# SUB-NATIONAL INSTITUTION AND SEQUENTIAL EXPANSION IN EMERGING MARKET: EVIDENCE OF FOREIGN FIRMS IN VIETNAM

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## Abstract

Purpose: Literature has shown that host country institutions crucially influence not only initial entry strategy but also sequential investment strategic decision. This study investigates how both formal and informal institutions affect sequential expansion strategy of foreign firms in Vietnam. Finding: Findings from the archival data of 1,500 FDI firms in Vietnam indicate that there is a strong, robust, and positive relationship between market support institutions such as the availability and ownership of real estate on sequential investment decision. Whereas, out of primary expectation, informal institution like corruption is not a constraints to firms' sequential expansion as long as the bribe payment help firms overcome business obstacles.

Key words: Sequential investment, corruption, institution, entry mode, Vietnam

JEL Codes: L10, L11

# Introduction

Foreign investors have to decide how to implement their sequential expansion strategy after initial enter to a host country. In contrast to firms in developed economies that enjoy relatively easy access to public services and information, MNEs entering emerging markets face differential access to those relevant resources, owing to institutional weaknesses and constraints. These strategic decisions have to accommodate institutional conditions that vary not only between countries, but also within the host economy (Meyer & Nguyen, 2005; Nguyen & Van Dijk, 2010).

Up to date, this literature is still limit in these prospects. First, institutional context of the host economy is usually considered as a determinant in initial entry mode choice. Second, studies on institution impacts on FDI activities mostly employ cross-national data. Third, most studies on FDI in emerging markets focus on China and lack studies on FDI characteristics in Southeast Asia countries, including Vietnam, even this region has increased its role in international

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economic development. This paper offers a theoretical and empirical framework to fill the gap in current literature and answer the question how sub-national institutions influence sequential expansion strategies of foreign investor in emerging market, and tests hypotheses arising from this framework in the case of Vietnam.

### **1** Literature Review And Hypotheses

#### **1.1** Impact of Infrastructure on Sequential expansion decision

Investment on infrastructure creates (i) production facilities and stimulates economic activities; (ii) reduces transaction costs and trade costs improving competitiveness. This study focuses on variations within one country and suggests that both formal and informal institutions are not homogenous. In terms of formal institutions, provinces or municipalities that have a one-stop agency to work with foreign investors and offer industrial zones with good infrastructure can greatly facilitate relations with investors (Meyer and Nguyen, 2005). Therefore, it is argued that:

Proposition 1: The development level of local infrastructure has a positive impact on the sequential expansion decision of foreign firms in that region.

There are three testable hypotheses developed to test this proposition in Vietnam.

Hypothesis 1-a: The area of land possessed by a firm positively relates to its sequential expansion decision.

Hypothesis 1-b: The ownership of land use right certificate (LURC) of a firm has a positive impact on its sequential expansion decision.

Hypothesis 1-c: Risk relating to LURC has a negative effect on sequential expansion decision.

## **1.2** Impact of Corruption -> Sequential expansion decision

Corruption is widely understood as "the acts in which the power of public office is used for personal gain in a manner that contravenes the rules of the game" (Meyer et al., 2009). Using a sample of 68 countries, Meyer et al. (2009) provided evidence that corruption negatively impacts growth. Hence, it is argued that:

Proposition 2: Local corruption level has a negative impact on the Sequential expansion decision of foreign firms invest into that region.

There are 3 hypotheses to test the proposition 2 in context of Vietnam.

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H2-a: Unofficial rent has a negative impact on sequential expansion decision.

H2-b: Unofficial payment has a negative impact on sequential expansion decision.

H2-c: Unofficial payment inefficiency has a negative effect on Sequential expansion decision

#### **1.3** Impact of Information Acquirability to Sequential expansion decision

In many emerging economies, weak institutional arrangements may magnify information asymmetries so firms face higher partner-related risks (Meyer & Nguyen, 2005) and need to spend more resources searching for information. Accurate and accessible information on law, regulation and other business indicators is a necessary requirement for efficient policy making, which will contribute to the sustainable business operation. It leads to the argument that:

Proposition 3: Acquirability of information about local investment environment has a positive impact on the sequential expansion decision of foreign firms invest into that region.

There are 2 hypotheses to test the above proposition in context of Vietnam.

H3-a: Accessibility to information on central laws and local polices has a positive impact on Sequential expansion decision.

H3-b: Predictability about information changes on central laws and local polices has a positive on Sequential expansion decision

#### **1.4** Moderating Effect of Entry Mode

Beginning with the seminal work of Peterson & Jolibert (1995), scholars have highlighted the unique barriers for foreign firms operating overseas, which are considered as "liability of foreignness". This stream of research has identified additional social costs for foreign investors operating outside of their home country. This can range from backlashes against foreign products to discriminatory treatment of foreign firms relative to domestic firms by government officials.

H4-a: Entry mode of foreign firms as WOS weaken the negative effect of LURC risk on sequential expansion.

H4-b: Entry mode of foreign firms as WOS weaken the negative effect of unofficial payment inefficiency on sequential expansion

# 2 Research Design

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## 2.1 Data

Firm-level data from "Provincial Competitiveness Index" Survey of 1,540 FDI firms operating in 6 different industries across 13 provinces in Vietnam, conducted by Vietnam Commercial Chamber Institute (VCCI) and United State Agency for International Development-supported Vietnam Competitiveness Initiative (USAID/VNCI), which consists of province-level indicators of public governance quality measured in 2012.

The primary subject of the survey is all types of domestic enterprises. Since 2010, PCI broadened its covered scope to foreign investment enterprises (FIEs). This study is dealing with survey on FDI firms only to figure out how local institution in host country impacts investment strategies of foreign firms. PCI FDI 2012 is the third annual survey of FDI firms conducted by VCCI and USAID/VNCI using mail-out survey in order to protect confidentiality of investors. The questionnaire survey was mailed out to over 5,000 registered FIEs in Vietnam based on the list of General Tax Authority. Foreign sample is only completed in 13 provinces with large investor populations (nationally representative survey). An associated group of college students randomly-assigned calls firms to remind them to complete survey and offer assistance on technical questions, which leads to a response rate of about 30%, varying slightly across provinces. In terms of firms' characteristic, among 1,540 responded firms, 87% are 100 percent foreign owned; 75% of firms from Asia (Japan, Korea, Taiwan, Singapore) and 20% are from US, EU, Australia.

#### 2.2 Model

#### **Binominal Logistic Regression**

A binomial logistic regression (often referred to simply as logistic regression), predicts the probability that an observation falls into one of two categories of a dichotomous dependent variable based on one or more independent variables that can be either continuous or categorical.

## 2.3 Measurement

#### **2.3.1 Dependent Variable**

Sequential Expansion: There are several items in the questionnaire survey can be used to measure this construct, for instance, whether and how much firm increased licensed investment size; whether firm registered to invest in a new project that involves a separate goods or service

since the first initial investment and firm's investment plans over the next 2 years. As the survey on local institution was conduct in 2012 and the first two items relate to fact occurred in the past, to ensure the causality between dependent and independent variables, the third item is used to measure firm's sequential expansion. It is also converted into dummy variable which takes value 1 if firm plans to increase the size of operation and 0 for otherwise.

### 2.3.2 Independent Variable

Infrastructure (proxy by the available of business premises):

• Land area firm presently utilizes in that province (ha)

• Ownership of land use right certificate (LURC): dummy variable which takes value 1 for owning LURC and 0 for otherwise.

• Risk on LURC: perception of the risk on business premises in 5 point Likert style from very low to very high.

Corruption:

• Unofficial rent: Respondents were asked whether they agree with the statement "Government officials draft/use local regulations within their competence to extract rents from local enterprises like us" and ranged in 4 point Likert style from strongly disagree to strongly agree.

• Unofficial payment: measured by the question "on average, what percentage of income do firms in your line of business typically pay per annum in unofficial payments to public officials?" with answer includes 6 categories from 0% to over 30%.

• Inefficiency of unofficial payment: measured by the question "If firm in your province pays the required 'additional payment' how often is the service delivered as the firm expected?" in 5 point Likert from number 1 means always to number 5 means never.

Information acquirability:

• Accessibility to provincial information: respondents were asked to rate their access to provincial documents and information which include provincial budgets; provincial socioeconomic development plans; central law, ordinances, decrees, decisions; plan for new infrastructure projects; land use allocation plans and maps, Official Gazette for legal documents in 5 point Likert style from impossible to very easy.

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• Predictability on changes in central and provincial policies: measured by the questions "How predictable are changes in laws at the central level"; and "How predictable is the implementation of these rules, laws, and regulations at the provincial level" in 5 point Likert style from never to always.

Moderating effect of Entry Mode

Entry Mode takes the value 1 if firm entered Vietnam market as wholly owned subsidiary and 0 for otherwise

## **2.3.3 Control Variables**

Firm age: number of years operating in Vietnam. Firm size: number of employee until 2012 (8 categories from less than 5 to 1000 and over). Firm Performance: firm's profit margin (net profit after taxes/revenue) (% of revenue in 8 categories from loss of 10% of revenue or greater to profit over 20%). Cumulative Investment: actual implemented investment capital until 2012 (6 categories from under 25 thousands USD to above 25 millions USD)

## **2.4 Conceptual Framework**

## Fig. 1: Proposed Research Model



Source: Authors' own proposed model

# **3** Empirical Results

To evaluate the impact of infrastructure, corruption and information acquirability on sequential expansion decision, Binominal Logistic Regression analysis was conducted. The results are showed in table 1.

Model 1 to model 3 tests hypotheses related to propositions on infrastructure, corruption and information acquirabilty, respectively. Model 4 and model 5 add the effect of either province or industry. Surveyed firms are locating in 13 provinces which have attracted most FDI projects in Vietnam (i.e Binh Duong, Bac Ninh, Ba Ria-Vung Tau, Da Nang, Dong Nai, TPHCM, Hai Duong, Ha Noi, Hai Phong, Hung Yen, Long An, Tay Ninh, Vinh Phuc) and belonging to 6 business fields (Industry / Manufacturing, Construction/ Investment in Infrastructure Construction, Service / Commerce, Agriculture / Forestry / Aquaculture, Mining, Finance / Banking / Insurance). Model 6 considers the effect of both province and industry dummy. Model 7 and model 8 test moderating effect of mode of entry without and with the aforementioned dummy variables respectively.

The results show that the overall explanatory power of the models is high, with chisquare statistics increases as more explained variables added. Among the models, model 6 has the highest chi-square and shows the significance in almost hypotheses.

All of 3 hypotheses developed from proposition 1, which points to the availability of real estate promoting sequential expansion, receives support, given the signs of coefficient are as predicted and statistically significant in as least one model. Hypothesis 1a, which implies that the more area of land owned, the more likely foreign investor increases the scale of business, is weakly supported as the coefficient is positive and significant at 10% in model 2 and 3. Whereas hypothesis 1b, which mentions that the ownership of land use right certificate positively effects to the decision of sequential expansion, is strongly supported (coefficient = 0.943, p<0.01). In addition, empirical result shows that risk on land use right has a negative and significant (coefficient = -0.245, p<0.01) effect on sequential expansion decision, leads to the support of hypothesis 1c. Overall, these results show support for three sub-hypotheses, and in consequence for the overall proposition 1 that the development level of infrastructure in a sub-region (proxy by the availability and stability of real estate) affects foreign investor's decision on sequential expansion into that region.

Tab.1: Estimated Result
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Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
LANDAREA	0.000	0.005	0.005	0.004	0.005	0.004	0.005	0.004
	(0.000)	(0.003)*	(0.003)*	(0.003)	(0.003)	(0.004)	(0.003)	(0.004)
LURC	0.530	0.641	0.714	0.786	0.821	0.943	0.591	0.813
	(0.184)***	(0.239)***	(0.258)***	(0.268)***	(0.283)***	(0.297)***	(0.263)**	(0.302)***
LURRISK	-0.135	-0.253	-0.231	-0.251	-0.204	-0.245	-0.089	0.185
	(0.087)	(0.116)**	(0.128)*	(0.129)*	(0.135)	(0.139)*	(0.315)	(0.339)
UNOFFRENT		0.349	0.483	0.492	0.447	0.478	0.482	0.492
		(0.171)**	(0.185)***	(0.187)***	(0.198)**	(0.202)**	(0.192)**	(0.211)**
UNOFFPAYM		0.039	0.038	0.081	0.064	0.116	0.007	0.092
		(0.113)	(0.124)	(0.128)	(0.134)	(0.140)	(0.129)	(0.145)
UNOFFPAYMINEFF		-0.167	-0.261	-0.285	-0.274	-0.310	0.250	0.051
		(0.105)	(0.116)**	(0.119)**	(0.125)**	(0.129)**	(0.305)	(0.343)
INFOACC			0.010	0.046	0.150	0.150	0.023	0.156
			(0.151)	(0.155)	(0.166)	(0.172)	(0.153)	(0.174)
INFOFRED			0.192	0.202	0.238	0.233	0.141	0.207
			(0.140)	(0.145)	(0.156)	(0.160)	(0.144)	(0.164)
WOS							1.908	2.603
							(1.096)*	(1.241)**
WOSLURRISK							-0.255	-0.581
							(0.345)	(0.375)
WOSUNOFFPAYMINEF							-0.579	-0.402
							(0.323)*	(0.364)
FIRMAGE	-0.091	-0.119	-0.115	-0.110	-0.116	-0.115	-0.117	-0.100
	(0.019)***	(0.025)***	(0.026)***	(0.027)***	(0.029)***	(0.030)***	(0.028)***	(0.032)***
FIRMSIZE	-0.053	-0.077	-0.100	-0.128	-0.073	-0.124	-0.079	-0.122
	(0.054)	(0.068)	(0.074)	(0.078)*	(0.079)	(0.084)	(0.077)	(0.086)
FIRMPERFORM	0.064	0.128	0.137	0.154	0.205	0.235	0.163	0.243
	(0.051)	(0.064)**	(0.072)*	(0.074)**	(0.078)***	(0.081)***	(0.075)**	(0.083)***
CUMULINV	0.036	0.060	0.092	0.084	0.050	0.033	0.115	0.073
	(0.060)	(0.077)	(0.084)	(0.086)	(0.089)	(0.092)	(0.086)	(0.095)
CONS	0.018	-0.231	-1.024	-1.703	-1.522	-1.871	-2.631	-4.163
	(0.417)	(0.643)	(0.905)	(1.272)	(1.336)	(1.630)	(1.341)*	(2.000)**
Province Dummies	Ν	Ν	Ν	Ν	Y	Y	Ν	Y
Industry Dummies	Ν	Ν	Ν	Y	Ν	Y	Ν	Y
Number of obs	743	490	443	422	442	421	432	412
LR chi2	35.22	57.57	62.19	64.71	97.91	105.5	64.01	105.03
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.000)	(0.000)	(0.0000)	(0.000)
Pseudo R2	0.0379	0.0912	0.1107	0.1200	0.1746	0.196	0.1170	0.199

\* p<0.05; \*\* p<0.01; \*\*\* p<0.001; Number in () is the standard error

Source: Authors' own calculation

The proposition 2 predicts that corruption has a negative effect on sequential expansion decision and examines through 3 hypotheses of unofficial rent, unofficial payment and unofficial payment inefficiency. While 3 hypotheses all predict that rent for unofficial payment of local officers, payment amount and the inefficiency of such a payment have negative effect on

sequential expansion decision of foreign firms, only the latter is supported as it shows the negative and significant effect (coefficient = -0.310, p<0.05). Hypothesis 2a on unofficial rent is significant but in opposite direction to prediction (coefficient = 0.478, p<0.05) whereas hypothesis 2b on unofficial payment is neither negative as predicted nor statistically significant, hence, both of them are not supported. Consequently, firms do not consider corruption as a serious obstacle for their business expanding but what matter is the efficiency of unofficial payment (Tse et al., 1997; Vernon Raymond, 2009).

The proposition 3 relating to the acquirability of information about the central and provincial policy includes 2 hypotheses of information accessibility and predictability on policy change. Both hypotheses are positively related to sequential expansion decision as predicted in hypothesis 3a and 3b, yet are not significant statistically. Therefore, it is failed to support hypothesis 3a and 3b. In terms of entry mode, the mode of entry as wholly owned subsidiary (WOS) positively affects firms' sequential expansion as shown in model 7 and model 8. However, it fails to support the hypothesis related to the moderating effect of entry mode as WOS, which is predicted to weaken the negative impact of both LUR risk and unofficial payment inefficiency on sequential expansion.

Among 4 control variables, namely firm age, firm size, firm performance and cumulative investment, only firm age and firm performance are statistically significant in explaining the sequential expansion decision. New firms tend to increase the scale of their operation more than old age firms (coefficient = -0.115, p<0.01) and firms with high firm performance also invest more in sequential stage (coefficient = 0.235, p<0.01).

### Conclusion

In conclusion, as many theoretical and empirical studies suggest that institutions crucially influence initial entry strategy as well as sequential investment strategic decision; this research has focused on how both formal and informal institutions affect sequential expansion strategy of foreign firms in Vietnam. A theoretical framework has been proposed to highlight the impact of institution development at a sub-national level on sequential expansion decision of FDI firms and an empirical test has been presented. The result has shown that there is a strong, robust, and positive relationship between market support institutions such as the availability and ownership of real estate on sequential investment decision of foreign firms. Whereas, out of primary

expectation, informal institution as corruption is not a constraints to firms' sequential expansion but only the inefficiency of bribe payment.

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