
KT2	16.48	7.919	0.593	0.758
KT3	16.67	7.769	0.524	0.775
KT4	16.55	7.828	0.587	0.759
KT5	16.74	8.265	0.497	0.779
KT6	16.23	7.832	0.532	0.772
Costs: $\alpha = 0.876$				
CP1	17.53	3.141	0.681	0.856
CP2	17.44	3.170	0.676	0.857
CP3	17.46	2.922	0.853	0.815
CP5	17.47	2.906	0.799	0.827
CP6	17.69	3.201	0.549	0.890
Infrastructure: $\alpha = 0.778$				
HT1	14.90	10.872	0.397	0.777
HT2	15.22	10.438	0.527	0.744
HT4	15.02	9.571	0.633	0.715
HT5	14.81	10.804	0.522	0.746
HT6	15.16	10.101	0.531	0.743
HT7	14.97	10.639	0.552	0.739
Natural resources: $\alpha = 0.755$				
TN3	12.70	5.864	0.659	0.656
TN4	12.50	6.453	0.548	0.701
TN5	12.45	7.277	0.379	0.759
TN6	12.93	6.704	0.501	0.719

TN7	12.62	6.892	0.528	0.710
Relevant regulations and policies: $\alpha = 0.728$				
QC1	13.18	5.979	0.535	0.662
QC2	12.93	6.254	0.531	0.666
QC3	12.93	6.408	0.459	0.692
QC4	13.53	6.315	0.448	0.697
QC5	13.32	6.064	0.472	0.689
Culture-geography: $\alpha = 0.767$				
VD1	13.56	5.672	0.629	0.699
VD2	13.91	5.963	0.434	0.758
VD3	14.02	5.643	0.518	0.731
VD4	13.63	5.197	0.707	0.667
VD5	13.80	5.247	0.456	0.765
Political risk: $\alpha = 0.789$				
RC1	14.83	7.823	0.724	0.693
RC2	14.76	9.316	0.525	0.762
RC3	14.87	8.432	0.679	0.713
RC4	15.19	9.142	0.439	0.794
RC5	14.88	9.338	0.490	0.773

The results of the first EFA analysis show that TN5 does not reach convergence value and is rejected. Similarly, variables RC1, HT1, and VD1 are excluded in the second, third and fourth analyses because of non-discriminating values. The results of the final EFA analysis are as follows:

Table 7

Results of the last EFA

	Component						
	1	2	3	4	5	6	7
CP3	0.920						
CP5	0.884						
CP1	0.807						
CP2	0.800						
CP6	0.678						
KT1		0.738					
KT2		0.736					
KT4		0.736					
KT6		0.683					
KT3		0.676					
KT5		0.656					
HT4			0.790				
HT7			0.747				
HT5			0.708				
HT6			0.686				
HT2			0.680				
QC1				0.731			
QC2				0.730			
QC5				0.678			
QC3				0.666			
QC4				0.648			
TN3					0.833		
TN6					0.750		
TN4					0.704	0.230	
TN7					0.669		
VD3						0.751	
VD4						0.728	

VD2						0.705	
VD5					0.242	0.624	-0.211
RC2							0.752
RC5							0.739
RC4							0.690
RC3							0.668
Eigenvalue	3.580	3.196	3.103	2.775	2.400	1.973	1.399
Extraction sums of square loadings	10.849	20.535	29.939	38.347	45.619	51.598	55.838
Cronbach's Alpha	0.876	0.798	0.777	0.728	0.759	0.699	0.693

The analysis results show that 33 observational variables are grouped into seven factors at eigenvalue, with an extraction sums of 55.838%. Each factor includes the following observation variables:

Factor 1 (cost-symbolized CP) consists of five observation variables: CP1, CP2, CP3, CP5, and CP6.

Factor 2 (macroeconomics and market-symbolized KTTT) consists of six observation variables: KT1, KT2, KT3, KT4, KT5, and KT6.

Factor 3 (infrastructure-symbolized CSHT) consists of five observation variables: HT2, HT4, HT5, HT6, and HT7.

Factor 4 (regulation, policy related-symbolized QDCS) includes five observation variables: QC1, QC2, QC3, QC4, and QC5.

Factor 5 (resources-symbolized NTN) consists of four observation variables: TN3, TN4, TN6, and TN7.

Factor 6 (culture, geography-symbolized VHDL) consists of four observation variables: VD2, VD3, VD4, and VD5.

Factor 7 (political risk-symbolized RRCT) consists of four observation variables: RC2, RC3, RC4, and RC5.

4.3. Analysing regression results of factors influencing the direct investment decision of Vietnamese enterprises to Cambodia

The results of the regression analysis show that with seven factors taken into account in determining the impact of Vietnam's direct investment decision in Cambodia, four models are created (Table 8). The fourth model has the highest correlation coefficient (0.867), which is satisfactory (≥ 0.50). Thus, the 4th model is chosen. The results also show that the assumptions are not violated. The linear regression equation represents the relationship

between the four factors affecting the decision to invest directly in Cambodia as follows:

Decision on investment in Cambodia = $a_0 + a_1 \cdot \text{culture, geography} + a_2 \cdot \text{infrastructure} + a_4 \cdot \text{macroeconomics and market} + a_5 \cdot \text{regulations and policies related to investment}$

Table 8

Model summary^e from the Stepwise method

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.557 ^a	.310	.307	.278	
2	.759 ^b	.576	.572	.218	
3	.873 ^c	.762	.759	.164	
4	.931 ^d	.867	.865	.123	1.893

a. Predictors: (Constant), VHDL

b. Predictors: (Constant), VHDL, CSHT

c. Predictors: (Constant), VHDL, CSHT, KTTT

d. Predictors: (Constant), VHDL, CSHT, KTTT, QĐCS

e. Dependent Variable: Y

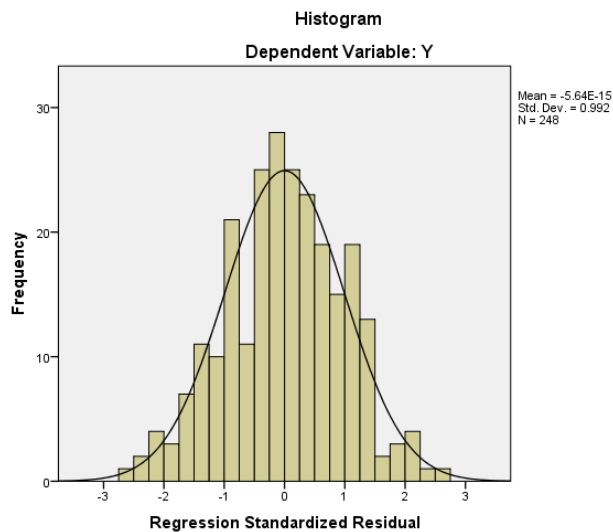


Figure 3. Regression Standardized Residual

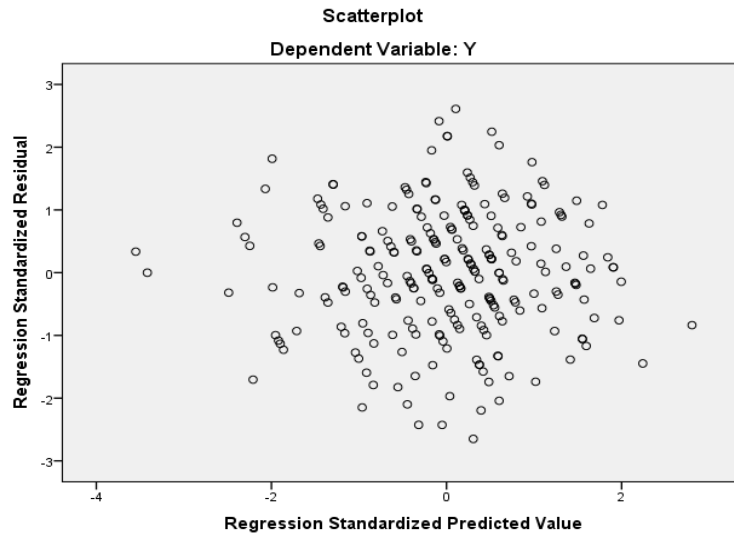


Figure 4. The Scatter Plot Between The Standardized Residual

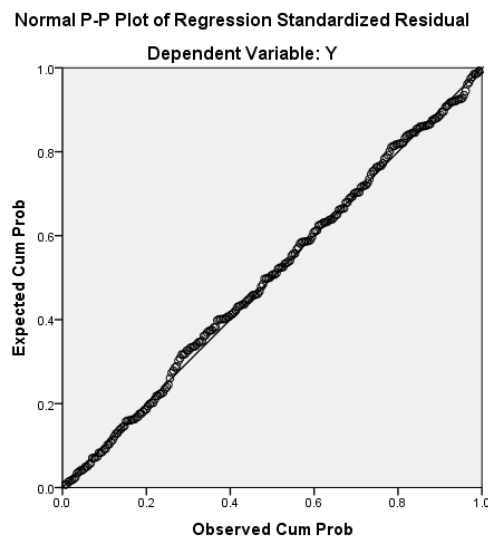


Figure 5. P-P Plot of Standardized Residual

Table 8 shows the fourth regression model selected, which explains 86.7% of the data set, with a 95% confidence level. This means that there are four accepted hypotheses: H1, H3, H5 and H6. The decision to invest in Cambodia is affected by: (i) culture, geography; (ii) infrastructure; (iii) macroeconomics and markets; and (iv) relevant regulations and policies. The rest is due to errors and other factors.

Table 9Model's coefficients^a

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	-.181	.088		-2.068	.040		
	VHDL	.350	.014	.600	25.575	.000	.994	1.006
4	CSHT	.266	.012	.503	21.475	.000	.997	1.003
	KTTT	.255	.014	.438	18.672	.000	.992	1.008
	QĐCS	.171	.012	.325	13.882	.000	.999	1.001

a. Dependent Variable: Y

In summary, the main determinants of investment in Cambodia are rewritten as follows:

Investment decision in Cambodia = $-0.118 + 0.350 \times \text{Culture-geography} + 0.266 \times \text{Infrastructure} + 0.255 \times \text{Macroeconomics and market} + 0.171 \times \text{Regulations and policies related to investment}$

Accordingly, the group of factors-geography culture has the most important impact on investment decisions of Vietnamese enterprises in Cambodia (0.35), followed by Infrastructure (0.266), the macroeconomic and market group (0.255) and finally the group of regulations and policies related to investment (0.171).

5. Conclusions and policy implications

The results of this research have suggested that the decision to invest directly in Cambodia is influenced by four factors: (i) culture-geography; (ii) infrastructure; (iii) market; and (iv) regulations and policies related to investment. This study again reaffirms Aykut et al.'s (2004) reasoning that direct investment abroad is influenced by factors motivating and attracting investment. However, in the Cambodian market, the cost, resource, and risk factors were not statistically significant in this study. This finding is consistent with the results of Duanmu et al. (2009) in China and India that the resources were not statistically significant. However, the cost factor and political risk have been confirmed by many researchers in their studies. Therefore, in the future study, additional models for these factors are needed.

The purpose of this paper is to develop a framework for analyzing the factors that influence the direct investment abroad, namely Cambodia. This study suggests that not only the factors that influence the decision to invest in Cambodia, but also the motivating factors.

Based on the existing literature, the research model has been developed. The results show that both groups of push-pull factors impact simultaneously on Vietnam's FDI abroad in which pull factors play a key role.

Push factors, the rules and procedures for licensing of Vietnam's FDI abroad, are more meaningful in influencing Vietnamese companies. To help Vietnamese enterprises quicker and deeper to penetrate into foreign markets, and the State management agencies of Vietnam should simplify the regulations and procedures for investment licensing.

Pull factors group with influence on the FDI of Vietnamese enterprises into Cambodia include the geography-culture factors (including religious factors, customs, attitudes, beliefs, languages and communication of the two countries, the geographic location of the two countries close together), these factors strongly influence the decision of direct investment of Vietnamese enterprises into Cambodia. In fact, many researches also confirmed this conclusion: border disputes, ethnic discrimination of some groups of factions within the National Assembly and some areas in Cambodia have a considerable impact on business activities in particular and investing commonly.

In our opinion, it is very urgent that Vietnam and Cambodia set up common border clearly, strengthen cultural exchanges, organizing local and inter-communal relations between the two countries, contributes to stabilizing the political system, are important impact on increasing Vietnam's FDI in Cambodia. In addition, the opening of language classes, learning about Cambodian culture for investors, professionals, traders who have done and will carry out business with this market will contribute to strengthen friendship between two countries.

Infrastructure factors group is the second most important factor influencing the decision of direct investment by Vietnamese enterprises in Cambodia (including Cambodia's transport system, traffic system linking the two countries, convenient communication system, convenient post office, power supply system, water supply system, human resource training, medical services). Vietnam Government needs to coordinate with Cambodia to strengthen the construction and expansion of bridges and roads such as the East-West Economic Corridor, roads, waterways, and airways to facilitate further investment and trade of the two countries' businesses. In addition, it needs to encourage the transport, telecommunication, electricity, etc. businesses to invest in the country.

Furthermore, the two sides should have special mechanisms to encourage health care projects such as hospitals, clinics, etc. of Vietnam deploying in Cambodia. To solve the macro and market problems the government of both countries should establish a mechanism for intergovernmental cooperation with the participation of scientists and representatives of the Association of Investors in Cambodia to review policy and mechanism relating to direct investment (mechanisms of investment in foreign countries of Vietnam, mechanism of attracting investment of Cambodia), indicating the macro-economy and market control of two countries aiming to propose perfect solutions.

Limitations of the study and suggestions for future studies: The authors mainly took surveys of enterprises investing and intending to invest in Cambodia by convenient sampling method, so the generalization of the research is limited. In addition, the study did not indicate how different the sectors in which Vietnamese businesses invest abroad are. The study focused on affirming the research design with Cronbach's Alpha reliability coefficient and the EFA exploratory factor analysis and linear multiple regression. Future studies should enhance sample size and use the SEM model to examine the causal relationship between main determinants■

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