國立交通大學

科技管理研究所

碩 士 論 文

外人直接投資越南的決定因素

Determinants of Foreign Direct Investment in Vietnam

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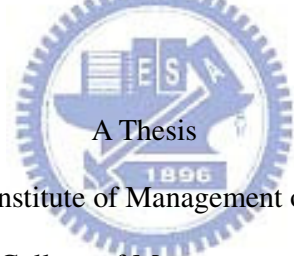
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ABSTRACT

Although Vietnam has attracted lots of foreign direct investment (FDI) over last two decades, Vietnam still suffers from a trade deficit with China which has become an export-oriented economy. As a way to diagnose this problem, this study aims to examine the determinants of foreign direct investments (FDI) in Vietnam, focused particularly on differences between two groups of top investors: Asian and non-Asian countries. The panel data regression model was built for each group of investors considering four determinants: relative gross domestic product (GDP), openness by adding exports and imports, relative wages, and relative exchange rates between Vietnam and FDI home countries. We selected these four determinants out of seven candidates based on step-wise regression modeling by SAS. According to the results, Asian investors' FDI showed a significant positive relationship with relative GDP and openness, but a significant negative relationship with relative wages and relative exchange rates. Non-Asian investors' FDI showed a significant positive relationship with relative GDP, but a significant negative relationship with relative wage. Openness and relative exchange rates were insignificant for non-Asian investors. From these results, we conclude that, in Vietnam, Asian investors are market-seeking FDI and resources-seeking for which market size or rate of return are important when deciding whether to invest. Non-Asian investors are rather efficiency-seeking FDI for which low cost of labor and/or infrastructure is more important than market openness and/or exchange rate. These results imply that the largest investors in Vietnam, Asian investors, have invested in Vietnam as a way to expand markets for their products. Related data also supports conclusions from our study.

Keywords – Vietnam, foreign direct investment, market-seeking FDI, efficiency-seeking FDI

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CHAPTER I

INTRODUCTION

1.1 An Overview

Since starting its economic reformation (*Doi Moi*, "renovation") in 1986, Vietnam has been one of the fastest growing economies in the region. *Doi Moi* facilitated marketization and decentralization, which boosted the foreign and private development in the national economy (Quang, 2002). According to state statistics, foreign investment has increased from virtually zero to about 99.596 million USD in 2007 (Vietnam General Statistic Office, 2008). According to United Nations Conference on Trade Development (UNCTAD) survey 2008-2010, Vietnam remains in sixth place because of the availability of skilled and cheap labor and its being the second fastest growing economy in the world behind only China (Appendix, table 11, UNTACD, world investment 2008). Especially, joining the World Trade Organization (WTO) in 2007 resulted in increasing FDI inflows in to Vietnam together with greater liberalization and FDI promotion efforts, particularly with respect to infrastructure FDI. Despite all the positive sides of FDI, Vietnam has suffered from trade deficits. Moreover, how to absorb FDI more efficiently is giving many Vietnamese policy-makers headaches. Therefore, one of the goals of this thesis is to study the characteristics of FDI inflows in Vietnam in order to provide policy makers a better

understanding about FDI's performances.

Despite increased attractiveness of Vietnam for FDI, there has been little research on the determinants of FDI in Vietnam. Organization fodr Economic Co-operation and Developemnt (OECD) explains that the observed pattern of FDI in Asia is mostly determined by the traditional ties between host and home countries, and partly by factors such as proximity, and cultural similarities (*Foreign Direct Investment and Recovery in Southeast Asia*, OECD publication,1999). However, no study has analyzed impacts on the Vietnamese economy by different regional investors using quantitative method. In that context, the division of investors allows us to identify the determinants of FDI in Vietnam depending on the group, leading to a better understanding about the characteristics of FDI sources. Therefore, taking into consideration the vital role of FDI in the future economic development of Vietnam, this paper attempts to study the determinants of FDI inflow into Vietnam depending on regions – Asian and non-Asian countries/regions.

1.2 Research Questions

Among the factors that led to Vietnam's renovation success, foreign direct investment has played a crucial role (Impacts of FDI in Vietnam 1988-2007). Despite the huge amount of FDI it has absorbed, Vietnam is distinct in the source-composition from other countries/regions in the world. There have been 84 countries and territories that have invested in Vietnam since the late

1980s, but the major part of this capital flow comes from Asian economies. Even though after the signing of US-Vietnam Bilateral Trade Agreement, investment from Non-Asian countries such as France, the Netherlands, and the United States has been increasing, it still only accounts for a small amount of total FDI. Up to the end of 2008, Singapore, Taiwan, Japan, Korea, and Hong Kong were the top investors and in 2008 constituted 50.25 percent of total FDI commitments. Therefore, there are many aspects of the FDI in Vietnam that cannot be fully appreciated without a comparison between two groups of investors. Thus one objective of this paper is to examine why Vietnam FDI source-composition has been so different from Asian and non-Asian countries/regions. We find the determinants of FDI to Vietnam and analyze how these variables are different from Asian and non-Asian investors. The paper is devoted to exploring the following two research questions

1. Characteristics of FDI in Vietnam

- How has Vietnam's FDI evolved during the last decades?

- What countries have contributed to the increase of FDI inflow to Vietnam?

- What are the geographical and sectoral distributions of FDI in Vietnam?

2. Determinants of FDI in Vietnam

- What factors drive FDI to Vietnam?

- Are these factors equally significant for Asian and Non-Asian countries?

-    How does FDI have influence on trade?

When these questions are investigated and answered, a better understanding of Vietnam FDI inflow can be created. It should help Vietnam policy makers identify features missed, and then make improvement current policies.

1.3 Contributions

Analyzing FDI flows into Vietnam is important for several reasons. First, on the subject of FDI, Vietnam remains under-researched. Although some empirical work has been done on the determinants of FDI inflows into Vietnam, the number of these works is still very small, and most of the analyses are at the sectoral or industrial level (Hoang; Ngoc & Ramstetter, 2004; Nguyen, Nguyen, Dinh, & Hanoi, 2007; Vu, 2008; Vu, Gangnes, & Noy, 2008). Furthermore, to the best of our knowledge there is no published empirical study on FDI that has been conducted and paid particular attention to the differences in determinants of inward FDI into Vietnam from Asian countries and non-Asian countries. Our empirical analysis employs a data set which includes 7 top Asian investors and 7 top non-Asian investors in Vietnam during the time period 2000-06. Dividing investors into two groups allows us to understand more determinants of FDI into Vietnam and helps to answer characteristics of Vietnam's industry.

Second, to the extent that FDI to Vietnam is driven by different factors, policies that have been successful for Asian investors may not be equally significant for Non-Asian investors.

Hence, our analysis will shed light on ways in which policy makers in Vietnam can attract FDI

more efficiently. Third, since FDI contributes to growth, it is important to know the factors that

affect FDI flows to Vietnam.

In sum, the findings of this study will provide a better understanding about Asian and

non-Asian investors. From that, implications for policy makers are broght out. In addition, this

study also contributes to the available literature on FDI by particularly examining the subject

with Vietnam.

1.4 Research Design

This paper utilizes a time-series cross-sectional panel data regression model to

investigate the determinants of foreign direct investment (FDI) into Vietnam by analyzing

macroeconomic determinants of FDI inflows into Vietnam depending on regional division –

Asian and non-Asian countries/regions. The annual data applied here are collected from 14

countries in the period 2000-2006. Among the countries there are seven Asian and seven

non-Asian countries. The descriptive statistics and t-tests are used for variable differences

between Asian and nine non-Asian countries, and then we employed the panel data regression

models to study four main FDI determinants.

1.5 Research Procedure

The structure of this research can be broken down into six chapters. The first chapter

consists of a general introduction concerning what will be researched. Chapter II begins with an overview of the Vietnamese economy and the current FDI status. In this chapter, development trends as well as the impact of FDI in Vietnam are examined. We also studied the sectoral distribution and illustrated the regional and source country of FDI in Vietnam.

Chapter III reviews the current literature on FDI and the theoretical framework. First of all, the subject of related FDI will be explained. Then the literature will focus specifically on the FDI's determinants. Specific attention is paid to the five main determinants which later will be studied in the Vietnam case. And finally, the two main articles which this research mainly based on are brought out and discussed.

Chapter IV explores the country specific determinants of FDI in Vietnam. In this section, a conceptual framework is constructed based on research questions and literature review. This section also describes how the data was collected, and the methodology of this research is explained.

Chapter V is devoted to the presentation of results and discussion of FDI impact on Vietnam's trade. A small comparison of China and Vietnam regarding their performance in FDI is done. And finally, the last part of this research, chapter VI, consists of conclusions, implications, limitations and future research.

CHAPTER II

FOREIGN DIRECT INVESTMENT AND THE ECONOMY IN

VIETNAM

Since the Vietnamese government launched an economic reform process called "Doi Moi" in 1986, Vietnamese socio-economy has made remarkable changes and witnessed great achievements. Both gross domestic product (GDP) and its trade with other countries grow dramatically. Vietnam's GDP steadily increased at an average of 7.2% per year. These great results and the increased openness of Vietnam's economy mainly due to Vietnamese government's import-substitution and export-oriented industrialization strategy in which trade and promoting FDI policies have the most favorable treatment in priority industries.

The purpose of this chapter is to examine the trends and impact of FDI in Vietnam. The major findings of this chapter are: (1) FDI has been only focused on three sectors such as oil, heavy industry and construction, which required lots of import. (2) Majority of FDI is from Asian countries (3) FDI in Vietnam is still dominant in the South regions, especially along the Mekong River

The chapter is divided into four sections: Section I provides an overview of the Vietnamese economy. Section II examines the policy and development of FDI in Vietnam.

Section III studies Vietnam's experience in utilizing foreign investment and it's characteristic.

The last section is devoted to conclude this chapter and its implication.

2.1 The Vietnamese Economy: An overview

Vietnam is located at the centre of Southeast Asia (figure 1). It has an inland border of

4,550km long and a complex of about 3,000 islands in Gulf. With a long coastal line of 3,260km

along the Pacific Ocean to the East, Vietnam is opening economy door to China, other ASEAN

countries and the world. This outstanding advantage of geographical makes Vietnam becoming a

potential place against other ASEAN countries in luring FDI flows.

Figure 1. Vietnam map
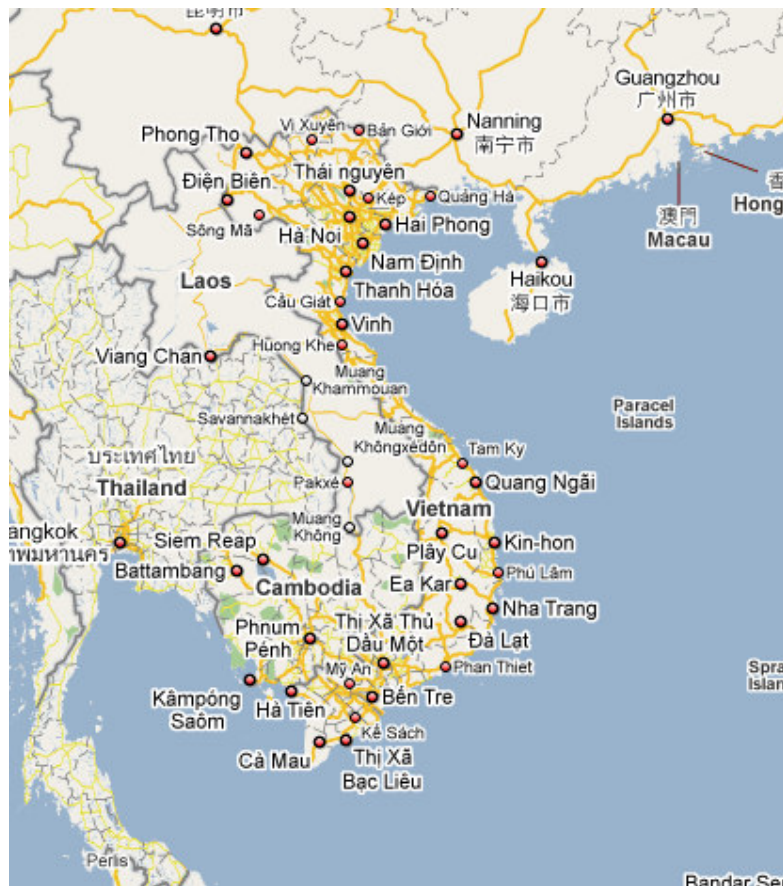
Source: Google map

Vietnam is populous, though is not a big country. The estimated population is 85.14

million inhabitants in 2007, a 1.22 % increase in comparison with that of 2006 (The World

Development Indicators). With a crowded population, Vietnam might be an appealing market for

companies focusing on domestic selling. Moreover, since the renovation in 1986 the ratio of

labor working in the areas of agriculture has decreased, and in parallel with that is the increasing

of the labor ratio in the industry and services (figure 2). In addition, the number of labor aged

15-64 is estimated to be 56.43 million, and the employment of labor aged 15-24 to population

ratio is about 66.1% in 2006. Comparing to China, Malaysia, and Indonesia, Vietnam has a

higher adult literacy rate (Le, 2003). Thus, huge young human resources with high level of

literacy provide Vietnam economy many opportunities to attract more investors..

Figure 2. Vietnam workforce structure.
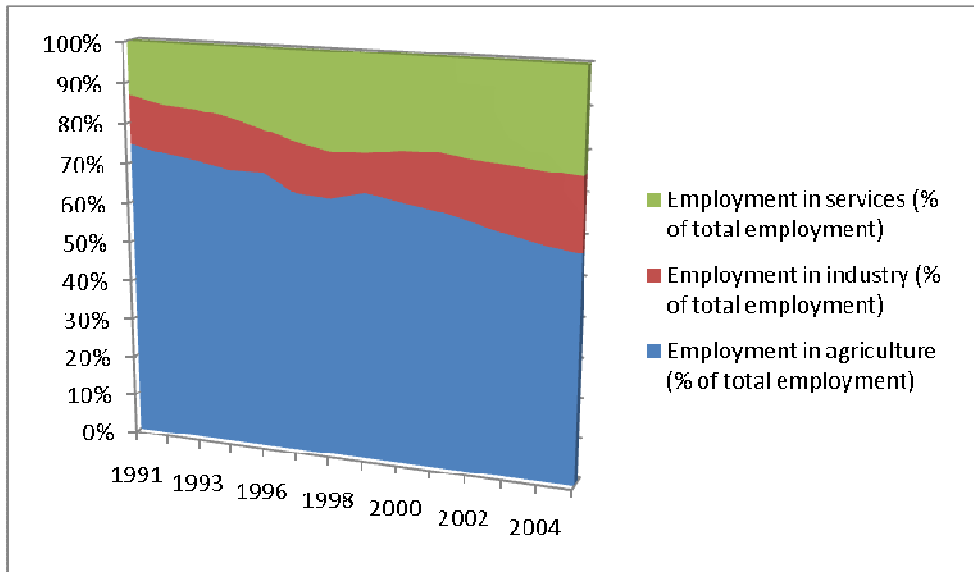
Source: World Indicator

About social political, Vietnam is considered one of the most stable environments in the

region according to Political and Economic Risk Consultancy, a Hong Kong-based organization,

which has ranked Vietnam the 1st in terms of the political and social stability after the 11th

September event. Besides, about 85% of Vietnamese are following Buddhism, and Vietnam has

almost no conflict among religion groups. Therefore, in comparison with other regional countries

such as Malaysia, Indonesia, Philippines, India and China, Vietnam has fewer problems

regarding religious and racial contradictions. For those regions, in 2007 and 2009, Vietnam has

been ranked in one of the safest countries in East Asia according to PERC (Political & Economic

Risk Consultancy Ltd, figure 3)

Figure 3. Overall Country Risk Ranking

Executive Summary to PERC's Asian Risk Prospects for 2009

Overall Country Risk Ranking
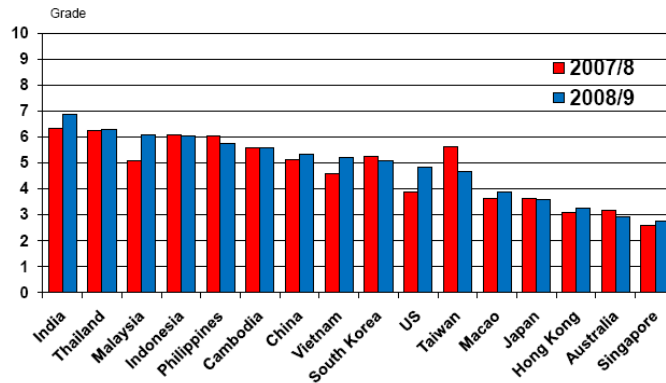
Grades are scaled from zero to 10, with zero representing the best situation possible and 10 the worst.

Source: Political & Economic Risk Consultancy Ltd.

Vietnam before 1986 was a poor country and had a close economy. In 1986, Vietnam has

embarked on "Doi Moi" renovation to transform from a planned economy into a market-based

economy, and has achieved a high stable GDP growth rate (table 1). Many important policies

have been employed during this two decades in order to stimulus the economy such as

transformation in agriculture which let farmers sell their producst, emloying a "three plans

system" in industry in which state-owned enterprises (SOEs) were permitted to engate in

commercial activities, fnancial reforms in which stock markets were established in 1997 and a

better monetary policy was adopted. Though Vietnam has achived very successful results from

"Doi Moi", it still has not totally done well in reformaiton such as according to IMF SOEs are

still under heavily protection of the government which leads to a huge loses (60%) from SOEs or

the policy system is still week

Table 1. Vietnam economic performance since Doi Moi.

Year	GDP (constant 2000 Billion US$)	GDP per capita (constant 2000 US$)	GDP growth (annual %)	GDP per capita, PPP (current international $)	GDP, PPP (current international billion $)	Exports (constant 2000 billion US$)	Imports (constant 2000 billion US$)
1986	12.2	202.8	2.8	509.6	30.7	0.0	0.0
1990	15.0	226.9	5.1	653.1	43.2	2.0	2.0
1995	22.3	305.2	9.5	991.7	72.4	6.8	7.3
2000	31.2	401.5	6.8	1416.5	110.0	17.2	17.9
2005	44.8	538.7	8.4	2142.8	178.1	37.0	41.2
2006	48.4	575.8	8.2	2363.1	198.8	45.4	50.0
2007	52.5	617.0	8.5	2599.8	221.3	53.5	61.3

Source: World Development Indicator, the 2007 World Bank Group

2.2 Policies and Trends

One of the most significant characteristic during the Vietnam's transformation from a

planned economy into a market-based economy is foreign direct investment. The huge amount of

investment inflow into Vietnam has made Vietnam among the fastest growing countries in the

Southeast Asia and one of the best countries among all developing countries in absorbing foreign

investment.

Foreign investment defined in Vietnam law on investment is the remittance of capital in

cash or other lawful assets by foreign investors into Vietnam in order to carry out investment

activities. In Vietnam, investors can be permitted to carry out the following forms of direct investment: One hundred percent of foreign investment which has been always the largest proportion of foreign investment; Joint ventures; Business cooperative contracts; Joint stock companies; Parent companies and subsidiaries; and the contractual forms of BCC (business co-operation contract), BOT (build-operate-transfer contract), BTO (build-transfer-operate contract) and BT (build-transfer contract)

Figure 4. FDI distribution by forms of investment
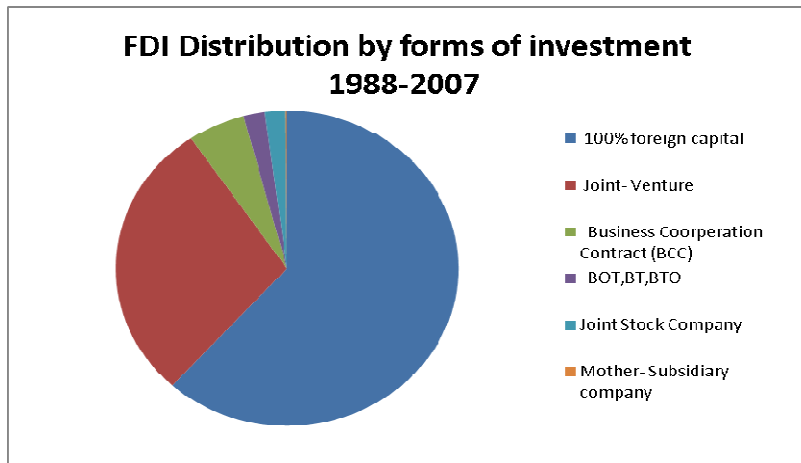
Source: FIA-MPI

The Law on Foreign Investment in Vietnam officially came into effect on 1st January 1988. Since then to the end of 2004, foreign investment into Vietnam underwent a period of 17 years and enjoyed great results. Figure 5shows the overall trend of FDI inflows in Vietnam since the beginning until 2006.

Figure 5. FDI development
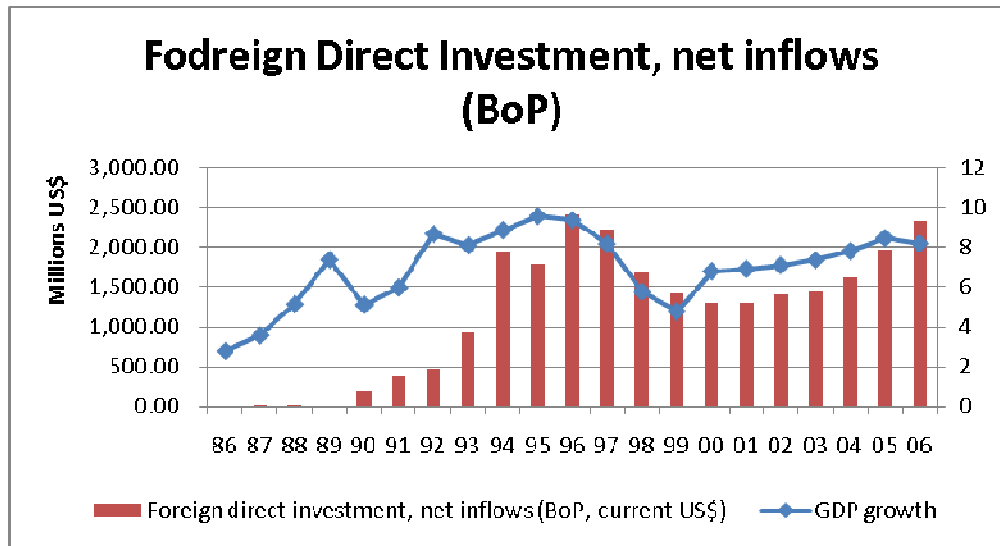
Source: Vietnam Government

During these two decades, along with the FDI development, Vietnam foreign investment laws and polices also have experienced a lot of changes, and four different phases can be distinguished: (i) the initial phase (1986 – 1990), during which FDI began to be permitted in Vietnam; (ii) the continuous development stage (1991 – 1996); (iii) the adjustment stage (1997-2001), in which Vietnam survived the Asian financial crisis in 1997; (iv) the high-growth period (2002-and onward), during which Vietnam's inward FDI surged

The initial stage (1986 – 1990)

During these initial years of renovation, Vietnam had implemented many plans to encourage the process of transformation from self-control to state enterprises, such as changing the internal structure of industrial sector, or setting up policies to encourage the development of

multi-sector economy. In 1987, the first law on foreign direct investment took effect. The big

market, cheap labor cost and the potential transitional economy attached a huge amount of FDI

into Vietnam. According to Vietnam government statistic results, during the short period of

1986 – 1990, Vietnam granted USD 1,582 million newly capital and in 1990 Vietnam FDI inflow

were USD 180 trillion (World Development Indicator)

The continuous developments stage (1991 – 1996)

This period was the flourish period of Vietnam FDI inflows. Together with the fast

growth of the first period, FDI inflows increased rapidly and peaked in 1996 at USD 2,395

million as a result of joining the ASEAN Free Trade Area, AFTA. It indicated a more relaxed

attitude towards foreign enterprises. Vietnam also made a commitment to eliminate tariff and

non-tariff barriers. In addition, during this period, series actions from the United States towards

Vietnam such as removing embargo and going to have the bilateral trade agreement with Vietnam

made Vietnam a very attractive to foreign investors and created an unprecedented surge in FDI in

Vietnam.

The adjustment stage (1997 – 2001)

The Asian financial crisis and the high world oil prices in the end were extremely bad for

many Asian countries' economies, and as a result, FDI from these countries dropped dramatically.

Especially for Vietnam whose major investors accounted for more than 50% amount of FDI inflows were from Asian country. During this period, Vietnam experienced a FDI inflow downfall, particularly 7% in 1997, 24% in 1998 and 15% in 1999.

The high growth stage (2002 – onward)

After Asian crisis, Vietnam tried to adjust the industrial structure of FDI. The Corporate Law officially took effect in 2000. And this event was the first step of the development of various non-state enterprises. The FDI inflows gradually increased again at the beginning of period with total amount of USD 1,400 million in 2002. Vietnam was striving to boost the market, so it created many favorable conditions for investors, and its entry into the World Trade Organization (WTO) turned out to be very attractive to foreign investors.

So far, the amount of accumulated FDI in Vietnam during 1988-2007 is $99,596.2 million (National Bureau of Statistic of Vietnam; GSO, 2008). And the amount of newly and increased FDI in Vietnam in the first 2 months of 2009 is $ 7,583 million (Vietnam Ministry of planning and investment).

2.3 Vietnam FDI Sectoral, Regional and Source Countries Distribution

As stated above, during the past 20 years of economic renovation, FDI has been an important driving force of the Vietnam transformation from an agriculture-based to an industry,

and services-based economy. In the beginning of the development, Vietnam was seen a natural

investment destination, and oil and gas were the most comparative factors of Vietnam to attract

investors to invest at first. Then with the very cheap labor cost, Vietnam has become an export

platform for foreign investors to reduce their production costs. By 2008, the manufacturing

sector is accounted for almost 60 percent of total foreign investments compare to 45 percent in

1990s. These early investment mostly concentrated in a relatively low technological contents,

such as textile, garment, and footwear. Other sectors also have been growing very fast are

construction, real estate and tourism-related investment as shown in figure 6

Figure 6. Vietnam FDI classified by segments
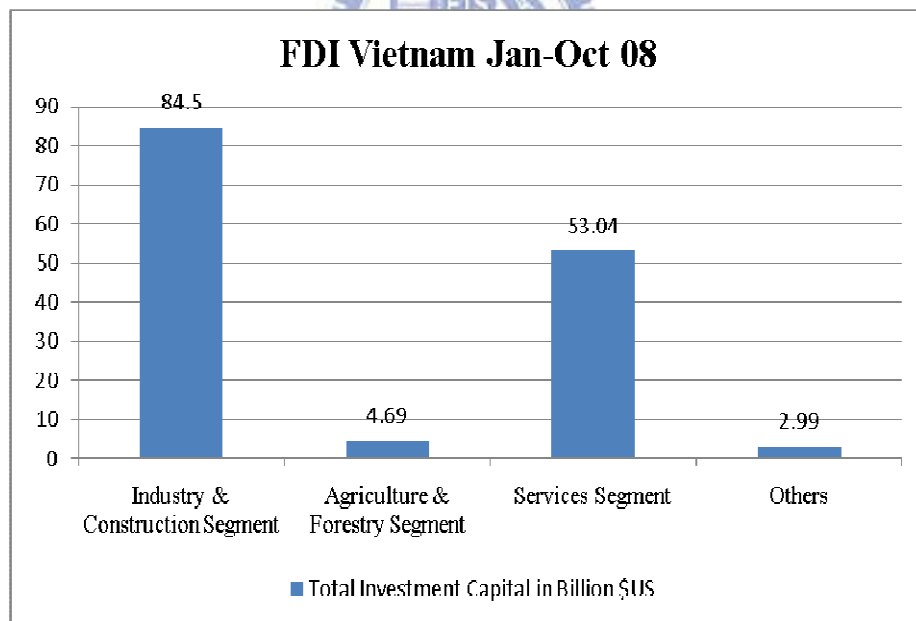
Source: Vietnam government

Although, most of the FDI focused on import substitute industries, exports industries

and exploiting the comparative advantage of Vietnam as shown in figure 7, there is a change in

17

the structure of manufacturing FDI which becomes more and more technological. In 2006, Intel announced its $1 billion investment in Vietnam to build up a semiconductor assembly, and Hong Hai – Foxconn, Taiwan wants to invest up to $5 billion of electronic and computer manufacturing in Vietnam. This indicates a good sign of the country's production changes.

Figure 7. Vietnam FDI classified by industries
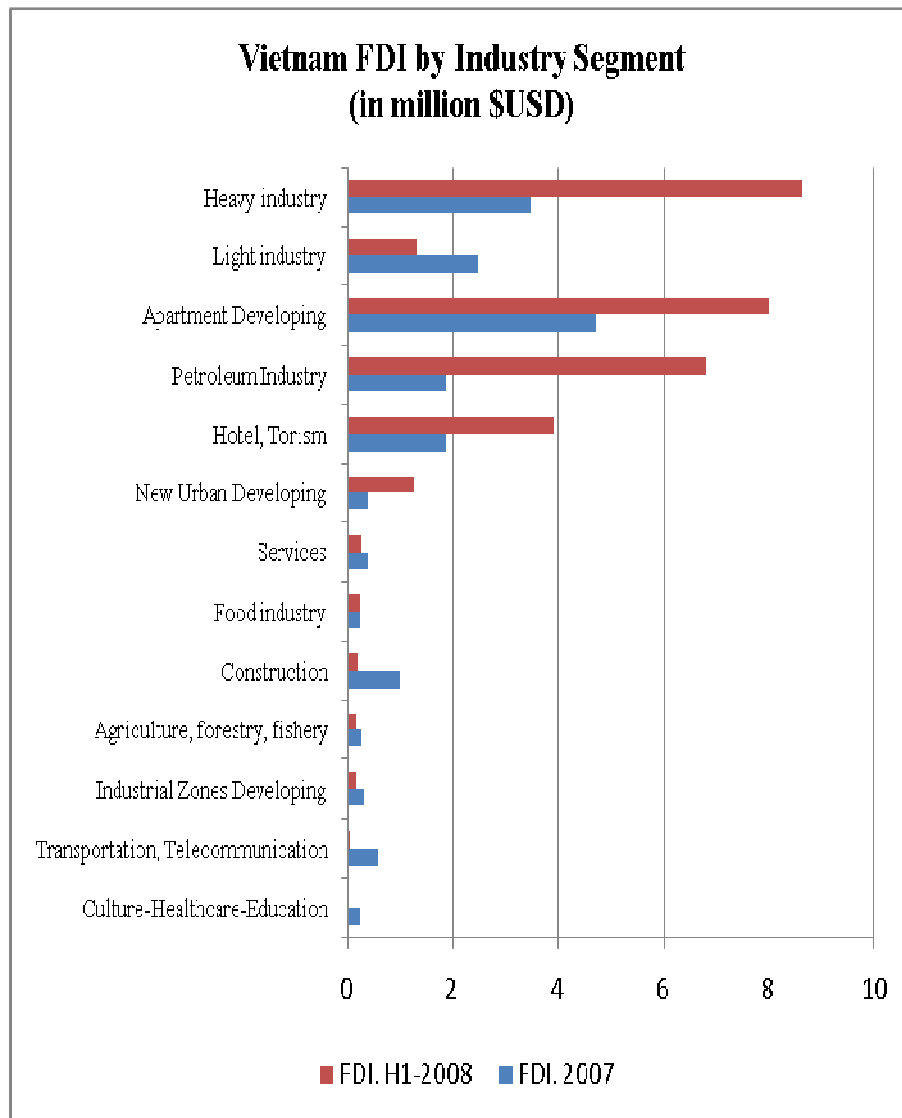
However, one of the notable characteristic about Vietnam FDI is the low level of FDI in

services, especially in telecommunication, media and finance. This happens is due to the Government's protection. Vietnam government wants to keep most service sectors away from foreign investors. The restrictions on FDI investments in services might cause the low quality, lack of innovation and higher cost to consumers. But this situation won't last for a long time since Vietnam jointed World Trade Organization and has committed to open its services sectors.

Another distinct characteristic of FDI in Vietnam from other countries' FDI is in its composition of source countries. Vietnam FDI can be characterized by the high dependence on Asian countries. Figure 8 shows the top 20 investors in Vietnam during 1998 and September 2007. Among those, over 60% lived in Asia. The relatively low proportions of FDI from non-Asian investors suggests that these investors are not very active in Vietnam

Figure 8. Vietnam FDI top investors
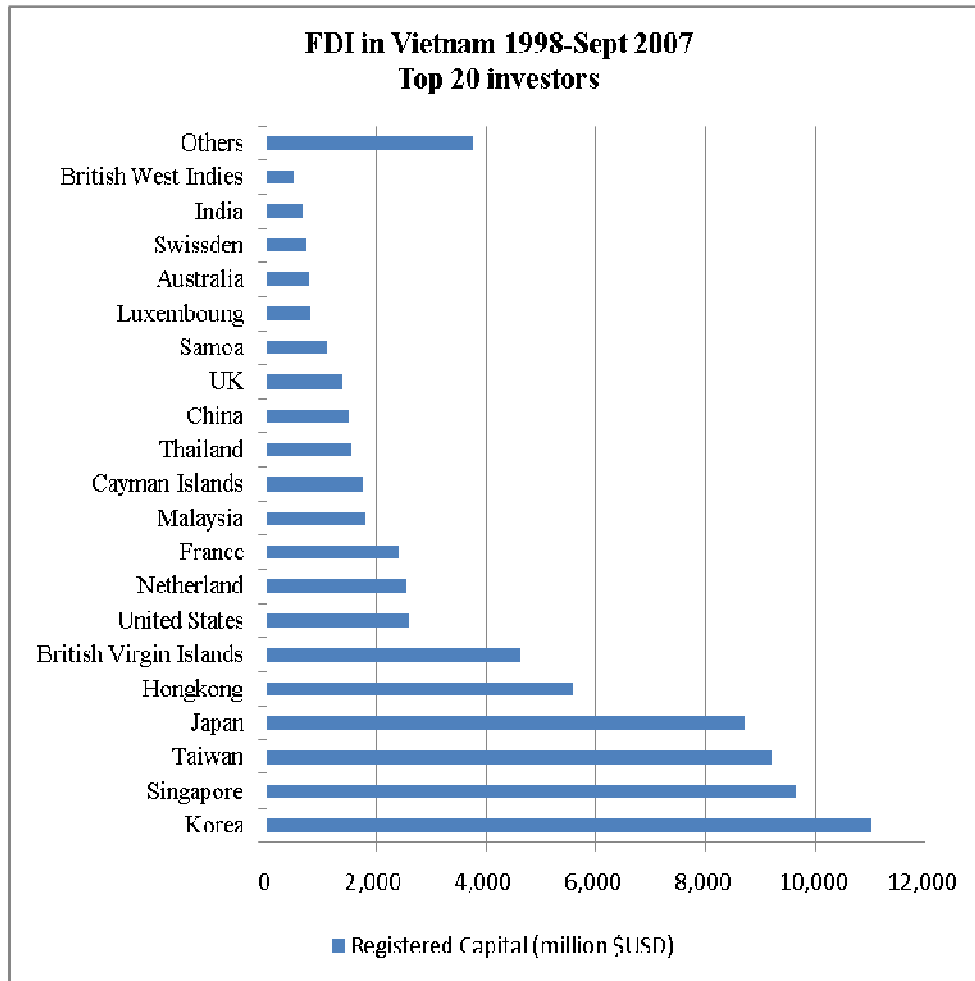
South Korea is the first largest FDI source country, with US$11,032 million, and

Singapore is the second, with US$9,654 million. Taiwan is the third, with US$9,221 million,

and mostly focus on apparel and textiles. One of the possible reasons for the large proportion of

FDI flows from Asia is the geographic distance between Vietnam and these Asian countries. In

addition, most of countries typically invest in Vietnam for reducing production cost, so that

Vietnam becomes very attractive to investors with a populous population as its comparative

advantage in labor-intensive products.

Foreign investment in Vietnam is very unequal across its 64 provinces, as shown in figure 9. The majority of FDI located in the southern part with about 50% of investment by 2008 as a consequence of the most developed infrastructure and available skilled labors. Therefore, this disparity in Vietnam FDI distribution is understandable and very common in all countries. Recently, there is a trend of FDI movement into the North part of Vietnam that is results of the Government's policy to attract investors and the better development of the Northern part.

Figure 9. Vietnam FDI classified by regions
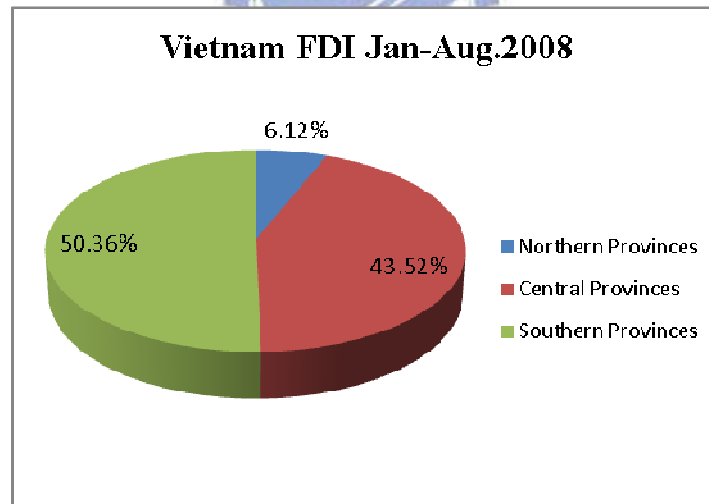
Source: Vietnam government

2.4 Findings of Vietnam FDI

During the past two decades of Doi Moi, Vietnam economy has changed very fast from agriculture based to a booming nation. And this economic transformation would not been

successful without FDI. Foreign investors have been the major force in boosting the Vietnam economy open up and more integrate with the World economy.

Vietnam started opening its economy with abundant natural resources such as oil, gas to attract resource-seeking investors. During the past 20 years, step by step its production structure transform from a manufacturing stage in which investments concentrate on a relatively low technological contents, such as textile, garment, and footwear, and on going to a more technology advanced stage in which investments focus on more advanced technological contents, such as electronic, computers equipments. Most of investments inflows are from Asian country, while from developed and high technology based countries such as EU, America are still a very small proportion. The inactive of non-Asian investors indicates that the Government needs to have more incentives to attract them. In addition, there is an uneven distribution of FDI in Vietnam across provinces. It is dominant in the South regions, especially along the Mekong River. Thus in order to reducing the gap among regions, the Government should have some fiscal incentives to encourage investors invest in less developed area. Moreover, the Government also needs to develop the infrastructure and have policies to diversify the FDI types into different sectors, such as more technological fields or on services and agriculture fields.

CHAPTER III

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

The World Bank (World Investment Report, 2007) defines Foreign Direct Investment as "an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate)" In order to gain a better insight to FDI, in this chapter, we review several major related theories which seek to explain various phenomena of foreign direct investment from different perspectives. In addition, as FDI grows more and more important to the world economy in general and specially to an individual country, it is essential and worth to look at the determinants of FDI inflows. Lastly, the theoretical framework related to this study is undertaken.

3.1 Theoretical Approaches to FDI

According to Charles W. L. Hill, most of theories approach from three complementary perspectives. The first theoretical perspective seeks to explain why firms often prefer FDI to other alternatives, exporting and licensing. The second set of theories seeks to explain why the same industry firms often direct their investment activities at the same time toward certain

locations. The last perspective is eclectic paradigm which attempts to combine the best aspects of

the two other perspectives into one explanation.

Some people argue that FDI is risky because of the cost when establishing facilities

production abroad and of the risk when operating in a different culture while exporting and

licensing can help to bear the costs and risks associated with FDI. However, as the matter of fact,

more and more firms apparently prefer FDI over either exporting or licensing. A branch of

economic theory has been developed to explain these phenomena. One of a very well known

theory is internalization theory. According to internalization theory, there are three drawbacks of

licensing strategy in exploiting foreign market opportunities: First, riskiness in revealing

valuable technological to a potential competitor; Second, difficulties in maximizing market share

and profitability because of not fully controlling over manufacturing market; Third, inefficient to

transfer competitive advantages which are mainly based on management instead of products

(Hill, 2007). This theory is first discussed by Coase, and he states that firms are more efficient if

using internal market (Coase, 1937). Then Casson argue that if firms own some specific

advantages which only they can internalize, it is better to go through FDI than licensing or

exporting (Casson, 1985). Because these advantages often take the form of management or

knowledge which is not amendable to licensing, the market for their transaction is likely to be

imperfect. Therefore, this approach is also known as the market imperfections approach. For

exporting strategy, it is often constrained by transportation costs and trade barriers such as tariff

or quotas, so that it reduces firms' profitability, special when firms have to shift products over a

large distance.

The two other theories are developed by F. T. Knickerbocker and Vernon to attempt to

explain the tendency of same industry firms direct their investment activities at the same time

toward certain locations. In Knickerbocker's statistical study of 187 large US multinational

enterprises, 46% of the new investments in each country were clustered in three year periods, and

75% within seven-year periods. This result demonstrates firms based in oligopolistic industries

tended to imitate each other's FDI in order to maintain their market position in each foreign

country (Knickerbocker, 1973). However, this theory does not explain the first mover who

decides to undertake FDI, yet the internationalization theory does. Therefore, the

internationalization theory is much more preferred. Besides those theories, another theory,

product life-cycle theory proposed by Vernon, is also used to explain FDI. The product life-cycle

theory is based on the observation that the mass production in 20th century was developed and

sold first in the U.S market (Vernon, 1993). Vernon argued that when having cost pressures or

having demand in foreign countries, often the same firms that pioneer a product in their home

markets undertake FDI to invest in low-cost location or produce a product for consumption in

foreign markets. However, this theory has a drawback which fail to explain why taking FDI is

profitable than exporting or licensing (Hill, 2007).

The widely accepted theory is the eclectic theory of FDI or is known as the ownership-location-internalization (OLI) paradigm (Dunning, 1988b) which considers the location-specific advantages in explanations of FDI. According to this theory, firms like to establish FDI to exploit assets or resource endowments, such as human resources. There are three advantages with which enterprises would open a subsidiary in a foreign country: (1) Ownership advantage which relates to advantages or specific assets which a firm owns in order to compete with its rivals, such as intangible assets like patent or band name; (2) Location advantage which refers to advantages of doing business offered by a host country to a multinational firm, such as cheaper labor, large market size, good environment, etc; (3) Internalization advantage which refers to an ability of a multinational enterprise to absorb the above two advantages rather than to exporting or licensing. A location-specific advantage is not only basic resources but also knowledge, such as some intellectual concentration area like science parks in Taiwan or Silicon Valley in US. This view is also supported by one well-establish theory by Krugman in which he suggests that firm can benefit from minimizing transport costs by locating in the resources region (Krugman, 1991). Therefore, a country can differentiate by creating industrialized "core or an agricultural "periphery" to attach FDI.

3.2 Determinants of FDI flows

To more understand about location advantages factor which affect multinational enterprises' motivation in undertaking FDI, it is essential to distinguish three main types of FDI international production based MNE activities: marketing seeking (import substituting), resource seeking (supply oriented), and efficiency seeking (rationalized investment) (Dunning, 1988a). And later Dunning proposed one more type of FDI which is strategic asset seeking FDI (Dunning, 2000)

Market-seeking FDI or horizontal FDI is driven by access to local or regional markets where firms can set up production to support goods and services (Markusen & Venables, 1998). Therefore, the size of market-population or the prospects of market growth is important determinants to attract this type of FDI. This investment will find and exploit new markets for firms' finished goods. Normally in order to survive in local market, the multinational enterprises have to possess special technologies which enable it to compete against local companies. And since this type of FDI requires firms to build up facilities and involving high technology, the firms often have a long contract with host countries, and in return the firm often asks for a higher level of development and higher requirements for human capitals and infrastructures from host countries.

Resource-seeking FDI or vertical FDI is investment focused on exploiting specific

resources such as raw material, natural resources, etc at a lower cost in host countries than the

cost which enterprises purchase at its home country. Therefore, this kind of investment is

motivated by foreign cheap labor. Firms often set up at least one production stage which involves

standardized technologies, but requires unskilled labor intensities, and then export products back

to home country or to third countries. So that FDI projects are often export oriented, and the

implications are low wages relative to home countries, trade costs such as tariffs and

transportation cost will give greater opportunities to multinational enterprises to invest, and so

will attract more FDI.

Efficiency-seeking FDI seeks to gain advantages from a lower cost structure in host

countries by transferring activities from home country. Therefore, policies stabilities, exchange

rate policies, fiscal and monetary policies and local conditions are important consideration.

Normally by undertaking this kind of FDI, enterprises want to rationalize its structure of

investment and diversify risk to have an efficient allocation of international economic activities.

Strategic asset seeking FDI aims to maintain and develop a firm's existing O advantages

to position its competitive advantages against other competitors.

3.3 Theoretical Framework

Those determinants stated above have been emerged in various empirical researches. In

this section, we begin with a brief overview of FDI determinants literature over the past decades.

The works of Barrell and Pain (Barrell & Pain, 1996), Rodrig (Rodrig, 2007) and Chakrabartim (Chakrabarti, 2001) suggest the following theoretical model of foreign direct investment:

$$Y = f(X, I, Z) \qquad (1)$$

Where Y denotes for net FDI; X represents for a set of variables related to aggregate demand; I is a set of interest variables, often include the host country's wage, openness, and real exchange rate; Z is set of other factors that measure different phenomenon from I, yet might influence the firm's level of production.

The variables' units are not always the same, so that a log-linear multiple regression is often used for this kind of specification model. The use of log-linear might help to reduce extreme values or transform non-linear relationship into a linear one (Wei, 2005). Therefore, the equation (1) can be written as:

$$Ln(Y) = \alpha + \beta_1 LnX + \beta_2 LnI + \beta_3 LnZ + \varepsilon \qquad (2)$$

where Ln represents natural logarithms.

A vast empirical literature has developed surrounding the issue of relationship between FDI and its determinants, yet still there is a lack of consensus about it. The aggregate demand or the size of the market of the country, often measured by Gross Domestic Product (GDP), is received the most widely accepted as a significant determinants of FDI flows. In order to utilize

resources and exploit economies efficiently, the large market-size is a crucial factor. Janicki and

Wunava in their analysis of determinants of FDI among 15 EU nations in 1997 demonstrates a

significant relationship between FDI and market size (Janicki & Wunnava, 2004). The results

obtained by Grosse & Trevino also reveals a significant positive relationship between the amount

of FDI and market size which is used as a proxy to pursue international expansion (Grosse &

Trevino, 1996; Rodrig, 2007)

Another factor which has been very popular as well as controversial part in an

explanation of FDI is the wage differentials between the source and host countries. Theoretically,

a rise in wage rate often associates with a fall in FDI or in other words, a lower wage rate of the

host country encourages firms to invest in order to reallocate production and obtain cheaper cost,

and hence FDI will rise (Janicki & Wunnava, 2004). There are, however, some studies find the

positive effect of wage in attracting FDI (Nankani, 1979). One of alternative explanation is that a

rise in wage might result from the development of economy which leads to the changes of the

factor price-ratio. The economy demands more capital as a substitution of labor, and hence FDI

increase. Another explanation is wage rate might not fully reflect labor cost. A rise in wage rate

could imply for a fall in labor cost when it is possible for productivity are not associated with

labor and increases far from wage rises (Yang, Groenewold, & Tcha, 2000).

A variable that also plays very important influence in determining FDI is the degree of

openness. Theoretically, openness measures the degree to which an economy is open to foreign trade and integrated with the world economic system, so that the more openness the economy is, the better and larger domestic market are offered for market seeking firms. On the other hand, some researchers argue that FDI inflows might be a substitution of trade, so that these two variables would be negatively correlated or in the other words a fall or a rise in FDI flows will be associated with a rise or a fall in trade flows (Yang, et al., 2000).

Another critical determinant of FDI in empirical work is related to exchange rate. And there is unclear evidence regarding the significant of exchange rate as well. The theoretical expectation is that there is a strong negative correlations between host countries' exchange rate and FDI inflow because a depreciation of the host country's currency allows foreign firms to purchase cheaper assets and technology so lowers relative cost of capital then increases the relative wealth position of foreign firms (Chakrabarti, 2001; Dees, 1998; Froot & Stein, 1991; Grosse & Trevino, 1996; Liu, Song, Wei, & Romilly, 1997). However, others have found a positive relationship (Froot & Stein, 1991; Thomas & Grosse, 2001; Wang & Swain, 1995). The main argument is the rate of return. When the host country's currency depreciates relative to others, the return of the asset in the foreign currency will go down because the profit will be converted back into the home country's currency. In addition, foreign firms' assets might engage in export or import activities, so that the effect of exchange rates on the value of assets is still

questioning.

As stated above, there has been a multitude of research focusing on foreign direct investment, yet literature studying FDI's determinants at macroeconomic level by using comparison of two different characteristic groups of investors is rather sparse. This study draws methodologies from both principal studies Zhang (Zhang HongLin, 2005) and Wei (Wei, 2005) that analyzed FDI in China, and then it is applied to Vietnam case.

Zhang uses a comparative analysis between FDI from Hong Kong-Taiwan (HKTDI) and from the European Union, the US, and Japan (the Triad) goes to Mainland China. The paper presents evidences that cannot be fully appreciated without understating China's location characteristic and differences between HKTDI and the Triad FDI. Four determinants are identified: labor cost, economic growth, trade barriers in which tariff rates are used and political instability which is employed as dummy variables defined by the author. The result reveals low labor cost as the primarily determinant which motivates HKTD investors. However, this paper just investigates the effects of individual determinants by measuring relatively the host country's conditions in comparison with other potential host countries, yet not with other home countries. Therefore, only series data, not cross-section data, is adopted (Zhang HongLin, 2005).

Wenhui Wei explores the determinants of inward FDI in China by using time-series cross-sectional panel data regression model for 15 OECD countries in 12 years. The findings of

this study's model suggest that the major driving force of attracting FDI in China is its domestic

market, rather than the low labor cost. However the paper studies the effects of determinants by

pulling all home countries together, yet not by comparative analysis which divides home

countries into different groups of investors (Wei, 2005).

Based on the above discussion of theories and empirical work, a panel data set is used and

a time-series cross-sectional model is developed to analyze the major determinants of FDI from

Asian and non-Asian countries into Vietnam. Four important determinants: market size as the

ratio of the host country to the home country, degree of openness as the ratio of trade (import plus

export) of host country to the home country, labor cost, and exchange rate between home and

host country are included in this study.
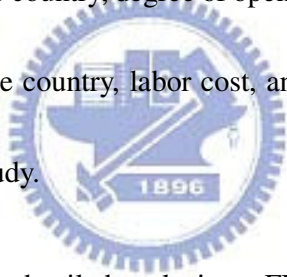
Regarding Vietnam, not any detailed analysis on FDI's contribution to growth has been

conducted. Although some empirical works have been done on the determinants of FDI inflows

into Vietnam, the numbers of these works are still very little, and most of the analyses are at

sectoral or industrial level (Hoang; Ngoc & Ramstetter, 2004; Nguyen, et al., 2007; Vu, 2008; Vu,

et al., 2008). Furthermore, to the best of our knowledge there is no published empirical study on

FDI that has been conducted and paid a particular attention to the differences in determinants of

inward FDI into Vietnam from Asian countries and non-Asian countries. Therefore, it calls for a

research on these aspects to understand more determinants of FDI into Vietnam and helps to

answer characteristics of Vietnam's industry.

CHAPTER IV

HYPOTHESIS, MODEL SPECIFICATION, AND METHODOLOGY

4.1 Hypothesis

Given that the literature review and the theoretical framework has been discussed and set

up in chapter III, specific hypotheses can be formulated for testing the framework as following.

❖ **H1 – Market Size**: *The higher the relative host countries' GDP to home countries'*

GDP is, the higher is FDI inflows to host countries

GDP may be seen as a measure of the future potential of the host country's domestic

market or the economic development. Therefore, as for market-seeking investors, the bigger the

market size is, the better infrastructure and the larger potential market the host countries have, so

that the better for them to set up, expand their production and sell their products in domestic

markets.

❖ **H2 - Openness**: *The* higher *the openness (exports and imports) between host countries*

and home countries, the higher FDI inflows is to host countries

The openness is often seen as the relationship between a country and the others.

Therefore, the higher the openness of host countries are, the more open they are to foreign

countries. That expresses the host countries promote FDI more and so that attach more foreign

investors.

❖ **H3 – Wage**: *The higher the relative host countries' real wage to home countries' real wage, the lower is FDI inflows to host countries.*

A cheaper relative real wage of host countries to other countries means a cheaper production in host countries, so that the host countries attach more investors.

❖ **H4 – Exchange rate**: *Exchange rate of host countries relative to that of home countries can have both positive and negative effects on FDI*

The higher exchange rate of host countries relative to that of home countries expresses depreciation in host countries' currency that means investors can sell their products abroad with a higher return. However, if investors sell their products in domestic market then convert profit to their currency or they have to import materials from abroad, then they get a lower return or more expensive in production.

To estimate the determinants of FDI into Vietnam, the data from 2000 to 2006 was employed. Top fourteen investors were chosen based on the availability of data and continuity of investment. These investors are South Korea, Singapore, Taiwan, Japan, Hong Kong, Thailand, China, Australia, Canada, Germany, UK, USA, Netherlands, and France.

We chose the period between 2000 and 2006 which appeared not to have serious

economic fluctuation affecting on investment - the year 2000 was just after the Asian financial

crisis and the year 2006 was just before Vietnam joined World Trade Organization (WTO). This

period may give us more objective results studying determinants of Vietnam's FDI inflow.

The data was collected from General Statistical Office (GSO) in Vietnam. Although

there is a concern that the data from Vietnamese government tends to be overstated, it is not

easy to find data about Vietnam in other sources. According to the data from GSO, there were 21

countries which had a continuous investment in Vietnam from 2000 to 2006. Table 4 shows the

amount of FDI from these countries. Among them, British Virgin Islands had no trade with

Vietnam. We also found out that there is little information available about Malaysia and no wage

information available for Denmark, so that we excluded these three countries from the country

set. Three outlier countries (Belgium, Italy, and New Zealand) were taken away because they

had significantly smaller amount of investment compared to other countries. Russia used to

have a special relationship with Vietnam so their investment may not represent typical FDI. So,

Russia was also excluded from our data.

For the analysis of difference depending on region, we divided countries into two

groups considering the important influences of geographic distance and cultural distance on FDI

inflows- Region 1 (called Asian countries) consisting of 7 countries such as South Korea,

Singapore, Taiwan, Japan, Hong Kong, Thailand, and China, and Region 2 (called Non-Asian

countries) consisting of 7 countries such as Australia, Canada, Germany, UK, USA, Netherlands, and France.

Summary statistics of the variables of the two investor groups and Satterthwaite method of t test used to classify the data are reported in Table 1

4.2 Data

To estimate the determinants of FDI into Vietnam, the data from 2000 to 2006 was employed. Top fourteen investors were chosen based on the availability of data and continuity of investment. These investors are South Korea, Singapore, Taiwan, Japan, Hong Kong, Thailand, China, Australia, Canada, Germany, UK, USA, Netherlands, and France.

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Table 2. Descriptive statistic and T-test results between two groups of investors

Variables	Mean (μ)		Std Dev (δ)		Minimum		Maximum		t – test
	Asian	Non-Asian	Asian	Non-Asian	Asian	Non-Asian	Asian	Non-Asian	(t ratio)
FDI (in $US million)	$291mil	$97mil	433mil	181mil	$6.58mil	$1.1mil	$2,769mil	$770mil	2.89***
Relative GDP	0.17	0.03	0.14	0.02	0.006	0.003	0.44	0.09	6.16***
Openness (in $US million)	4021	1646	2427	1784	854	136	10634	8832	5.52***
Relative Wage	0.19	0.3	0.25	0.01	0.007	0.009	0.99	0.07	4.5***
Relative Exchange Rate	1965	16015	2986	5277	11.04	7616	10066	29429	-16.22***
			(1.32)[a]	(-0.33)[a]					
Culture Distance	40.7	69.6	36.9	23.4	10	15	127	108	-4.61***
Geography	2067.9	9984	925.8	1975.5	868	7769	3672	13159	-25.4***

Note: The asterisks *** indicates significance at the 1% level. [a] *CV – Coefficient of Variation to compare Std of relative different size of data*

4.3 Model Specification

The purpose of this study is to examine the determinants of FDI inflows into Vietnam. The method of investigation in this research is the panel regression. Based on the existing literature review, we took a set of possible determinants of FDI: relative GDP between Vietnam and FDI home countries (RGDP), Vietnam import from FDI home countries (IM), Vietnam export to FDI home countries (EX), total Vietnam import from and export to countries (OP), relative real wage between Vietnam and FDI home countries (RW), relative exchange rate between Vietnam and FDI home countries'(REX), culture distance between Vietnam and FDI home countries(CulD), geography distance between Vietnam and FDI home countries (Geo), the number of double tax signed by Vietnam (DT), and the number of bilateral agreement signed by Vietnam (BA).
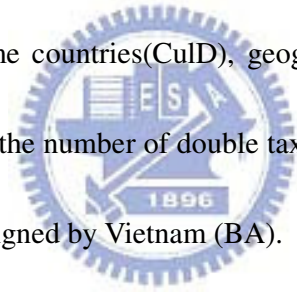
First, step-wise auto-regression and back-ward method were carried out to find most related variables to FDI in Vietnam. As a result, only 5 variables were left in the model representing the economic relationship with FDI such as RGDP, OP, RW, REX, and CulD. Then, descriptive analyses with five variables (Table 2) also support that these five variables are significantly related to the amount of FDI at 1% level of significance.

Second, the panel regression models were built for each group using four variables such as RGDP, OP, RW, and REX. Culture distance was excluded because except culture

distance, the rest four variables have cross-sectional time series characteristic. In addition, the culture distance was used in the beginning together with the geographic distance to divide countries into two groups, so that the influences of culture distance have already studied. Therefore, in this second step, we only considered the main four variables RGDP, OP, RW, and REX. The following model was constructed to express the relationship of these four economic variables with FDI inflows:

$$FDI_{it} = f(RGDP_{it}^{+}, OP_{it}^{+}, RW_{it}^{-}, REX_{it})$$

Where i and t denote country and time respectively; FDI: foreign direct investment denotes the annual real inward registered FDI into Vietnam from country i in year t; $RGDP_{it}$: the ratio of real Vietnam's GDP to real FDI home country i's GDP in year t; OP_{it}: the sum of real Vietnam's exports to and imports from a home country i in year t; RW_{it}: the ratio of Vietnam's real wage to a home country i's real wage; REX_{it}: the ratio of Vietnam's currency/US\$ real exchange rate to a home country i's currency /US\$ real exchange rate in year t;

Where "+" and "-"denote the expected effect of the potential determinants of FDI.

Data on amount of FDI, export and import to Vietnam were collected from Vietnam General Statistic Office (GSO) and the Ministry of Planning and Investment (MPI). Data on exchange rate was obtained from World Development Indicators (WDI, World Bank Group

2007). Information about wages was obtained from IMF International Financial Statistics

(2007). All the wages were converted to US dollars by current exchange rates. For wages in

Vietnam, they were decided based on the experts' opinion from Vietnam because of the

difficulty of collecting data.

The model can be rewritten as of the form:

$$FDI_{it} = CA_i \, RGDP_{it}^{\beta 1} \, OP_{it}^{\beta 2} \, RW_{it}^{\beta 3} \, REX_{it}^{\beta 4}$$

Therefore, the log-linear form of the above equation is:

$$\ln FDI_{it} = \beta_1 \ln RGDP_{it} + \beta_2 \ln OP_{it} + \beta_3 \ln RW_{it} + \beta_4 \ln REX_{it} + \mu_{it} \, (1)$$
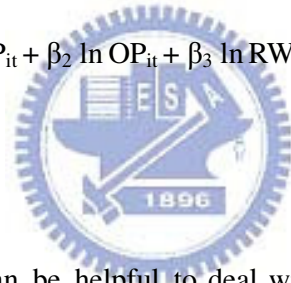
$$i = 1 \ldots N; \, t = 1 \ldots T$$

Applying a log-linear can be helpful to deal with several extreme values of FDI

which comes from certain countries in some year. In addition, the use of logarithm may help

to transform a likely non-linear relationship between inward FDI in Vietnam and the

explanatory (Wei, 2005)

It is very obvious that these four independent variables are longitudinal data

observed from different countries within Vietnam over time. Therefore, panel regression

model is the most appropriate way to deal with these kinds of cross section time series data.

F-test for No Fixed Effects and Hausman specification test showed that the fixed effect

regression model is the best statistical model.

Therefore, two panel regression models were built between the amount of FDI and the four macroeconomic factors mentioned above as independent variables for Asian and Non-Asian countries, respectively. For regression modeling, SAS 9.2 was used.

CHAPTER V

EMPIRICAL RESULTS AND ANALYSIS

5.1 Empirical results – Determinants of FDI in Vietnam

The descriptive statistic and t-test results, as shown in table 2, in the beginning

of the research show that more investment in Vietnam comes from Asian countries than

from Non-Asian countries. The relative GDP and the relative wages of the Asian

countries are lower than those from the Non-Asian countries. The relative exchange

rates and the degree of openness of the Asian countries are higher than those of the

Non-Asian countries. This shows that the bilateral trade between Vietnam and the nine

Asian countries is more than that with the Non-Asian countries. The results of t-tests

reveal that Asian and non-Asian countries show different behavior regarding to the

variables defined before.

After the t-test is conducted, the panel model is adopted to understand the

inward FDI determinants in Vietnam. At first, we conducted the panel model for all 14

countries. However, the results showed insignificant effects for all variables.

Moreover, the R-square was only 30% which is too low to prove that the model can

fully explain the relationship between FDI and other determinants. These results were

understandable since the data used by the model was significantly different inside. The data included 14 countries with very different characteristics; therefore, the relationship cannot be studied by pulling all those countries together. The separated models for each group of investors are necessary, and as shown in the table 3, the results of the estimation of the models for Asian investors and non-Asian investors are very significant. The adjusted-R2s which are higher than 80% indicate a good explanatory power.

Table 3. Panel regression model results

Independent variables	Asian Investors	Non-Asian Investors	All Investors
Intercept	12.52***(6.13)	12.65*** (2.72)	13.75*(1.90)
Ln(RGDP)	0.15* (1.77)	0.51* (1.69)	0.27 (0.32)
Ln (Op)	1.17*** (4.76)	0.24 (1.25)	0.79 (1.23)
Ln(RW)	-0.17** (-3.01)	-0.71*** (-6.63)	-0.2 (-0.66)
Ln(REX))	-0.18*** (-2.04)	0.2 (0.44)	-0.18 (-0.75)
R-Square	0.84	0.8099	0.30
M.S.E [a]	0.2987	0.3063	0.15
D.F.E[b]	44	44	93

Notes: t-values are in parenthesis and the asterisks ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.
[a] M.S.E: Mean squared error
[b] DFE: Degree of freedom

The relative wage and the relative GDP variables are significant and have the right signs as expected for both Asian and Non-Asian countries. The coefficients for the relative wage variable are positive. It reflects the fact that the higher the wage

differences between FDI home countries and Vietnam the stronger the incentive for that

FDI home countries to invest in Vietnam and to take advantage of the low wages of her

labor for manufacturing purpose. The positive coefficient for GDP is consistent with

our expectation that if the host country market expands more rapidly than the home

country market, the host country market becomes more attractive and home country

firms become more willing to enter the host country.

The major different determinant is Vietnam's exchange rate relative to the

home countries. The relative exchange rates have significant negative effect for Asian

countries, but positive though insignificant in the regression functions for Non-Asian

countries. For Non-Asian countries, there are pretty much different between Vietnam's

currency and Non-Asian country, so the fluctuation of Vietnam's currency is relatively

small compared to other countries' currency. When the relative exchange rates between

Vietnam and Non-Asian countries ratio are used, the REX coefficient of variation

become very small as 0.33 comparing to 1.52 that of Asian investors. Therefore, the

REX variable is relatively constant in this case so does not show its effects and become

insignificant in this model. In contrast to Non-Asian countries, the negative significant

effect of exchange rates for Asian countries supporting the theory of "rate-of-return",

in which the foreign investors get a lower return from invested assets when the host

country has a depreciation in its currency relative to other currencies.

The second different determinant is the degree-of-openness. Although they have positive signs as expected for both groups of investors, the degree-of-openness in the regression model is significant for Asian investors, but insignificant for Non-Asian investors. The positive coefficient for the degree-of-openness variable reflects that the bigger the bilateral trade between Vietnam and other home countries, the more i FDI inflow there will be from these countries. The insignificance for Non-Asian investors might be due to the fact that Vietnam is one of place for Non-Asian investors diversify their risk from other countries, and from the statistic results, the small amount of Vietnam trade with non-Asian investors might reflect their unconcern about the degree-of-openness. As a result, the degree-of-openness has an insignificant influence on the non-Asian investors' decisions.

In sum, we have labor cost and market size as the important determinants and have the right expected effects on both Asian and Non-Asian countries. However, the relative exchange rate and degree-of-openness are only significant for Asian countries. The exchange rate has a negative correlation with FDI, and that support to the hypothesis of lower returns on   assets for Asian investors when Vietnam's currency depreciates

5.2 Discussions and Policy Implications

From the empirical results, both larger market size and cheaper wage turned out to be important for investors regardless of regional difference. However, it is interesting to notice that openness and relative exchange rates are significant for Asian investors while they are insignificant for non-Asian investors.

Regarding this difference, Vietnam has large size of trade with Asian countries more than twice compared with non-Asian countries (figure 10). Table 2 also shows that Asian countries have had more FDI and trade with Vietnam than that of non-Asian countries. It can be interpreted that greater amount of trade with Vietnam is related to more FDI into Vietnam. These observations are associated with the empirical results which show a positive correlation between FDI and trade. However, as for non-Asian countries, their trade with Vietnam is much smaller compared to Asian countries, so trade becomes not a sensitive FDI determinant. This one is understandable since Vietnam, though, has been opening its economy for almost two decades, it's still a mystery place to non-Asian investors who are far away and very different in culture. In constrast for Asian countries, Vietnam is both the market for their products and the place of production relocation for cost advantage. Therefore, with the huge amount of trade, it looks reasonable that Asian countries' FDI are

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positively significant related to trade

In addition, most investments from non-Asian investors seem to focus on services and high-technology manufacturing to serve the domestic market. By 22/11/2008, the US was ranked number 11 out of 81 countries/regions investing in Vietnam with total investment amounting to 4.1billion, out of which 56.3% was for service with 52% of total for hotel and tourism only, such as Good Choice enterprise with $1.3US billion, Rockingham Asset enterprise with $112 million, Winvest Investment with $300 million (Vietnam ministry of planning and investment, 2008). By 22/09/2008, France is ranked number 13 out of 81 countries/regions and number 2 in EU countries investing in Vietnam with a total investment amounting to $2.36 billion, out of which 52.7% are for service, and some projects such as construction of water plan and Phu My power plant (Vietnam ministry of planning and investment, 2008). It shows that non-Asian investors are efficiency-seeking or market-seeking investors concerned with market size, infrastructure and/or labor costs and enterprises' advantages.

On the contrary, investments from Asian investors seem to diversify into different areas, but can be concentrated in two main fields: one is manufacturing - import-substitution, and the other is in export-based production as the result of

Vietnam government policies. By 12/2008, Taiwan was ranked the first investor out of 81 countries/regions invest in Vietnam with an investment amount of $19.65 billion in which 75.3% are for industry and construction, such as motorcycles, garments, cement, threat fiber, etc. Some big projects are the Taiwan-funded Hung Nghiep Formosa which focuses on textile plant, artificial thread plants, and plastics... with total investment of $7.879 billion; or cement ChinFon Haiphong with total investment of $459 million. Similar to Taiwan, Korea is another big investor in Vietnam with total investment of $16 billion by 31/10/2008, and most of investments are in industry and construction with 74.8%, such as steel Posco enterprises with $1.12 billion investment, light Orion –Hanel with $58 million investment. In addition, looking in more detail at the composition of sales of FDI enterprises (table 10), we can see that for mechanical and electronic products more than 70% while only around 20% of textiles, garment and footwear are sold in domestic markets. Even though this table is for all investors in Vietnam, since around 70% of investors in Vietnam are from Asia, we can conclude that this table pretty much reflects the Asian investors' behavior. This indicates that Asian investors are both market-seeking investors who are concerned about market-size and trade and resource-seeking investors who are concerned about labor costs. Moreover, the main exported goods are crude oil, marine products, garments, footwear, while the main imported goods are petroleum products,

steel and iron, machinery and equipments, leather and garment materials, motorcycles

(IMF, Vietnam statistical appendix, November, 2006). This shows that Asian

investors are involved in both import-substitution industry such as products of

machinery, equipment…and export-orientation industry with products such as

garment, leather, footwear…In addition, since Vietnam is an undeveloped country, it

cannot provide investors with all necessary materials needed. Therefore, majority

inputs, investors have to import from other countries (table 11). Since the large parts

of input production come from import, Asian investors become very sensitive toward

exchange rates. Although, the depreciation in Vietnam's currency relative to other

currencies though helps Asian investors gain profit from exporting cheaper products,

the profit cannot compensate for the increasing in cost of materials and assets which are

mainly acquired through imports from other countries

It is worth noting that Vietnam always has had trade deficit with FDI home

countries in Asia, but trade surpluses with FDI home countries in non-Asia regions.

(Figure 10 for trade balance details depending on country). Vietnam has trade deficit

with Taiwan of US 2.2 billion (BN), with Korea of about US 2.1 BN, with Singapore

of about US 1.9 BN, with China of about US 1.4 BN, and Hong Kong of about US 0.6

BN. On the other hand, Vietnam has a trade surplus with United States of about US 3.4

BN and with the EU of about US 1.6 BN. Since trade deficits with Asian countries are

much larger than trade surpluses with non-Asian countries, in general Vietnam has

trade deficits.   Does FDI contribute to Vietnam's deficits?

Figure 10. Vietnam Trade Balance (million of US$)

	00	01	02	03	04	05	06
American	369	655	1,995	2,795	3,891	5,061	6,858
EU	1,528	1,497	1,322	1,375	2,287	2,936	3,965
Korea	-1,401	-1,481	-1,811	-2,133	-2,751	-2,931	-3,066
Taiwan	-1,123	-1,203	-1,708	-2,166	-2,808	-3,369	-3,856
ASEAN	-1830.0	-1618.7	-2334.3	-2996.0	-3712.4	-3582.8	-5914.0
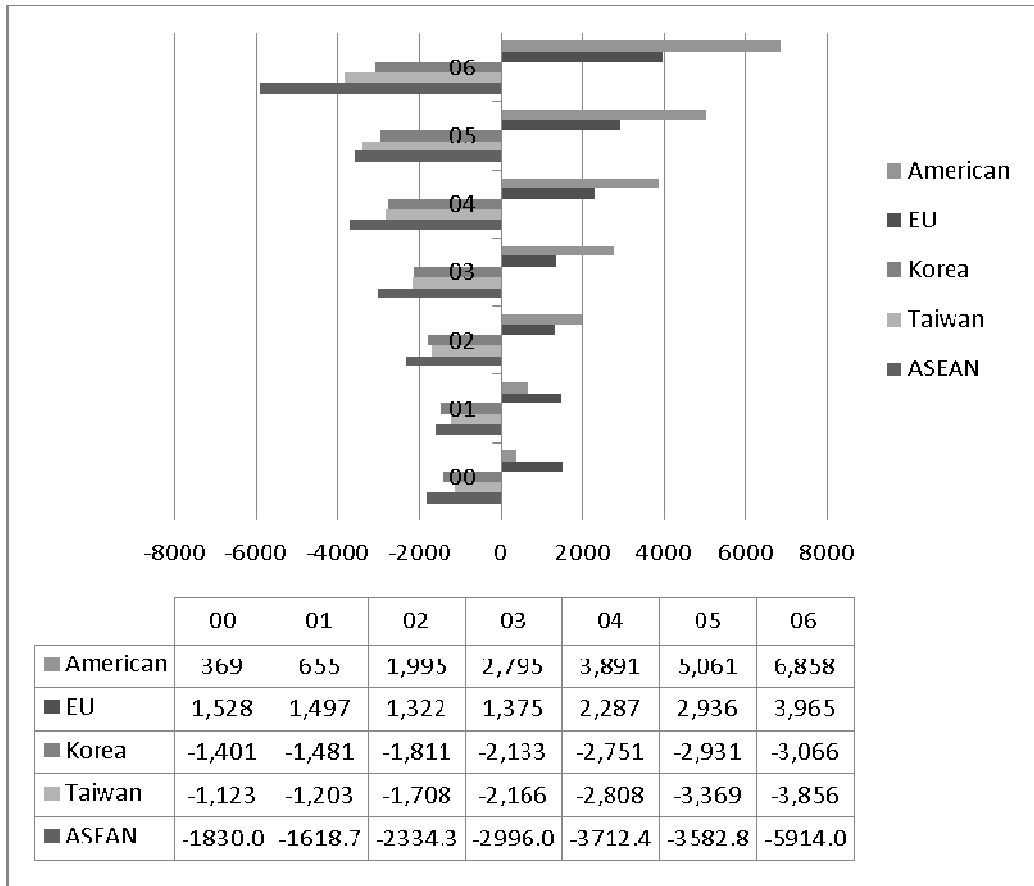
Source: National Bureau of Statistic of Vietnam; GSO, 2008

Maybe. Since the amount FDI inflows are dominated by Asian investors, the

impact of FDI on trade might come mainly from Asian investors' behavior. As

mentioned above, Asian investors have been involved in both export-oriented and

import-substitution areas. For export-oriented area, the Asian inflow FDIs help

expand Vietnamese exports and contribute to reducing the trade imbalances by

exporting footwear, garment, leather, and etc. However, Asian FDIs also increase

Vietnamese imports by importing a lot of machinery, equipment and materials used for input productions. Therefore, Asian FDIs have both negative and positive impacts on Vietnamese trade imbalances. For non-Asian investors, mostly their investments focus on services and high-tech industry to serve the internal market, so that it does not have so many influences on trade deficit.

There has been many articles discuss about Vietnam trade deficit's issue. Some argue that it is necessary and a must have for any developing country whose market is thirsty for capital and new technology. However, looking at China, though it is a big country, China is still a developing country and quite similar to Vietnam in terms of large proportion of Asian investment in FDI source-countries composition compared to the proportion of Non-Asian investment (figure 11). China always has trade surpluses. This might be a question for Vietnam policy makers. Does Vietnam have enough incentives toward the export-oriented FDI and are the existing incentive well received by Asian investors? And, more policies to attract Non-Asian investors are needed

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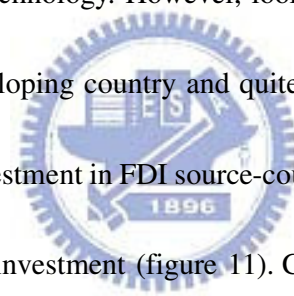
Figure 11. Vietnam and China FDI by home countries
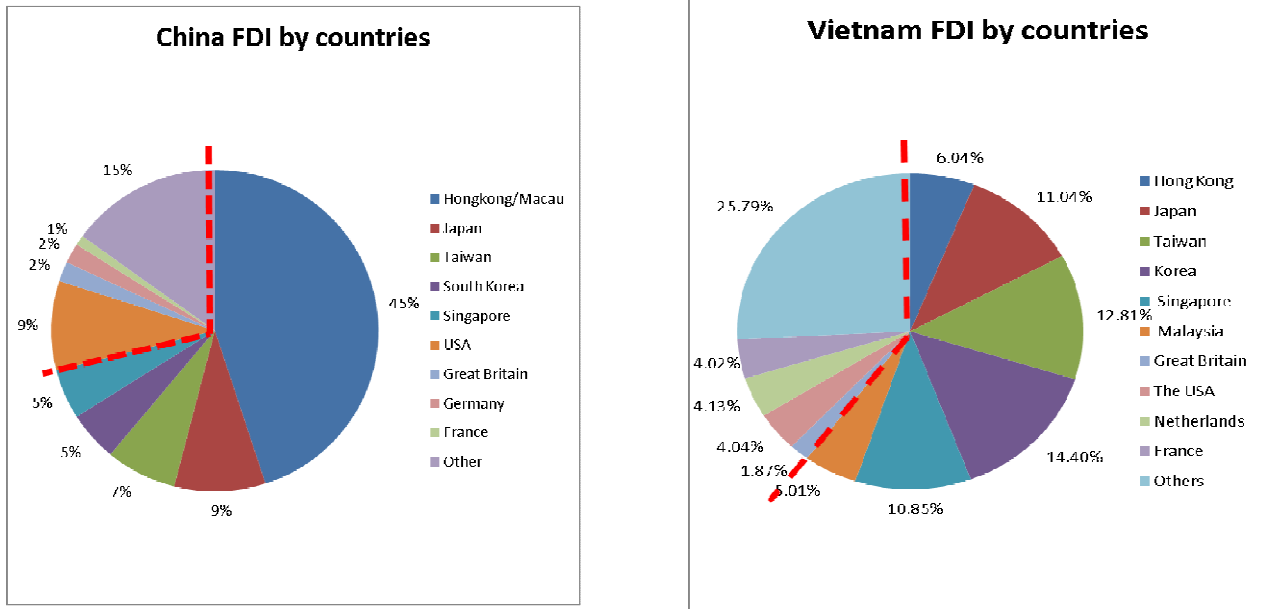
Source: Vietnam and China govermnent

Table 4. Key Economic Indicators for Vietnam and China

Year	GDP Per Capita		GDP Growth		Export (in million USD)		Import (in million USD)		Net Export (in million USD)	
	Vietnam	China	Vietnam	China	Vietnam	China	Vietnam	China	Vietnam	China
1998	356	821	6%	8%	11,977	207,424	13,496	163,587	-1,519	43,837
1999	370	864	5%	8%	14,033	220,964	13,608	190,323	425	30,641
2000	402	949	7%	8%	17,150	279,561	17,325	250,688	-175	28,874
2001	415	1,042	7%	8%	17,837	299,409	17,928	271,325	-91	28,084
2002	440	1,135	7%	9%	19,654	365,395	21,458	328,012	-1,804	37,383
2003	480	1,274	7%	10%	23,421	485,003	26,780	448,924	-3,359	36,079
2004	553	1,490	8%	10%	30,352	655,827	33,511	606,543	-3,159	49,284
2005	635	1,715	8%	10%	36,623	836,888	39,358	712,090	-2,735	124,798
2006	711	2,027	8%	12%	44,926	1,061,682	47,710	852,769	-2,784	208,912
2007	806	2,432	8%	13%	54,591	1,342,206	65,845	1,034,729	-11,254	307,477
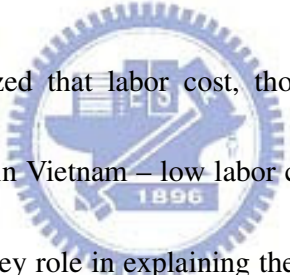
Source: World Development Indicators - The World Bank Group, 2007

CHAPTER VI

CONCLUSION

The vast majority of empirical studies analyzing the determinants of foreign investment in Vietnam have tended to look at regional factors or sectoral factors. This study focuses on macroeconomic factors. In particular, studying determinants of FDI from Non-Asian and Asian countries is interesting for FDI theories and important for policy makers.

It should be emphasized that labor cost, though, are the motivation for a substantial proportion of FDI in Vietnam – low labor cost seeking for both Asian and Non-Asian countries plays a key role in explaining the behavior of FDI. The findings confirmed that Vietnam's potential domestic market, high trade integration with the world, and cheap labor costs are the major factors that have been attracting foreign investors.

In addition, the panel data approach was utilized to analyze the determinants of FDI in Vietnam, and this study confirms the hypothesis that there exist different determinants of FDI in Vietnam from the Asian and non-Asian countries. It is showed by the study's results that openness and relative exchange rates are significant for

Asian investors while they are insignificant for non-Asian investors. These results are consistent with the behavior and characteristics of Asian investors, which are market-seeking and resources seeking, and non-Asian investors which are efficiency-seeking or market-seeking. Moreover, the uneven distribution of FDI across industries and across source countries also contributes to Vietnam's trade imbalances. Therefore, Vietnam's government should have policies to increase diversification of the types of FDI – such as, widening the focus from export-oriented manufacturing to other sectors, including agriculture and food processing and moving from manufacturing low technology advanced productions to higher technology. Besides, the Government also needs to strengthen policies to keep encouraging exports. Attracting more non-Asian investors in high technology fields is also needed.

The findings of this study may contribute additional facts to support or enhance the theories of FDI. It could also help the Vietnamese government to develop appropriate FDI policies to attract potential investors from Asian and non-Asian countries.

Obviously, there is still much that needs to done on the studies of the quality of FDI in Vietnam. Characterization of FDI has not been fully studied. If data on Vietnam's sector/industry-level realized FDI data are available, it will surely deepen

our understanding of the determinants of FDI in Vietnam. More country and industry

level FDI data over longer periods of will also help us gain more insight into this

problem.

APPENDIX

Table 5. Taiwan FDI by sector

(Accumulated amount - 22/08/2008)

Sector	FDI Projects	Total Amount	Percentage
Industry and Construction			**82.50**
Heavy industry	675	4,340	22.10
Light industry	632	10,327	52.60
Foodstuff industry	44	130	0.70
Construction	109	1,408	7.20
Agriculture, forestry, fish-breeding			**6.30**
Agro-forestry	311	1,156	5.90
Sea products	35	79	0.40
Service			**11.20**
Services	61	74	0.40
Transportation - Post	11	12	0.10
Hotel - Travel	16	833	4.20
Finance - Banking	7	133	0.70
Culture-Healthcare-Education	18	38	0.20
Building infrastructure for EPZs & Izs	8	304	1.50
Building offices - apartments	13	816	4.20

Source: Vietnam Ministry of Planning and Investment

Table 6. Korea FDI by sector

(Accumulated amount - 22/08/2008)

Major	FDI Projects	Total Amount (in million $US)	Percentage
Industry and Construction		**8,911**	**54.8**
	1,521		
Oil and gas industry	2	112	0.7
Heavy industry	433	3,824	23.5
Light industry	897	3,518	21.6
Foodstuff industry	41	301	1.9
Construction	148	1,156	7.1
Agriculture, forestry, fish-breeding		**170**	**1.0**
	94		
Agro-forestry	70	130	0.8
Sea products	24	39	0.2
Service		**7,187**	**44.2**
	444		
Services	262	485	3.0
Transportation - Post	45	342	2.1
Hotel - Travel	36	1,203	7.4
Finance - Banking	7	85	0.5
Culture-Healthcare-Education	50	302	1.9
Building infrastructure for EPZs & Izs	4	169	1.0
Building new urban areas	3	776	4.8
Building offices - apartments	37	3,825	23.5
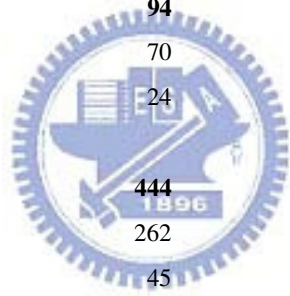
Source: Vietnam Ministry of Planning and Investment

Table 7. Japan FDI by sector

(Accumulated amount - 22/08/2008)

Major	FDI Projects	Total Amount (in million $US)	Percentage
Industry and Construction	**690**	**14,547**	**86.3**
Oil and gas industry	5	6,295	37.3
Heavy industry	445	6,107	36.2
Light industry	186	960	5.7
Foodstuff industry	25	205	1.2
Construction	29	979	5.8
Agriculture, forestry, fish-breeding	**64**	**193**	**1.1**
Agro-forestry	53	154	0.9
Seaproducts	11	39	0.2
Service	**265**	**2,244**	**13.3**
Services	173	230	1.4
Transportation - Post	29	501	3.0
Hotel - Travel	13	126	0.7
Finance - Banking	5	138	0.8
Culture-Healthcare-Education	28	130	0.8
Building infrastructure for EPZs & Izs	2	14	0.1
Building new urban areas	1	100	0.6
Building offices - apartments	14	877	5.2

Source: Vietnam Ministry of Planning and Investment

Table 8. France FDI by sector

(Accumulated amount - 10/10/2008)

Major	FDI Projects	Total Amount (in million $US)	Percentage
Industry and Construction	**93**	**867**	**36.7**
Heavy industry	32	68	2.9
Light industry	44	618	26.2
Foodstuff industry	9	29	1.2
Construction	8	152	6.4
Agriculture, forestry, fish-breeding	**26**	**218**	**9.2**
Agro-forestry	25	216	9.1
Seaproducts	1	2	0.1
Services	**97**	**1278**	**54.1**
Services	53	167	7.1
Transportation - Post	8	677	28.7
Hotel – Travel	17	264	11.2
Finance – Banking	7	66	2.8
Culture-Healthcare-Education	11	50	2.1
Building offices - apartments	1	54	2.3

Source: Vietnam Ministry of Planning and Investment
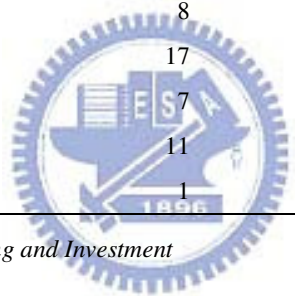
Table 9. USA FDI by sector (Accumulated amount – 10/10/2008)

Sector	FDI Projects	Total Amount in million $US	Percentage
Industry and Construction	254	1240	25.8
Agriculture, forestry, fish-breeding	226	860	17.9
Service	131	2700	56.3

Source: Vietnam Ministry of Planning and Investment

Table 10. Composition of sales of FDI enterprises (unit: percent)

	2001	2002	2003
Mechanics - Electronics			
Export	25.34	25.14	24.36
Domestic sales	74.66	74.86	75.64
Sales to domestic enterprises	42.64	42.98	43.83
Sales to FDI enterprises	21.34	20.49	20.32
Self distribution	36.02	36.53	35.84
Textiles, garment and footwear			
Export	79.96	79.43	79.81
Domestic sales	20.04	20.57	20.19
Sales to domestic enterprises	35.79	33.97	34.11
Sales to FDI enterprises	3.16	2.78	2.78
Self distribution	61.06	63.25	63.11
Food processing			
Export	25.8	27.76	23.21
Domestic sales	74.2	72.24	76.79
Sales to domestic enterprises	60.08	48.39	48.39
Sales to FDI enterprises	13.06	13.48	13.03
Self distribution	26.85	38.14	38.58

Source: Enterprise survey by Central Institute for Economic Management(2004)

Table 11. Sources of inputs to FDI enterprises (unit: percent)

	2001	2002	2003
Overall for three industries			
From domestic enterprises	31.65	31.05	31.7
From FDI enterprises	16.2	17.85	16.89
From other sources (import, etc.)	51.96	51.1	51.41
Mechanics – Electronics			
From domestic enterprises	17.37	18.71	20.43
From FDI enterprises	8.02	9.73	10.32
From other sources (import, etc.)	74.47	71.56	69.25
Textiles, garment and footwear			
From domestic enterprises	35.68	34.88	37.15
From FDI enterprises	24.29	23.82	23.35
From other sources (import, etc.)	39.62	41.3	39.5
Food processing			
From domestic enterprises	48.18	44.92	41.98
From FDI enterprises	18.64	22.76	18.91
From other sources (import, etc.)	33.18	32.31	39.11

Source: Enterprise survey by Central Institute for Economic Management (CIEM) (2004)

Table 12. Investors Distribution

(Registered capital in million USD)

No	Country	2000	2001	2002	2003	2004	2005	2006	Sum	Percentage
1	South Korea	75	122	292	354	401	640	2,770	4,653	19%
2	Taiwan	285	479	355	350	488	415	220	2,592	11%
3	Japan	84	188	115	125	280	459	1,034	2,285	9%
4	Hong Kong	20	76	163	122	202	460	1,180	2,223	9%
5	The USA	31	120	164	58	69	262	770	1,474	6%
6	The Netherlands	668	578	1	39	48	33	91	1,458	6%
7	BritishVirginIslands	118	102	113	211	252	176	471	1,444	6%
8	Singapore	47	269	268	81	134	164	436	1,399	6%
9	China	26	78	82	158	85	79	344	851	3%
10	The UK	539	7	17	9	15	30	40	656	3%
11	France	9	412	6	19	7	19	36	509	2%
12	Malaysia	10	30	112	61	94	165	19	493	2%
13	Australia	58	18	11	163	41	6	10	307	1%
14	Canada	4	2	11	25	160	36	27	264	1%
15	Thailand	21	46	37	57	7	33	62	262	1%
16	Russia	59	17	29	10	28	2	7	153	1%
17	Germany	8	7	8	4	6	15	27	75	0%
18	Denmark	5	3	0	6	16	28	9	68	0%
19	Belgium	5	5	0	1	19	3	1	34	0%
20	Italy	1	1	8	5	3	10	0	27	0%
21	New Zealand	3	1	1	1	1	0	7	13	0%
	Others	89	52	113	128	210	1,586	1,162	3,340	14%
	Sum	2,165	2,614	1,906	1,987	2,566	4,621	8,722	24,581	100%

Source: National Bureau of Statistic of Vietnam; GSO, 2008

Table 13. Vietnam Imports by SITC

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
TOTAL (in $US Million)	8155.4	11143.6	11592.3	11499.6	11742.1	15636.5	16217.9	19745.6	25255.8	31968.8	36761.1	44891.1
Primary products (%)	23.5	19.3	18.4	17.2	19.3	22.6	22.7	21.3	20.9	22.9	25.3	25.6
Food, foodstuff and live animal	4.7	3.7	3.7	4.0	4.3	4.0	5.1	4.8	5.0	4.7	5.3	5.1
Beverages and tobacco	1.0	0.4	0.7	1.1	0.7	0.7	0.7	0.8	0.6	0.5	0.5	0.3
Crude materials, inedible, except fuels	5.6	3.7	3.2	3.3	3.9	3.8	4.3	4.1	4.0	4.5	4.4	4.6
Mineral fuels, lubricants and related materials	11.1	11.1	10.3	8.4	9.5	13.6	12.1	11.0	10.7	12.5	14.6	14.9
Animal and vegetable oils, fats and wax	1.2	0.4	0.5	0.5	0.8	0.6	0.5	0.7	0.6	0.7	0.5	0.6
Manufactured products (%)	76.5	80.5	81.3	82.7	80.7	77.4	77.3	78.7	78.4	75.3	72.4	70.2
Chemical and related products, n.e.s	15.8	16.3	16.8	18.7	17.4	15.4	15.4	14.9	14.3	14.7	14.4	14.1
Manufactured goods classified chiefly by materials	18.5	21.4	23.1	20.7	23.3	21.8	23.0	27.4	26.4	27.7	27.7	27.1
Machinery and transport equipment	28.7	30.5	29.6	30.3	29.4	30.1	30.0	29.2	31.4	27.3	25.2	24.1
Miscellaneous manufactured articles	13.5	12.3	11.8	13.0	10.6	10.1	8.9	7.2	6.2	5.6	5.2	5.0
Commodities not classified elsewhere in SITC	0.0	0.2	0.2	0.0	0.1	0.0	0.0	0.1	0.7	1.8	2.2	4.2

Table 14. Factors favoring investment by host country (ten most attractive countries for FDI), 2008–2010

(Per cent of responses for a given country)

Ranking	Host country	Access to international/ regional markets	Access to local capital markets (finance)	Access to natural resources	Availability of incentives	Availability of skilled labor and expertise	Availability of suppliers	Cheap labor	Following your competitors	Government effectiveness	Quality of infrastructure	Rate of growth of market	Size of market
1	China	13	2	3	2	5	6	14	4	3	4	22	22
2	India	12	2	2	-	10	4	15	4	3	3	24	22
3	United States	14	7	2	2	11	7	1	6	8	13	8	21
4	Russia	12	2	5	1	3	3	8	3	2	2	30	29
5	Brazil	17	2	8	2	4	4	8	2	4	4	25	22
6	Viet Nam	9	-	4	8	15	6	21	8	2	-	19	9
7	Germany	13	4	4	4	16	7	-	4	13	16	7	13
8	Indonesia	5	-	15	8	5	10	13	5	10	-	15	13
9	Australia	18	2	9	2	14	2	-	2	9	11	18	11
10	Canada	15	8	13	3	13	13	-	8	5	10	8	8
10	Mexico	13	-	8	4	13	13	19	-	2	6	13	10
10	United Kingdom	14	5	3	-	14	11	-	3	8	19	5	19
	World average	14	3	5	3	8	6	8	4	6	7	18	18

Source: World Investment Prospects Survey (WIPS) 2008–2010.

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