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碩士論文

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Master Thesis

越南不動產外國投資分析及其區位因素之影響研究

The real estate FDI in Vietnam and the impacts of "Location" factors.

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ABSTRACT

In recent year, real estate industry has been widely recognized as one of the most developed and dynamic market, especially in the emerging economies likes Vietnam. The development of this market has contributed to Vietnam to maintain growth above 10% for several consecutive years. However, the real estate bubble and its consequences have tremendous harm to a fledgling economy. Therefore, researching on the Vietnam market, as well as analysis evaluated the strengths, weaknesses, it necessarily helps us to draw experience and lessons for the similar markets.

My research analyzes in-depth into the real estate market in a tumultuous period of 2005-2012. This is also the period witnessed the ups and downs of the Vietnam economy, in which the real estate sector is one of the most severely affected fields . Like many other emerging economies, this is a mandatory collapse to help the economy to improve and become more mature. Indeed, the real estate market in Vietnam still expects to recover the fast growth in the next decade.

Research also provides us a different perspective on the analysis of the real estate market through split estate market into four single sectors: office, retail, residential and tourism. Evaluation among the four markets shows us the relationships between each individual market, how they interact with each other as well as the entire real estate market.

The study based on the OLI paradigm and previous researches on the effects of Location factors on the investment decisions of MNEs in Vietnam real estate market. Regression models have employed to quantify the FDI real estate flow in Vietnam.

Keyword: real estate market, FDI, office, retail, residence, tourism, Vietnam, OLI paradigm, regression model, MNEs.

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CHAPTER 1 INTRODUCTION

1.1 Research Background and Motivation

The last decade has witnessed a strong growth in investment activities in general and in particular in real estate investment in Vietnam. It is the fact that the real estate sector has been one of the major drivers of the long lasting economic growth enjoyed in Vietnam in the recent past. Moreover, one of the components of the demand for housing in Vietnam has been the acquisitions of real estate by foreign investors. However, there are few studies intending to examine the determinants of Foreign Real Estate Investment (FREI), which in the Vietnamese case is more surprising.

In fact, in recent years, there has been fast growth in direct real estate investments and portfolio investments in the real estate securities. According to UNCTAD (2004), worldwide cross-border merger and acquisition sales in real estate increased from USD 4,984 million within 1988–90 to USD 40,640 million within 2001–03. Similarly, other FDI statistics reflect the recent dominance of real estate sector flows among other services FDI.

Existing economic literature suggests that FREI (like FDI in other services) will assist a host country's economic development by injecting financial resources as well as provision of services in terms of lower cost and higher level of quality. In effect, it introduces additional competition, generates employment and brings technology (Arnold et al., 2006; UNCTAD, 2004; Golub, 2009). Moreover, FREI contributes significantly to the rapid globalization of metropolises and facilitates changes in the scene of urban development qualitatively (Wei et al., 2006; Wu, 2001). In addition, it is believed that the FDI inflows make the real estate industry in host countries perform well (Jiang et al., 1998). For example, He et al. (2009) argued that participation of foreign real estate investors in Chinas' real estate sector has several benefits for this

industry such as technology transfer, introducing recent practices and standards and injection of financial capital to the market. It is also believed that the increased FREI raises the tourism in the host country, as tourism is the step that follows acquiring a property in a foreign country (Rodriguez and Bustillo, 2010).

1.2 Problem Statements

Given the importance of FREI for host economies and consequently, a growing international competition in attraction of FREI, many scholars and policymakers have attempted to understand the factors that influence FREI. Various determinants have been identified that influence the location of investments for foreign real estate investors. Theoretical and empirical studies have identified market size and growth, physical infrastructure, FDI in other sectors as some of the important determinants of FREI. Bilateral trades, labor costs, exchange rate risks, property prices, tourism agglomeration, populations have been identified as additional influences that can explain FREI.

1.3 Objectives

The main purpose of the thesis to examine the relationships between 6 "Location" factors (Tourists, Location, Land cost, Infrastructure, GDP, Population density) and foreign real estate investments (FREI) in Vietnam. Moreover, the study also research about the shift in investment flows between four main categories: office, retail, residential and tourism. In addition, geographical factor are considered as a cause affecting FDI in real estate.

The information was collected from various sources about the real estate market in Hanoi and Ho Chi Minh City also provides an overview of the market in this period. The rise and fall of prices for rent, for sale and the relationship between every single market are significant and will be analyzed in the next chapter. It can also be seen as a qualitative, predictions, creating a foundation for establishing hypotheses and analyze

the results of the regression model

1.4 Research Scope and Limitations

Rather than analyzing a broad range of determinants of FREI, this study focuses on the some factors of real estate market (for example, land cost, location, tourism, market size, population density and infrastructure). These aspects are then used to help identify those components which are the most important to foreign real estate investors. In fact, as far as we know, there has not been a systematic study to examine the effects of real estate market factors on FREI across Vietnam. I begin to fill these gaps by analyzing the relationships between real estate market factors and FREI for 34/63 provinces. My research will analyze the combined data from multiple sources, such as from the General Statistics Office and foreign and domestic reports.

This study based on the OLI paradigm and previous researches on the effects of Location factors on the investment decisions of MNEs in Vietnam real estate market. There are 6 Location variables selected, which will be discussed in more detail in the next chapter, data were collected from 34 provinces across Vietnam. Regression models have been used to quantify the FDI real estate flow in Vietnam. From the result, we will have a clearer picture of the impact of these hypothesized variables as well as analysis of the shift of FDI inflow in the real estate sector in Vietnam.

1.5 Thesis Structure

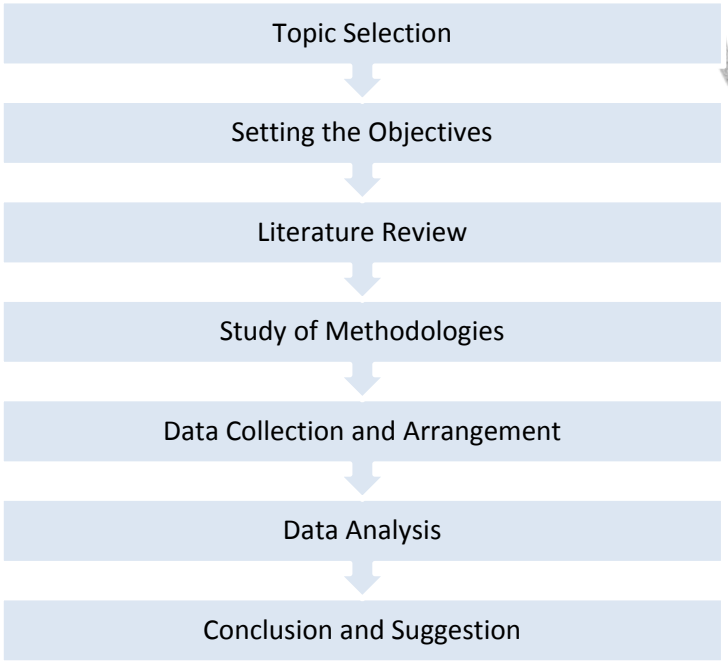


Figure 1.1 Procedure of the research

Figure 1.1 shows procedure of this research. Base on the above steps, the thesis structure is as follows:

Chapter 1: Introduce the background, motivations, objectives, scope, limitations and thesis structure.

Chapter 2: In the second section a conceptual discussion is carried out, and the most significant hypothesis about the determinants for FREI are exposed after a review of the literature.

Chapter 3: In the third section, we describe the temporal trends of the figures, making apparent the macroeconomic relevance of FREI inflows in Vietnam. In addition, I specify two econometric models for the time period 2005–2012 taking into account the different points of view considered and report the empirical findings.

Chapter 4: In the fourth section, some concluding remarks are summarized.

Chapter 5: Finally, the fifth section contains conclusions and recommendations.

CHAPTER 2 BACKGROUND AND LITERATURE REVIEW

The objective of this chapter is to provide basis and comprehensive information about the status of real estate by FDI resources all over the world as well as in Vietnam. In particular, the thesis analyzes focus in tumultuous period 2005-2012 in Vietnam as well as the world, with landmarks as the global economic crisis in 2008. This chapter also reviews and summarizes the OLI paradigm and previous studies on this. Since then, we will have an overview about my thesis background. These previous studies play a very important role; it is also the data that will be used to compare with the results in my research. From which, we have a clearer picture of what is obtained as well as the shortcomings of the study.

2.1 International Real Estate Investment Review

Liberalization and internationalization of financial markets since 1974, when the regime of fixed exchange rates was abandoned in favor of floating exchange rates, have had profound impact on the international capital flow and consequently international real estate investment. International diversification in asset investment has become phenomenal as modern portfolio theories show its merits of risk reduction and return enhancement. Financial innovations such as securitization of real estate in the USA have enhanced liquidity of investment in real estate, and thus made more capital available to real estate investment. It is claimed that ‘‘securitization is the critical innovation that has allowed local property development to be financed in the national and international capital markets’’ (Logan, 1991; p. 398). According to modern portfolio theories, international diversification in asset investment could reduce overall risks and thus enhance returns (Vos, 1993). The rationale is that there is diversity in the world economy and countries do not experience the same economic performance at the same time. One country may be in recession, while another may be booming.

Investment demand for international assets including real estate has therefore been established. For instance, since 1982, a constant 10% of foreign direct investment had gone to real estate in the USA. Foreign direct investment in USA real estate increased from $11.4 billion in 1982 to $24.5 billion in 1987. Over half the total space available, 12 million ft2 of office space in Los Angeles, were owned by foreigners with 25% of commercial space in the central business district of Washington, DC, and 10–15% in Chicago, was owned by foreigners (Bacow, 1988).

Investment in international real estate as assets has gained currency on the one hand. On the other hand, acquisition of international real estate as space has been upheld by the globalization of economic activities since the 1960s. Economic globalization is a process linked by interconnected cross-border production, and it enables firms to enter new markets, to capitalize on technological and organizational advantages, and to reduce costs (OECD, 1997). In a form of foreign direct investment, production in developed countries is relocated to developing countries where conditions of low-cost labors and emerging huge demand for new products become increasingly attractive. The total global flow of foreign direct investment captured by developing countries increased from 18% in the 1980s to 36% in 1996 (Lo & Marcotullio, 2000). Thus, there is an increasing demand for local premises from global production and personnel involved.

Real estate is a special commodity in the market because of its heterogeneity, low liquidity, high transaction cost and location fixity. Real estate development and investment are therefore deemed local economic activities which usually require insights of local markets. A survey in the 1980s unveiled that there was a phenomenon of cultural and geographic proximities between origins and destinations of international real estate capital (Hines, 1988, pp. 9–10). It shows clearly that what foreign investors

are concerned about are local market conditions. Unfamiliarity with foreign countries' institutions impedes real estate as an international investment medium. Haila (2000) notices that there are no property or real estate development companies among the largest 100 transnational companies ranked by foreign assets in the world. Oil, electronics and automobile companies dominate the list. In the light of the above arguments, it can be inferred that China being both a developing and a former socialist centrally planned country, still unfathomable to many outsiders, should not be considered favorably as a destination for foreign real estate investment.

2.2 Neighboring Real Estate Market

2.2.1 Shanghai Market

The nation-wide economic reforms since 1979 have ushered in a new era where market forces begin to play certain roles in the urban economy, and supplies are to be driven by market demands. Since the 1980s, many multinational corporations (MNCs) have set up their headquarters in Shanghai for the Chinese market. Well-known MNCs such as AT&T, 3M, Intel, Emerson, Dupont, ICI, Hewlett-Packard, Philips, Nortel, Toshiba, NTT have established their presence in Shanghai (Rose, 1999). In the 1990s, Shanghai captured about 10% of the total foreign capital invested in China (SMBS, 2001a). ''By the end of 1997, over 230 of the world's 500 largest industrial firms—as identified by Fortune magazine in 1996, had investments in Shanghai. Among the world's top 100 industrial TNCs, 55 of them were involved in operations in the city'' (Yeung & Li, 1999, p. 519). During the transformation, Shanghai is shedding its image of an industrial city and re-establishing itself as the main service center in China. Outputs of manufacturing and services in 1978 accounted for 77.4% and 18.6% of GDP, respectively. The share of manufacturing decreased to 47.4%, and that of services increased to 51.0% in 2002 (SMBS, 2003a). A well-diversified service industry has

been growing in the fields of law, accounting, designing, advertising, printing, etc., which paves the way for the growth of financial services. With the market orientation, Shanghai obviously becomes a market choice for financial business, evidenced by an increasing share of contribution of the financial sector to GDP: from 3.8% (1981) to 10.8% (2002) (SMBS, 2003a). The financial sector is also becoming more international oriented by the participation of foreign banks, financial companies and insurance companies. In 2002, 128 foreign-owned financial institutions were in operation in Shanghai (SMBS, 2003a).

Foreign investment takes place following the evaluation of market fundamentals of the recipient countries. Current strong market demand and growth potential clearly lead to decisions in favor of investment. Nevertheless, investment in real estate is of long-term nature, and investment decisions are not sufficiently justified if local institutions are not understood well. The fact that very little capital from Western countries has been invested in China's real estate verifies this rule of thumb, though booming Chinese cities have attracted a substantial amount of industrial capital from the West. However, many Hong Kong and Southeast Asian real estate development firms have been active in China's dynamic coastal cities, and played a key role in the property-led urban regeneration of Shanghai in the 1990s, competing with local developers. By the end of 2002, 28.5% of the total foreign capital in aggregate, or US$11.5 billion, had invested in Shanghai's real estate (SMBS, 2003a). When the property market was extremely buoyant in 1995, as much as 74.1% of total foreign capital into the city was intended to be invested in real estate (see Table 1). It is apparent that developers from Hong Kong, Macau and Taiwan are playing increasingly significant roles in Shanghai's property development market.

When the Chinese Communist Party (CCP) defeated the Guomingdang Nationalist Government in 1949, the paramount task on the new government's agenda was to develop a new socialist China. Influenced by the Soviet model, the CCP made a strategic decision to develop heavy industries, and thereby to build the national industrial back-bone. The single-minded emphasis on the industrialization created a dichotomy between ‘‘producer cities’’ and ‘‘consumer cities’’. Cities with dominant manufacturing production were deemed producers, while cities specialized in commercial, retail, financial and other non-manufacturing activities were classified as consumers. Producers took priority over consumers in the allocation of planned investments. Shanghai's central business district withered as a result. Because of the industrialization policy, many manufacturing factories occupied central locations in downtown Shanghai. Up to 1985, 56.7% of all factories in Shanghai municipality were still in its central city where it was estimated that 30% of the land area was occupied by factories and warehouses (Fung, Yan, & Ning, 1992). Shanghai's service sectors had been greatly suppressed. There were only 3.4 millionm2 of offices by 1980, increased by 48% from a stock of 2.3 millionm2 in 1950, while the city's GDP increased by 13 times between 1950 and 1980. Under the reforms towards the market economy since 1979, urban capital investment has shifted its preference from manufacturing to services. Market forces apparently influence the allocation of economic resources to the urban built environment. It constitutes a sharp contrast to the urban construction in the previous era when investment in the urban built environment was neglected. Shanghai witnessed an explosive growth in building construction over the last two decades. Construction of high-rise buildings symbolizes the ascendance of Shanghai as a world city. Jinmao, built in the late 1990s, is one of the tallest in the world. The increment of office buildings in terms of floor areas in the 1980s (2.6 millionm2) is 136% more than

the amount built (1.1 millionm2) over the previous three decades between 1950 and 1980.

In the context of economic globalization, in the form of foreign direct investment, production in developed countries is being relocated to developing countries where conditions of low-cost labors and emerging huge demand for new products become increasingly attractive. However, real estate development and investment are deemed local economic activities which usually require insights into local markets. From the Shanghai case study, it can be inferred that international real estate investments in Asian developing countries are possibly under rationales different from those for developed countries. Factors such as diversification and favorable exchange rate change are far less important than the long-term objective of establishing foothold in the recipient countries. Nevertheless, cultural proximities remain a prominent factor. With a similar understanding that Shanghai has huge market potentials, western real estate capital still avoids the city, while HK real estate capital ventures into the city. Confidence in the city should be derived from the knowledge of Shanghai's intangible capital. Therefore, reasons such as ''establishment of foothold in the market'', ''penetration into new market'', ''company's development strategy'' and ''potential of the market'' (see Table 8) are translated into investment actions.

2.2.2 Singapore Market

Singapore's housing market is skewed towards the public sector. In 1995, 86 per cent of the 3.6 million populations in Singapore resided in public housing (see Yearbook of Statistics Singapore, 1995). Of the 700,060 units of public housing, 90 per cent were owner-occupied units while the other 10 per cent of the public housing stock comprised rental units. Owner-occupied public housing, an anomaly in most other countries, is housing built by the Housing and Development Board (HDB) and sold on

99-year leases to eligible households who are subject to resale and other regulations imposed by the housing authority. Designated town councils chaired by members of parliament take care of general estate maintenance for a monthly fee.

The home-ownership rate in Singapore is therefore in the region of 90 per cent - one of the highest rates in the world. Besides HDB policy, this high rate is also attributed to Singapore' s unique housing finance arrangement known as the Central Provident Fund (CPF) (see Asher, 1991, 1996). The fund is essentially a fully funded, pay-as-you-go social security scheme, which requires mandatory contributions by both employers and employees of a certain percentage of the employees' monthly contractual wage to his/ her account in the fund. The contribution rates peaked at 25 per cent of wages for both employers and employees from 1984-1986. Contribution rates are currently 20 per cent of wages for both employees and employers. The scheme covers about two-thirds of the work force and CPF balances at the end of 1995 were S$66 ban or 56 per cent of GDP. CPF contributions are exempt from income tax and balances earn interest, which are also tax-deductible. The interest rate is based on the average of 1-year fixed deposit and month-end savings rates of the `Big Four' Singapore banks, subject to a minimum rate of 2.5 per cent.

These substantial forced savings may be withdrawn at age 55 or earlier for various approved purposes. Between 1968 and 1981, they could only be withdrawn for purposes of down payment, stamp duties, mortgage and interest payments incurred for the purchase of public-sector-built housing. In 1981, the scheme was extended to allow for withdrawals for mortgage payments for the purchase of private housing. During the past decade, rules governing the use of CPF savings have been gradually liberalized to allow for withdrawals for medical and education expenses, insurance and investments in various financial assets (Phang, 1992, pp. 74-83).

Public housing rents and prices of new units are subsidized by the government. While a brand new 5-room, HDB flat cost between S$160,000 and S$260,000 (depending on location) in 1995, a comparable resale HDB at would cost double the amount. Subsidies to the HDB are in the form of loans (at below market rates of interest) and grants financed from the government's budget, and more importantly, land made available to the HDB at prices below market value. About four-fifths of the land in Singapore belongs to the state.

Public housing supply is allocated based on "first-come- first-served" waiting lists as well as various eligibility conditions. About 140,000 households are presently on the waiting list for new HDB flats and the waiting time is about 5 years. An applicant who satisfies the eligibility conditions is entitled to apply to the HDB to purchase a flat twice. Half the households on the present waiting list are second-time applicants. Eligibility conditions (which have been relaxed over time as the housing programme expanded) include citizenship status, non-ownership of other residential properties, minimum household size of two, and having household incomes below the ceiling set by the HDB. The present monthly income ceilings are S$800 for rental flats (mainly 1- to 3-room units), S$1200 for 3-room flats, S$8000 for 4- and 5-room flats, S$10.000 for executive condominiums, and S$12.000 for multi-tier families.

An authorized resale market for HDB flats has existed since 1971 and is subject to the regulations laid down by the HDB. The seller must satisfy a minimum occupancy period of 5 years if the flat was purchased at a subsidized price from the HDB. The minimum occupancy period is 30 months if the flat had been purchased in the resale market. A resale unit differs from a new unit in that the buyer does not have to be on a waiting list for new units to be completed. In contrast to the chronic disequilibrium evident in the market for new flats, prices in the resale market are determined largely by

market forces but are also influenced by prices for new HDB flats and HDB credit and valuation policies for resale flats.

The housing market was dull after the Dot-Com bubble burst in late 2000 and the outbreak of Severe Acute Respiratory Syndrome (SARS) in 2003. A strong recovery from the market downturn was necessary to Singapore's economy. As housing asset is the largest component of household wealth, a prolonged decline can cause financial hardship especially to the elderly whose retirement savings are largely in terms of housing assets (Ronald, 2010). As such, the government introduced several measures to boost the market. First, foreigners were allowed to buy land parcels and complete homes at Sentosa Cove since August 2004. The favorable policy caused a surge of foreign liquidity into the private residential market. The percentage of foreign buyers rose from 6% to 10% within two quarters and the presale segment increased from 6% to 17%. In mid-2005, the government removed the restriction on foreigners owning apartments below six stories, raised the loan-to-value limit and reduced the cash down payment. An upward trend in housing price appreciation was observed until end 2007. Between 2005 and 2007, foreign buyers accounted for 10% and 15% sales in the entire private residential market and the presale segment, respectively. In contrast, between 2000 and 2004 total sales made to foreigners were only 6%. The rise in foreign buyers was in tandem with the recovery of Singapore's housing market, as evidenced by the rebound in housing prices in 2004 led by an influx of foreign liquidity into the high-end private-housing market, which then aided the general recovery of the market (Deng et al., 2012).

Even after the Global Financial Crisis, foreign investment still played an important role in supporting or raising Singapore's private-housing prices. For instance, in the

recent recovery from the last downturn, significant appreciation of housing prices and upsurge of foreigners' buying activity were observed.

The foreign liquidity into Singapore's property market is sensitive to government policy shifts. Although changes in regulations had been successful in attracting foreigners to buy properties in Singapore, as continual hikes in housing prices could cause issues in housing affordability, the government introduced the Additional Buyer's Stamp Duty (ABSD) in December 2011, targeting foreigners and non-individuals. With ABSD costing 10% of property value, foreigners became inactive and prices in the central region dropped. In 2012 Q1, home prices had fallen for the first time in almost three years.

2.2.3 Malaysia Market

Malaysia is a middle-income developing country with an annual per capita GNP growth rate of around 3 percent. Like most other successfully developing countries at similar stages, Malaysia has been urbanizing rapidly. Between 1970 and 1991, urban population grew almost 5 percent per annum, compared with a growth rate of less than 3 percent for the total population. About 44 percent of its 18 million citizens live in cities and towns. Coupled with declining house- hold size, the number of urban households grew by almost 6 percent per annum during the same decade.

Changes in the stock of dwellings in Malaysia between 1970 and 1980 reflect both the increasing urbanization of the country and the strong economy during that period. While total dwellings increased by only 3.8 percent per annum, the number of urban housing units rose at an annual rate of 7.1 percent. Therefore, despite the rapid rise in the number of urban households, the availability of urban housing actually improved.

Relative to the U.S., the public sector has a considerable presence in the housing market. During the 1980s, the public sector was responsible for 20-35 percent of all new

units constructed. The number of public enterprises active in the housing market grew rapidly from the late 1970s when they were often producing new housing for middle- and upper-income households.

Despite growth in the quantity and quality of Malaysian housing over the study period, in some respects the market could well have performed much better. As the Malaysian economy responded to external stimuli and grew strongly from the mid-1970s, housing prices rose rapidly. From 1976 until the trend flattened out in 1982, the reported selling price of a single story terrace house increased an average of 18.6 percent per annum. During the same period, household income rose by 10.8 percent per annum, implying a general decline in the ability of households to purchase the most typical new unit on the market.

It also shows that consumer prices rose steadily during 1972-82 at a compound annual rate of 7.0 percent, and residential rents rose at a compound rate of 6.4 percent over the same period, the price of newly built housing rose at a compound annual rate of 18.9 percent.8 After 1982, however, new housing prices stabilized and then declined by about 20 percent from their peak in 1984; during the same period incomes fell by about 13 percent. This pattern of rapid price raises, prices that are high relative to incomes, and price instability in the face of fluctuating incomes distinguishes Malaysia from many other countries, especially its neighbor, Thailand.

Prices can be examined in levels as well as changes. A rough comparison across countries can be made using the ratio of median house prices to median incomes. Malpezzi (1990) presents such calculations using data from Malaysia, Thailand, and Korea for the late 1970s/early 1980s. Typical house prices were about 6 times typical incomes in Malaysia, compared to 5.5 in Korea and 2.5 in Thailand.

We argue later that an important explanation for high house prices in Malaysia is the policy environment in which housing developers must function, and somewhat paradoxically, the government policies and programs intended to raise the quality and quantity of the housing produced. Five key interventions have been identified which seem to have influenced the housing price level either directly, by increasing construction standards and costs, or indirectly, by increasing developers' risk. These interventions are: (a) the increasing role of the public sector in housing production; (b) land-use and infrastructure standards; (c) lengthy housing construction approval procedures; (d) quotas related to the New Economic Policy (NEP); and (e) financial intervention.

2.3 OLI Paradigm

The “OLI” or “eclectic” approach to the study of foreign direct investment (FDI) was developed by John Dunning. (See, for example, Dunning (1977). It has proved an extremely fruitful way of thinking about multinational enterprises (MNEs) and has inspired a great deal of applied work in economics and international business. In itself it does not constitute a formal theory that can be confronted with data in a scientific way, but it nevertheless provides a helpful framework for categorizing much (though not all) recent analytical and empirical research on FDI.

“OLI” stands for Ownership, Location, and Internalization, three potential sources of advantage that may underlie a firm’s decision to become a multinational. Ownership advantages address the question of why some firms but not others go abroad, and suggest that a successful MNE has some firm-specific advantages, which allow it to overcome the costs of operating in a foreign country. Location advantages focus on the question of where an MNE chooses to locate. Finally, internalization advantages influence how a firm chooses to operate in a foreign country, trading off the savings in

transactions, holdup and monitoring costs of a wholly owned subsidiary, against the advantages of other entry modes such as exports, licensing, or joint venture. A key feature of this approach is that it focuses on the incentives facing individual firms. This is now standard in mainstream international trade theory, but was not at all so in the 1970s, when FDI was typically seen through a Heckscher-Ohlin lens as an international movement of physical capital in search of higher returns. (See, for example Mundell (1956).)

According to Dunning, in order to undertake FDI successfully, the firm must first have some competitive advantages in its home market that are specific to that firm. These ownership or "O" advantage must also be transferable to foreign markets. Then, given that O advantages exist, there must also be certain features or characteristics of the foreign market that will allow the firm to take full advantage of its O advantages in the host country. This second set of advantages is referred to as location or "L" advantages. Internalization or "I" advantages comprise the third necessary piece of the puzzle. The I advantages are those that allow the firm to maintain its competitive position by reducing transactions costs. These "OLI" advantages are described in more detail below.

Ownership

Ownership advantages are keys to explaining the existence of MNEs. A key idea is that firms are collections of assets, and that candidate MNEs possess higher-than-average levels of assets having the character of internal public goods. These assets can be applied to production at different locations without reducing their effectiveness. Examples include product development, managerial structures, patents, and marketing skills, all of which are encompassed by the catchall term of Helpman (1984) “headquarter services”. While this is clearly a multi-dimensional factor, it is common to

model it in terms of a single index of firm productivity. The most sophisticated treatment along these lines is found in recent work on heterogeneous firms by Helpman, Melitz and Yeaple (2004), which combines the simplest version of the horizontal motive for FDI (to be discussed below) with the assumption that firms differ in their productivities. A potential firm must pay a sunk cost to determine its productivity, and, when this is revealed, active firms sort themselves into different modes of production. Low-productivity firms produce only for the home market; medium-productivity firms choose to pay the fixed costs of exporting; but only the most productive firms choose to pay the higher fixed costs of engaging in FDI. These predictions are consistent with the evidence. As a further contribution, the paper derives from the model the prediction that industries with greater firm heterogeneity will have relatively more firms engaged in FDI, and shows that this prediction is confirmed by the data. However, this work (and others like it) do not explore why firm productivities differ in the first place. Prior investment in R&D (both process and product) and in marketing presumably account for the disproportionately greater productivity of most MNEs.

A firm's **O** advantages must be unique to the firm, and it must be possible for those advantages to be transferred abroad. These **O** advantages largely take the form of the advantages of common governance or the possession of intangible assets such as specific know-how, proprietary technology, patents or brand and loyalty, which are exclusive or specific to the firm possessing them. A firm may have substantial financial strength or huge economies of scale, for example, but these would not necessarily be unique to the individual firm, since many firms can develop such advantages, and so competitive advantages such as these may not be O advantages. The greater the O advantages of enterprises (net of any disadvantages of operating in a foreign

environment), the more incentive firms have to exploit those advantages in foreign markets.

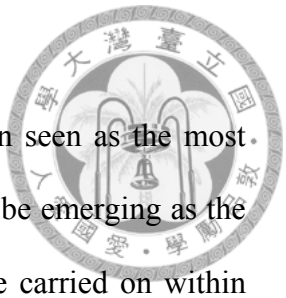
Location

While international trade theory has tended to take ownership advantages for granted or else to model them in obvious ways, rather more attention has been devoted to exploring alternative motives for MNEs to locate abroad. A key issue that has attracted much attention is the distinction between "horizontal" and "vertical" FDI. Horizontal FDI occurs when a firm locates a plant abroad in order to improve its market access to foreign consumers. In its purest form, this simply replicates its domestic production facilities at a foreign location. Vertical FDI, by contrast, is not primarily or even necessarily aimed at production for sale in the foreign market, but rather seeks to avail of lower production costs there. Since in almost all cases the parent firm retains its headquarters in the home country, and the firm specific or ownership advantages can be seen as generating a flow of "headquarter services" to the host-country plant, there is a sense in which all FDI is vertical. Nevertheless, the distinction between market-access and cost motives for FDI is an important one.

Empirical studies of FDI have until recently tended to favor the horizontal over the vertical motive. For example, many case studies have shown that "tariff-jumping" has been important in many historical episodes. It has also been noted that the bulk of FDI is between high-income countries with relatively similar wage costs (though much of this is likely to be neither vertical nor horizontal FDI, but rather cross-border mergers and acquisitions, to be discussed further below). More formal econometric studies have shown that the horizontal motive provides a good explanation for FDI. (See, for example, Brainard (1997) and Markusen (2002). On the other hand, there is no clear evidence that FDI falls in importance with distance, as the horizontal model implies. In

addition, more recent empirical work by Yeaple (2003b) and others, based on data at the level of individual firms, suggests that both motives are important. It is easy to see why this might be so even in the simple two-country case discussed above. If the foreign market is sizeable, then the total gain from FDI as opposed to producing at home (in each case serving both domestic and foreign customers from a single plant) is given by the sum of (1) and (2) above: both trade-cost-jumping and off shoring gains have to be taken into account. More generally, with many countries, there are additional reasons for FDI, and the two motives are likely to interact in complicated ways. For example, even for vertically integrated firms, proximity and concentration are not in conflict where serving a group of foreign countries is concerned. The reduction of trade costs between European countries in the 1990s encouraged American and Asian firms serving European markets to concentrate their production in European plants and so engage in "export-platform" FDI. Similarly, Yeaple (2003a) has shown that the horizontal and vertical motives may reinforce each other if a parent firm wishes both to serve foreign markets in similar high-income countries and to avail of lower production costs in low-income countries. In general, therefore, the pattern of location of foreign plants is likely to reflect the "complex integration strategies" of firms facing both vertical and horizontal motives for engaging in FDI.

Location advantages are due to economic differences among countries and may take many forms. The host country may offer such features as low-cost labor, labor with unique skills, better access to vital raw materials or a large relatively untapped market. In addition, it may simply offer the opportunity for a firm to make a defensive investment to prevent its competitors from gaining a foothold. In the absence of L advantages such as these, there would be no incentive for the firm to engage in FDI, and foreign markets would best be served entirely by exports.



Internalization

Internalization, the third strand of Dunning's taxonomy, is often seen as the most important; in the words of Ethier (1986), "Internalization appears to be emerging as the Caesar of the OLI triumvirate." Explaining why some activities are carried on within firms and others through arms-length transactions is a major research topic for microeconomics as a whole, not just for the economics of FDI. A pioneering 1937 paper by Ronald Coase argued that the optimal scale of the firm, or the optimal degree of internalization, reflects a balance between the transactions costs of using the market and the organizational costs of running a firm. In recent decades economists working in information economics have tried to endogenize these two sources of costs, emphasizing the inability of agents to write complete contracts. An early application of this approach to FDI was by Ethier (1986). In his model, production requires prior research, the results of which can either be carried out within a vertically integrated firm (in the MNE case) or sold to downstream users. However, the end user must agree to purchase the research before its outcome is known. Ethier shows that a greater degree of uncertainty about the likely success of research efforts makes it more costly for the upstream and downstream firms to write a contract, which because of the complexity of the research process must necessarily be independent of the outcome. Hence, more uncertainty raises the likelihood that production will be vertically integrated through MNEs. Moreover, the emergence of MNEs does not require international differences in factor prices, unlike other models of vertical FDI.

A different approach to indigenizing the internalization decision, though also relying on incomplete contracts, is taken by Antras and Helpman (2004). Following the Grossman-Hart-Moore property-rights approach to the problem of bargaining between a firm owner and a potential supplier/employee, ex post efficiency is greater when

residual ownership rights are allocated to the party, which contributes more to the final output. Embedded in a model of product differentiation and trade, this implies that more efficient firms and firms for which headquarter services are more important should exhibit internalization (the owner contracts with the supplier, who becomes an employee) while less efficient firms should exhibit arm's-length trade (the supplier remains a separate legal entity). In addition the model assumes that final-goods producers are located only in one country, the North of a two-country North-South model. Such producers are assumed to have a two-fold choice: on the one hand they have to choose between vertical integration, which solves the hold-up problem but at the cost of reducing incentives to the provider of the input, and an arm's-length relationship; on the other hand they could locate their production in either country, trading off higher wages in the North against lower contract protection in the South. The full range of potential outcomes, and the paper shows how heterogeneous firms will sort into these different modes, based on their productivity, on the share of headquarter services in the value of output, and on the differences in costs between home and foreign locations.

When O and L advantages exist, to warrant the risks of ownership, the firm must also possess I advantages. Internalization advantages allow the firm to minimize transactions costs and other agency costs that would likely occur if the firm engaged in some other form of market penetration like a joint venture, for example. This would mean that the cost of having the firm manage and control all of its activities in the foreign country directly would be less than the cost of operating in any other fashion. For example, the costs of monitoring foreign partners, having information filtered through third parties, dealing with foreign financial institutions, etc., would be mitigated. If the firm has the ability to thus effectively exert control over its value chain, it would

be more beneficial to the firm to utilize its I advantages than to enter into leasing, franchising or other types of agreements with foreign firms in advantageous locations.

2.4 Previous Study on Real Estate

Existing studies on Foreign Real Estate Investment (FREI) argue that the Ownership **"O"** and Internalization **"I"** advantages of the OLI model does not have important impacts on host economy's inflow of FREI in comparison with Location **"L"** factor. It is due to the fact that FREI occur not because foreign investors aim to control the operations or to take advantage of some kinds of technology or managerial know-how *(Jiang et al., 1998; He et al., 2009).* In other words, foreign real estate investors (in most cases) do not want to control a business when they acquire a property like house *(Rodríguez and Bustillo, 2010*). However, Location "**L**" factors such as infrastructure, market size, political, institutional and legal environment are the key determinants of FREI in particular countries (He et al., 2009; Jiang et al., 1998; Zhu et al., 2006).

Dunning (1988) utilized the Eclectic Paradigm framework to analyze advantages in the international hotel industry. He found that traditional foreign hotel operators (such as Hilton, Sheraton, etc.) possessed firm-specific advantages that motivated their international investments, as predicted by the Eclectic Paradigm. However, other investors purchased hotels in foreign countries simply for the purpose of diversifying their investment portfolios. These investors did not possess the OLI advantages. Ownership of a hotel can be generally viewed as more in the nature of portfolio investment where the objective is to maximize the capitalized value of a future stream from the asset acquired. This might be done by reading the market correctly and taking advantage of differences in capitalization ratios and exchange rate expectations; this is Aliber's explanation (Aliber, 1970) for movements in direct investment between different currency areas, and would seem borne out by the marked rise in net inward

investment into the U.S. hotel industry in the last decade, particularly by the Japanese (Dunning, 1988:262).

Location advantages are country-specific factors that make it profitable for foreign companies to produce in the host country rather than produce at home and export to the host country. Some examples of location factors are the availability of local inputs such as natural resources, market size, the cultural and political environment, infrastructure, transport costs, trade, industrial, budget and tax policies as well as the presence of transparent regulatory frameworks (Kok and Ersoy, 2009; Luiz and Charalambous, 2009).

Location sub-paradigm. Factors influencing location decisions include pricing of factor inputs or assets, host country political risk, regulations and laws, and fiscal and monetary policies. Location advantages are measured against recurring costs of being foreign (other than exchange risk), such as operating a long distance from the investment or differential treatment in the host country. When host countries are found that satisfy the necessary condition and the sufficient condition described, firms possessing O advantages may potentially be successful in building or acquiring real estate assets in the host country and actively managing them. Firms relying only on P advantages may simply acquire passive interest in existing real estate assets in the host country, if available.

He et al. (2009) argued that participation of foreign real estate investors in Chinas' real estate sector has several benefits for this industry such as technology transfer, introducing recent practices and standards and injection of financial capital to the market. It is also believed that the increased FREI raises the tourism in the host countries, as tourism is the step that follows acquiring a property in a foreign country.

This can influence tourism when the previous investment in real estate is introduced (Rodriguez and Bustillo, 2010).

By using a questionnaire survey and collecting information from foreign property developers in Shanghai, China, Zhu et al. (2006) found that the potential of the current market, the firm's development strategy, penetration into a new market, the establishment of secure position in the market and the ability to accumulate experience in the market are the main reasons for foreign property investors and developers to operate in Shanghai. Through questionnaire survey on property consultants, Chin et al. (2006) investigated the factors that are of importance in attracting local and international property investments in Southeast Asian cities' real estate markets. Their results indicated that well-developed financial structure, political and stability of the economy, limitations and regulations on foreign investors and established legal regulation are the most important issues affecting the market attractiveness.

Lai and Fischer (2007) collected data from foreign investors that invested in Taiwan's property sector during 1997–2003 in order to identify the factors that explain foreign investors' selection criteria. By using a multi-criteria decision model, they found that the ranking of priorities for foreign real estate investment firms is led by economics, policies, markets, social and product factors respectively. More specifically, their results suggest that operational risks, market size, land costs, national competitiveness, political stabilities, language communications, economic development and government's limitations on property investment are the most important criteria.

He et al. (2009) empirically investigated the location patterns and determinants of FDI in real estate sector of China. Using the data from Chinese provinces over the period of 1997–2007 and applying a panel data regression, their statistical results indicated that foreign investors in China follow their customers and pursue local profit

opportunities. Furthermore, they showed higher financing costs and labor costs have negative effects on FDI in real estate but higher housing prices can attract greater amount of FDI. Finally, foreign real estate investors are attracted to provinces with good governance, developed land and housing commercialization, efficient law enforcement. Using data from 35 major Chinese cities, He and Zhu (2010) showed that FDI in real estate is common in large cities, which has larger number of population, foreign investments and tourists.

Rodríguez and Bustillo (2010) examined the determinants of FREI in Spain over the period 1990–2007, applying Engle-Granger cointegrating regressions. Based on the elective model, they concluded that FREI is influenced by factors like housing prices, travel costs, expected capital gains, learning about country's tourism attractiveness by foreigners, GDP per capita and property prices.

Anop (2010) studied the determinants of FREI in a set of developed OECD (Organization for Economic Co-operation and Development) countries. Based on a panel data analysis for the period of 1996–2007, their empirical findings showed that market size, human capital development and better road infrastructure are significant determinants of FDI in real estate.

Gholipour and Masron (2011) examined the effect of tourism agglomeration (learning about the host location) on FREI in OECD countries. Using a fixed-effect panel data method, their results showed that tourism agglomeration is positively and significantly associated with FREI. Moreover, they found that countries with larger market size attract greater amount of FREI.

2.5 Summary

From the literature review, the thesis summarized Eclectic paradigm (or OLI framework) is relevant here. Existing studies on FREI *(Foreign Real Estate Investment*)

argue that the ownership and internalization advantages of the OLI model does not have important impacts on host economy's inflow of FREI in comparison with Location **"L"** factor. Beside outstanding Location factors such as: market size, political stability, financial structure, etc, tourism is also one of the important elements impacting on FREI *(Foreign Real Estate Investment)*.

CHAPTER 3 RESEARCH METHODS

Currently in Vietnam, there has been no in-depth study on the real estate market in the period 2005-2012, especially about FDI inflows. My research concentrates on understanding the shift of FDI inflows into the real estate sector in Vietnam. Data were collected from 34/ 63 provinces and cities nationwide. These are also the provinces with the fastest growth in terms of FDI. This study divided the period 2005-2008 into two 4-year periods with the milestone - before and after 2008 in Vietnam. This is also the time to witness the collapse of the real estate bubble in Vietnam. For real estate investors not only Vietnamese but also foreigners, this is an important time to re-evaluate their whole investment process in Vietnam, restructured asset portfolio as well as finding new directions in the next period.

3.1 Research on Vietnam Real Estate Market

3.1.1 Vietnam Economic Overview

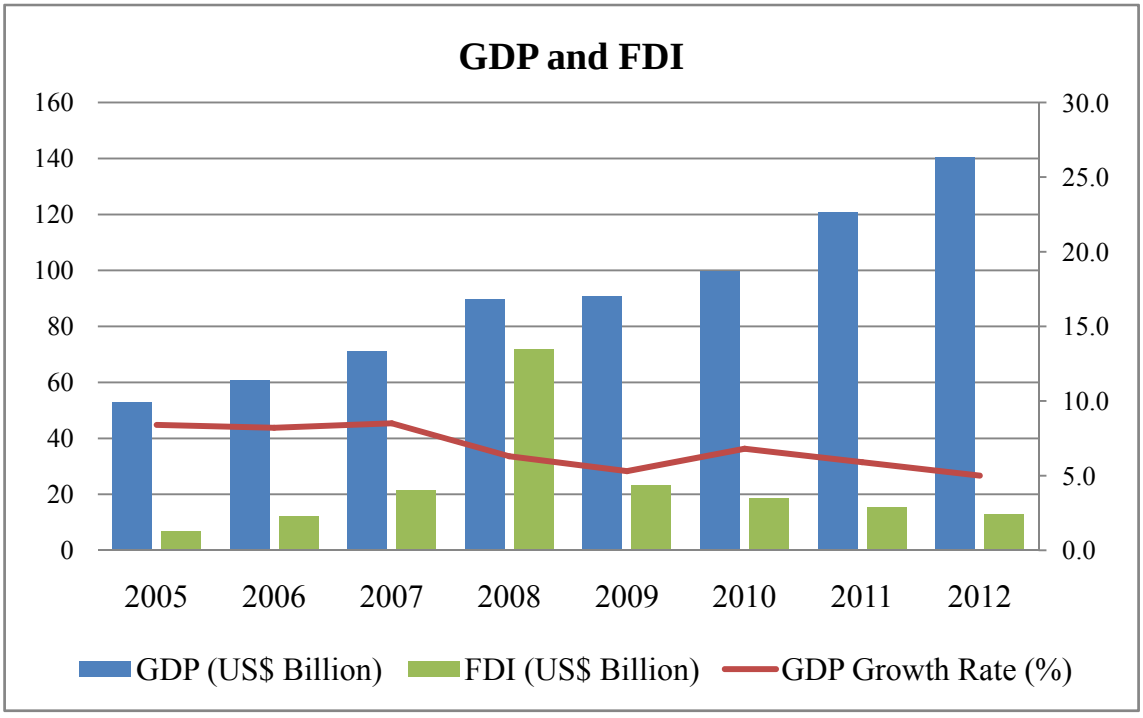


Figure 3.1 GDP, GDP growth rate and FDI in Vietnam 2005-2012

(Source: Vietnam General Statistics Office)

Figure 3.1 shows that after several year maintain the GDP growth rate nearly 10%, because of the global economic crisis, Vietnam cannot hold up the growth rate and at the end of 2012, it drop a half, only 5%. Besides that, the FDI resources also reduce significantly compared to the peak of 2008.

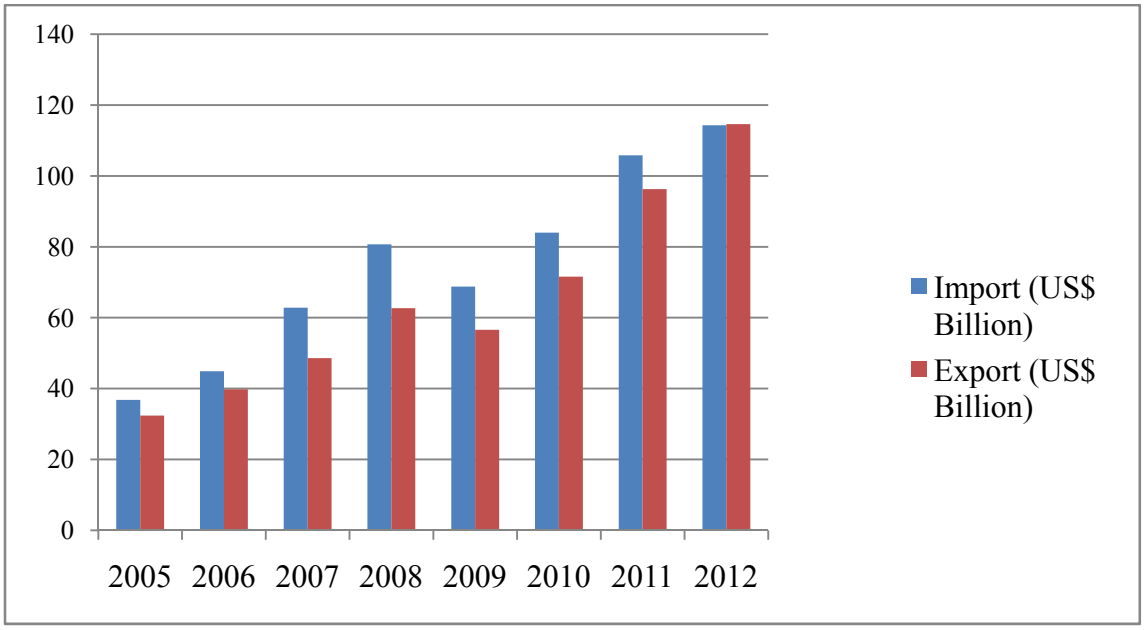


Figure 3.2 Import-Export balance in Vietnam 2005-2012

(Source: Vietnam General Statistics Office)

As showed in figure 3.2, 2012, the first time, Vietnam become net exporter after many years depends on import resources. However, with a developing country and rely heavily on foreign resources like Vietnam, it could not be a good sign for the economy. It may be the prediction of economic stagnation.

Figure 3.3 Interest rate and inflation rate in Vietnam 2005-2012

(Source: Vietnam General Statistics Office)

Based on figure 3.3, Vietnam is a country has a young economy and macro-economy lacks of stability. Interest rates is still too high (13% in 2013) although reducing comparing to the peak of 22% (2007). Besides that, Inflation rates still is high and reach a peak at 2008 and 2011, 23% and 18.6% respectively. Nevertheless, on the real estate business perspective, it could be also an opportunity for investors. When inflation is high, people tend to invest in assets with high profitability instead of putting money in the bank. In addition, reality has proven, real estate speculation in Vietnam has topped the four areas: gold, stocks, savings and real estate.

3.1.2 Vietnam Real Estate Overview

My research separates Vietnam real estate market into 4 groups: Office, retail, residence and Hotel resorts market, focusing on 2 biggest cities, Hanoi-the capital of Vietnam in the North and HCM city-the most dynamic and developed cities in the South.

3.1.2.1 Office Market

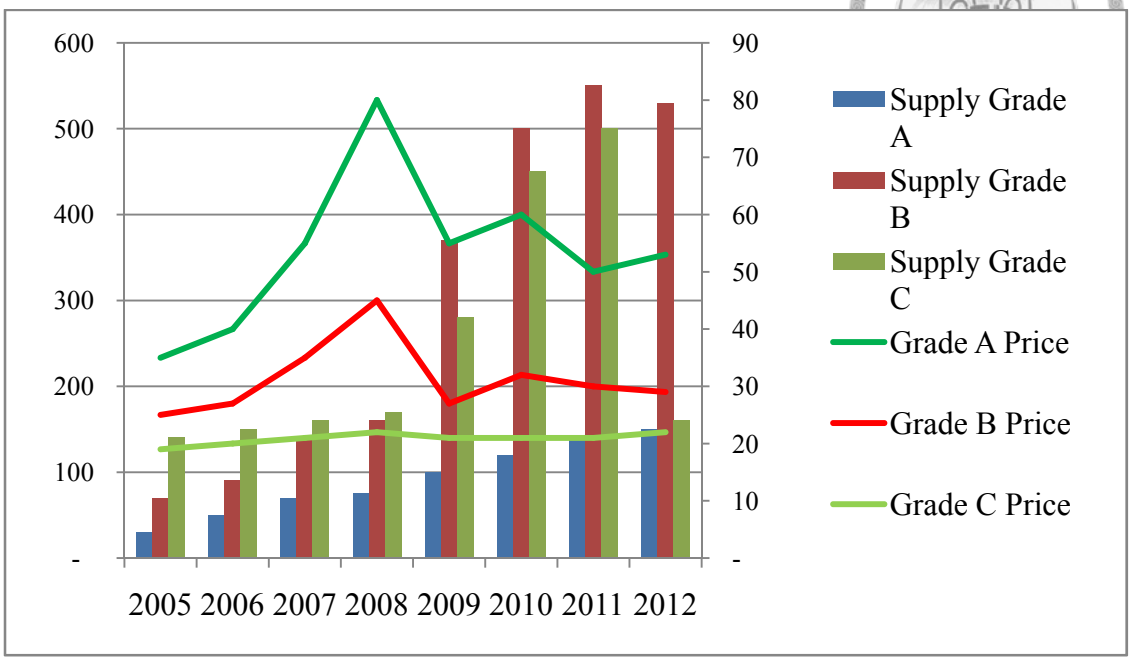


Figure 3.4 Office market in Ho Chi Minh City 2005-2012

(Source: Vietnam General Statistics Office, Jones Lang LaSalle Research)

From figure 3.4, renting price peaked in 2008, however due to constantly increasing supply in the next years rental prices go down 30% in grade A and B, and to be constant until now at $ 55 / m2 and 30$ /m2 in both A and B segments. Meanwhile, the C segment to maintain stability in 8-year period.

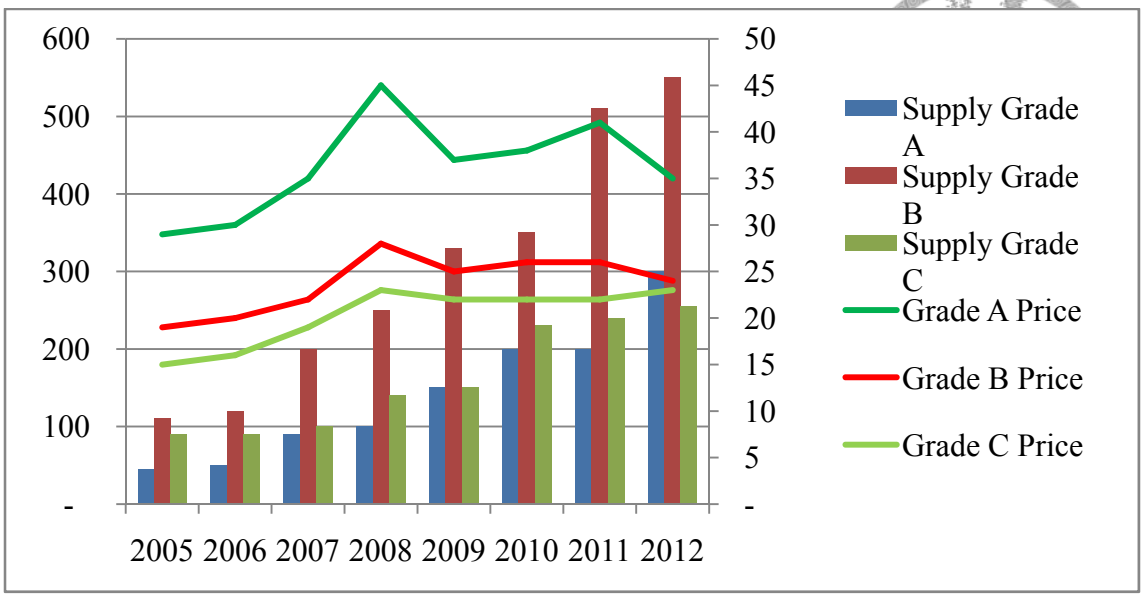


Figure 3.5 Office market in Hanoi 2005-2012

(Source: Vietnam General Statistics Office, Jones Lang LaSalle Research)

As showed in figure 3.5, in Hanoi, a similar trend occurred in segments A and B but in different degrees. However, in the Grade C, renting prices even increased slightly. In 2012, Grade C price and Grade B price is asymptotic.

Conclusion:

- Price reach a peak at 2008 in both Hanoi and HCM city
- Supply increased sharply after 2008
- Price drop 30-40% after 2008 in Grade A and B.
- Grade C price is stable in both two cities.

3.1.2.2 Retail Market

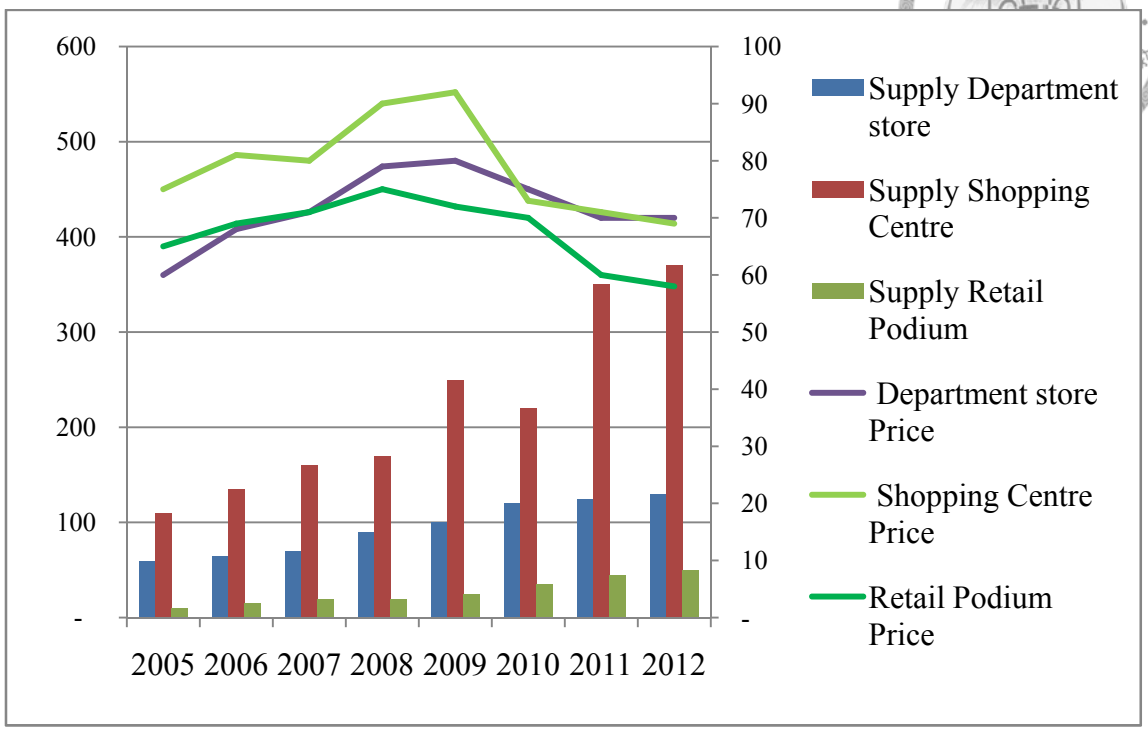


Figure 3.6 Retail market in Ho Chi Minh city 2005-2012

(*Source: Vietnam General Statistics Office, Jones Lang LaSalle Research)*

Figure 3.6 shows that all three types of retail market tend to decline after peaking in 2008-2009. Now the price went back to the time of 2005 (60-70 USD / m2). According to the report, the supply remained stable and increased slightly in the next year along with the decline of the economy led to people's incomes decline, rental price will decrease slightly in the next years.

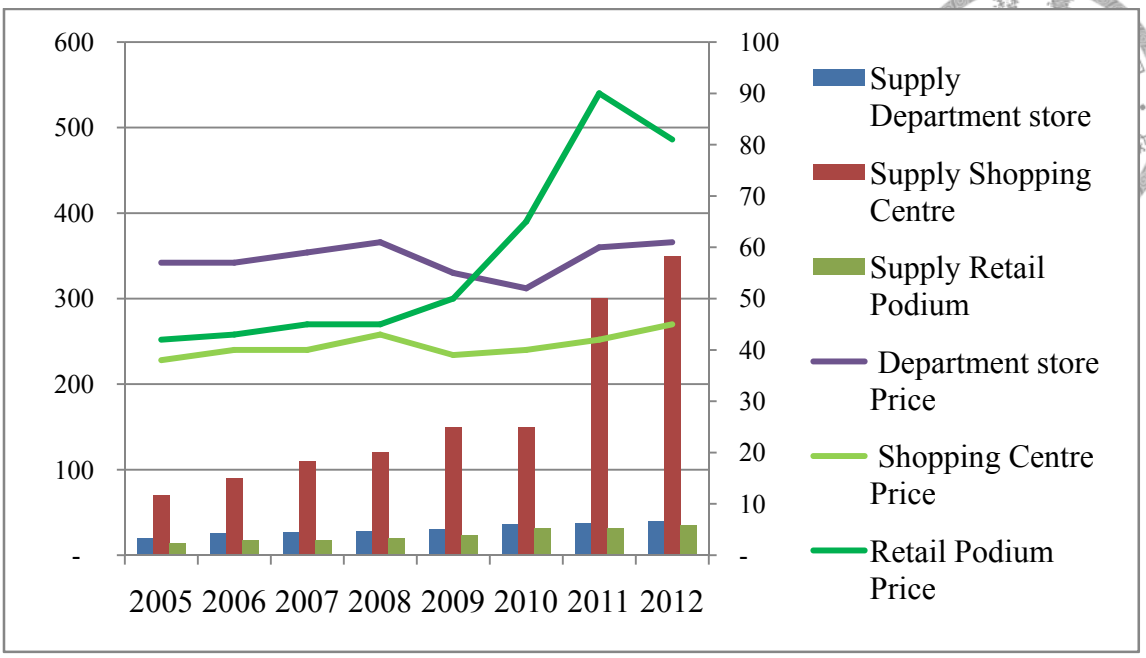


Figure 3.7 Retail market in Hanoi 2005-2012

(Source: Vietnam General Statistics Office, Jones Lang LaSalle Research)

From figure 3.7, in Hanoi, except Retail Podium, two remaining sectors stayed stable in 8 years with prices lower 10 dollars / m2 than HCM city. The same as HCM, we do not see any good sign for the recovery of the market.

Conclusion:

Short-term perspectives:

- Prices will go down slightly in the coming years.
- Redundancy in all three segments.
- The difficulties of the economy led to people's incomes along with purchasing power decline.

Long-term perspective:

- Vietnam's retail market is considered to be one of the most dynamic developed market in South East Asia
- Vietnam has the young population and rapid urbanization.
- Demand for retail market only focuses on some big cities.

- Only suits the long-term projects with professional investors.

3.1.2.3 Residential Market

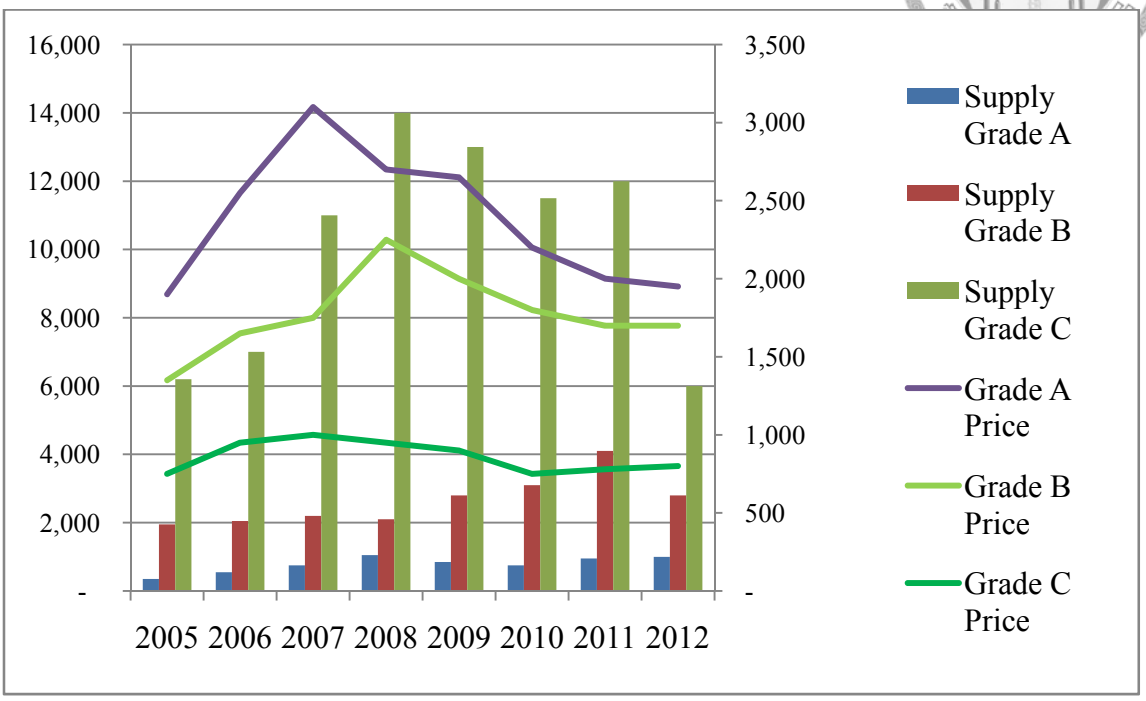


Figure 3.8 Residential market in Ho Chi Minh city 2005-2012

(Source: Vietnam General Statistics Office, Jones Lang LaSalle Research)

As showed in figure 3.8, it could be concluded that:

- Similar trends as office market even though the peak time, it was coming earlier in 2007 and 2008.
- Price in Grade A and B went down sharply whereas Grade C stayed stable.
- Investor mainly focus on the grade C (70% supply of the market)

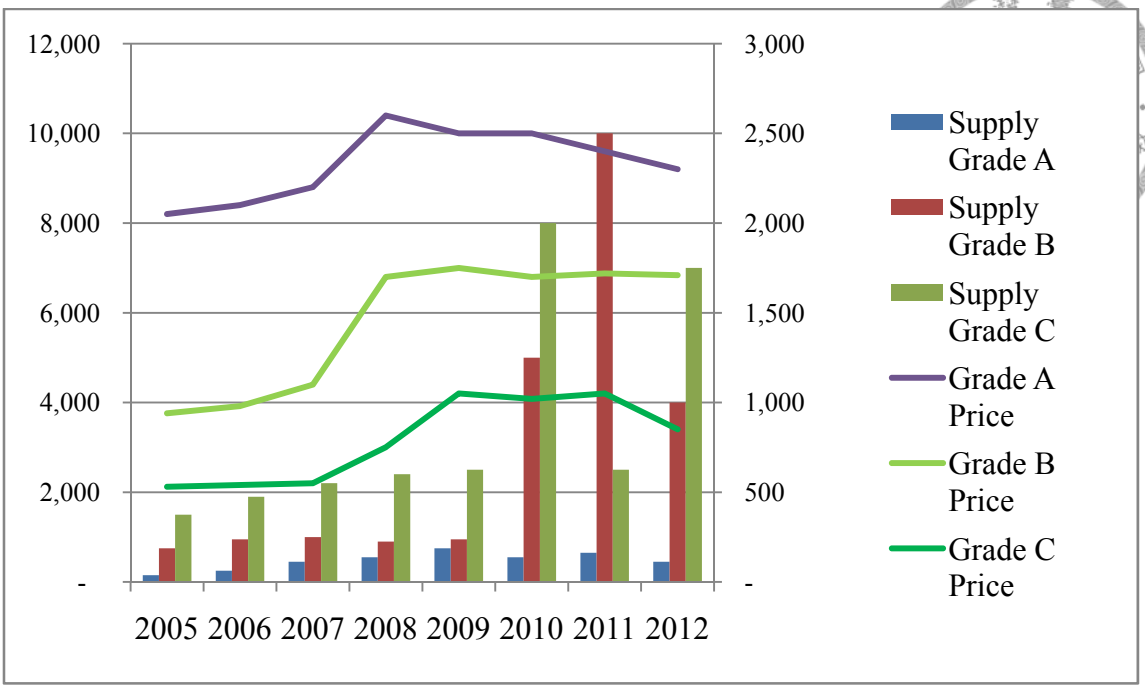


Figure 3.9 Residential market in Hanoi 2005-2012

(Source: Vietnam General Statistics Office, Jones Lang LaSalle Research)

Based on figure 3.9, in Hanoi, Grade B seems to be more dominant. The market did not see significant declines in prices like HCM city.

Conclusion:

- The current market excess more than 10,000 apartments in all three sectors.
- The market is predicted to be very difficult in the coming years
- The difficulties of the economy led to people's incomes along with purchasing power decline.
- However, with the rapid urbanization in Vietnam, housing demand is still high.
- Government has issued some solutions such as modifying laws in construction and real estate; supporting interest rate for housing buyers.
- The marker is predicted to return to peak period after 10 years.

3.1.2.4 Hotel and Resort Market

Tourism is also a potential market with rapid and hot development, despite the economic difficulties. Vietnam is a tropical country, with many beautiful landscapes. Nowadays, Vietnam is considered as one of the top destinations of tourists worldwide.

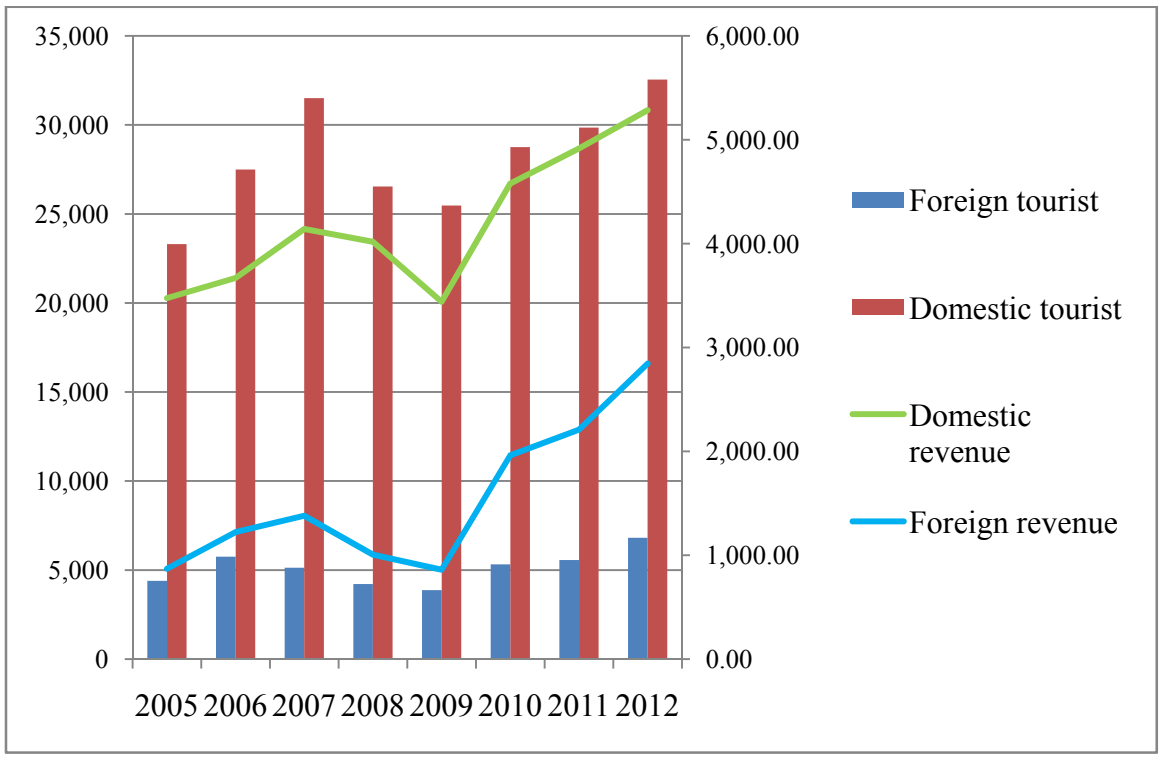


Figure 3.10 Foreign and domestic tourist 2005-2012

(Source: Vietnam General Statistics Office)

Figure 3.10 demonstrates that although there is a slight decrease in revenue in 2009 because of the impact of the global economic crisis, Vietnam's tourism market is growing constantly in the next years. It is forecast that the market will reach $ 11-12 million foreign tourists in 2015 and revenue from tourism will account for 10% of GDP.

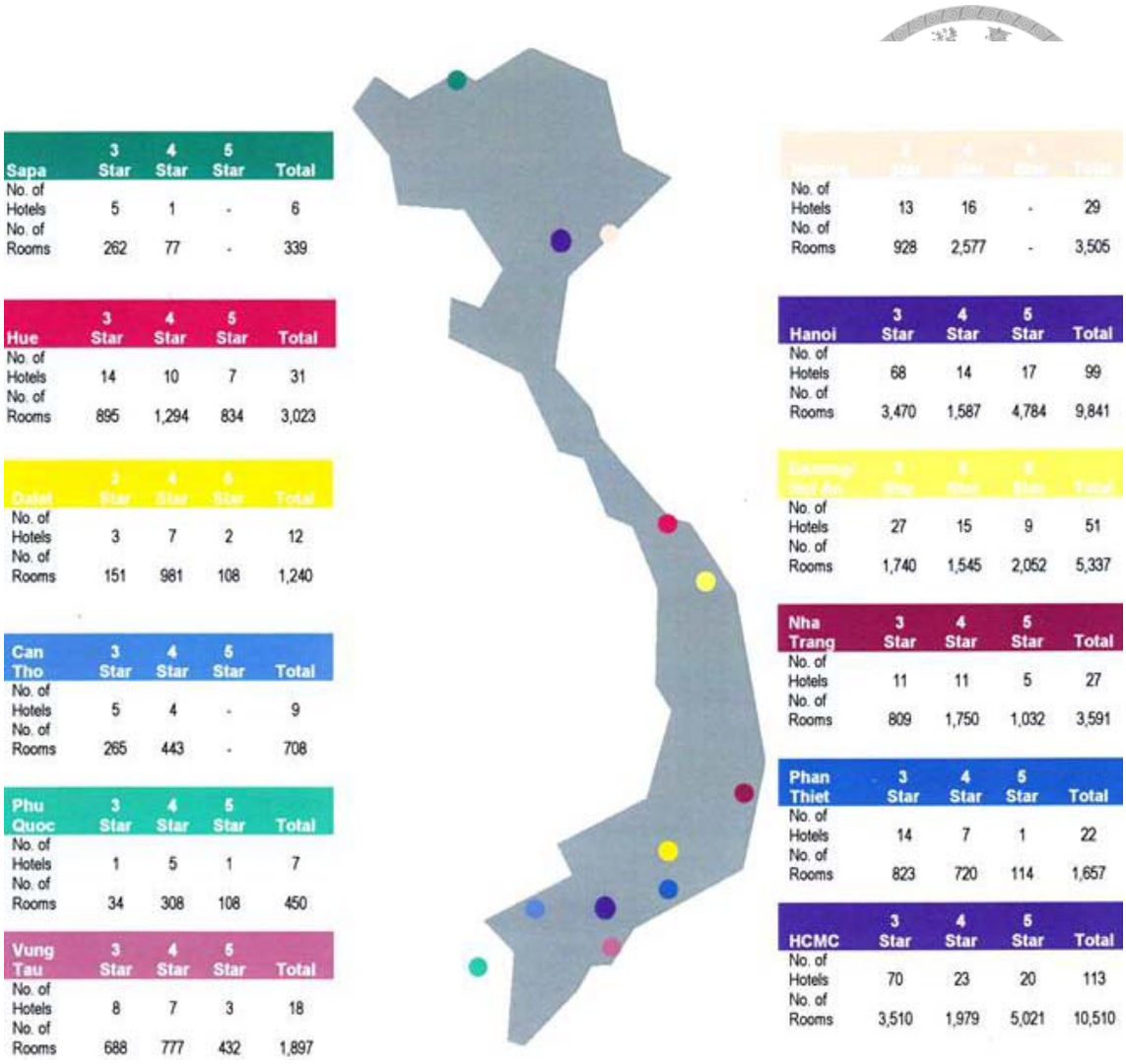


Figure 3.11 The distribution of tourism destinations in Vietnam

(Source: Atkinson and Lourey (2011), Vietnam Lodging Industry – Hotel Survey 2011)

Vietnam	3 star	4 star	5 star	total
No of hotel	239	120	65	424
No of room	13.575	14.030	14.485	42.096

From figure 3.11, because of the advantage of beautiful beaches, most of the resort along coastal areas. With the potential to receive more than 10 million foreign visitors per year, just over 400 hotels and 40,000 rooms is a very modest figure.

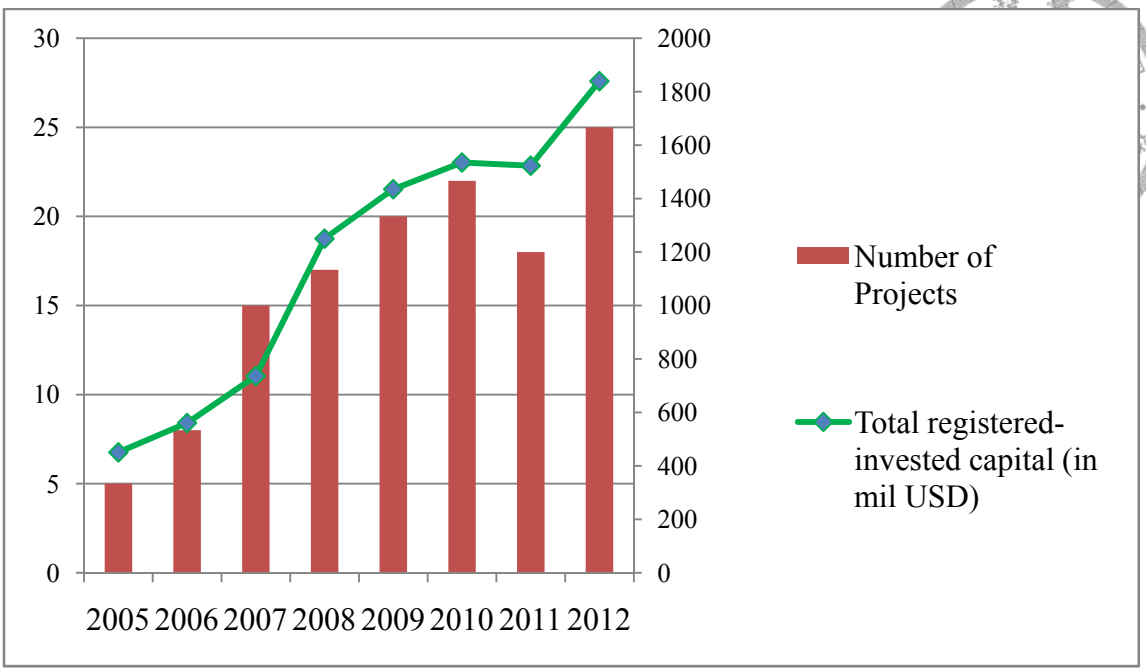


Figure 3.12 Statistics on the number of projects and investment in Tourism 2005-2012

(Source: Vietnam General Statistics Office)

As illustrated in figure 3.12, chart statistics on the number of real estate projects in tourism last 8 years. Compared with 2005, the number of projects and total investment amount increase 4 times and tends to rise gradually in the coming years. Moreover, according to the latest report, it will be one of the top areas attracted FDI in Vietnam in the coming years.

Therefore, some conclusions could be proposed:

Advantages:

- Many beautiful tourism destination, especially beaches across the country.
- High profits because of low labor cost, land cost and tax.
- High number of international tourist (more than 10 million tourists)
- No effects from bubbles of real estate market.

Disadvantages:

- Low level of human resources

- Infrastructure costs is still high

- No clear national strategies.

However, tourism will be one of the top areas attracted FDI in Vietnam in the next years.

3.1.3 FDI in Real Estate Overview

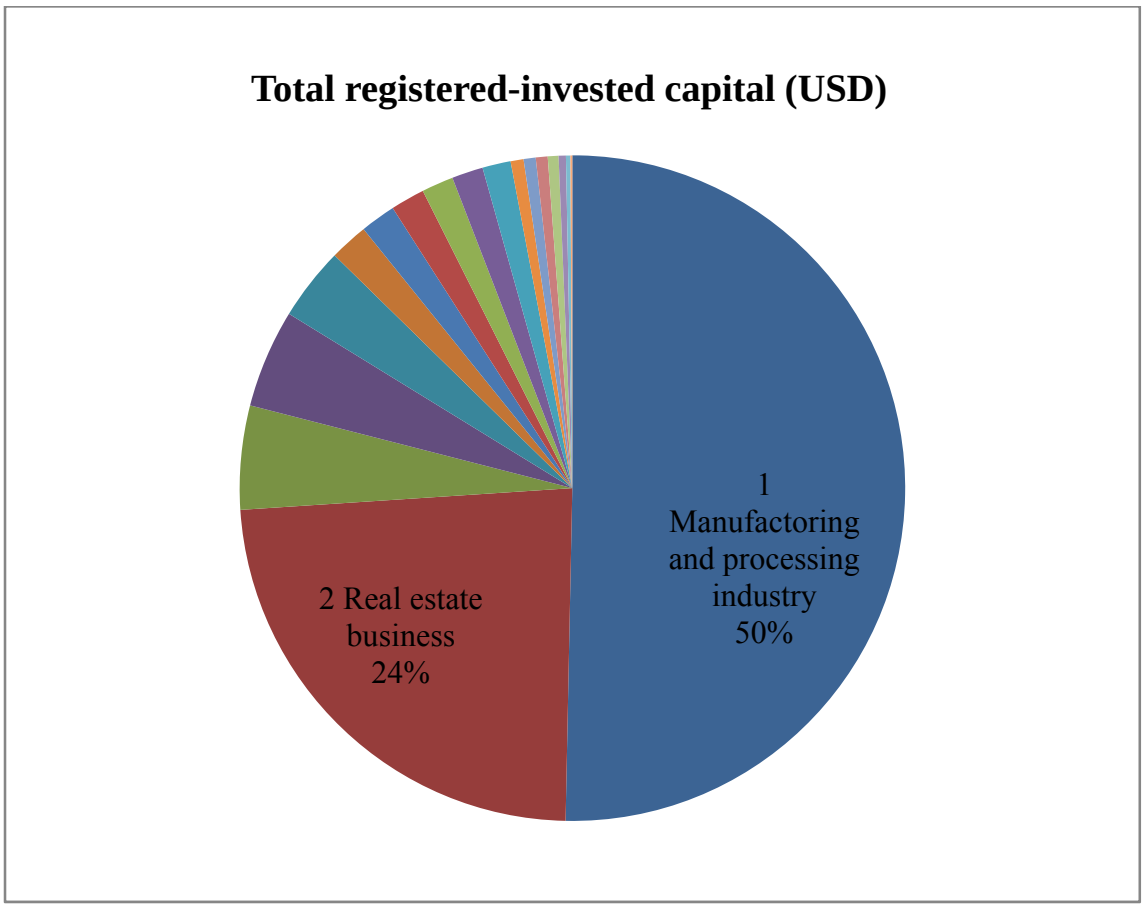


Figure 3.13 Total registered-invested FDI capital 2005-2012

(Source: Vietnam General Statistics Office)

Figure 3.13 points out that real estate stood 2nd in the most attractive FDI sectors with nearly 25%, right behind the manufacturing industry**.** Moreover, the cumulative FDI registered-invest capital in real estate reached 50 billion $ USD. The real estate speculation is always topped the list in four areas: gold, savings, stocks and real estate. Foreseeing this trend, foreign investors are also interested in Vietnam real estate market. Surprisingly, the largest real estate project has been completed and put into use in

Vietnam, is the project belongs to Taiwanese investor, the project named Phu My Hung (CT & D Group). A scale project in HCMC is 500 ha.

Year	2005	2006	2007	2008	2009	2010	2011	2012
Total registered-invested capital (in mil USD)	460,8	624,9	2.103,5	23.702,8	7.808,4	6.827,9	869,9	1.979,9
Number of Projects	17	14	52	447	254	33	25	13

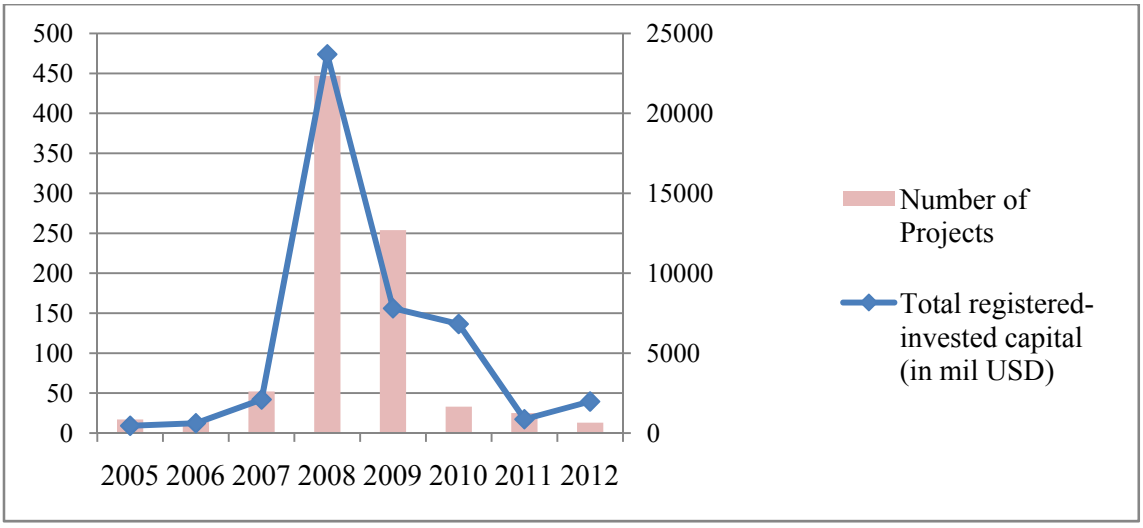
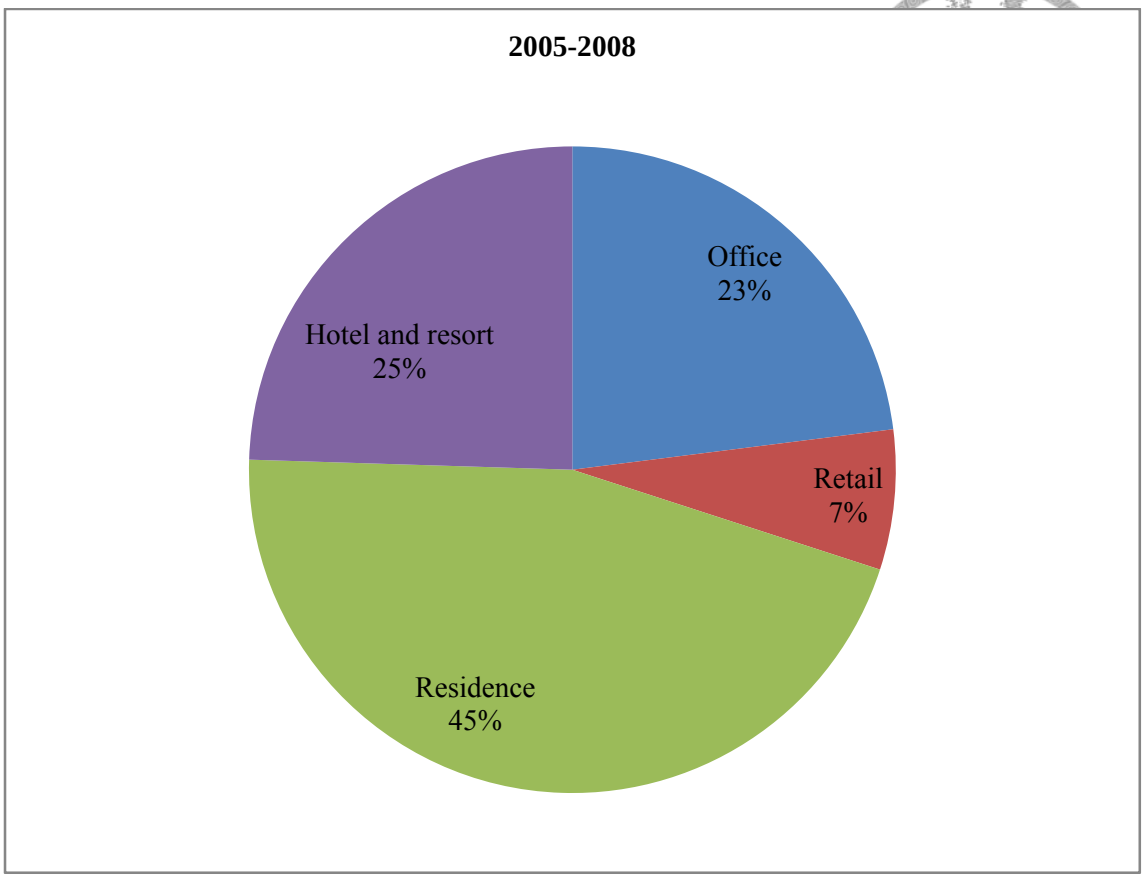


Figure 3.14 Total registered-invested FDI capital in real estate 2005-2012

(Source: Vietnam General Statistics Office)

As showed in figure 3.14, 2008 was a special milestone, marking the rapid collapse of the real estate market in Vietnam. In the short and medium term, FDI capital flow into this segment is expected not recovery. Currently, Vietnam government has some solutions to recover market as reduce interest rates and modify laws for foreigners to buy houses, but the efficiency is not high.



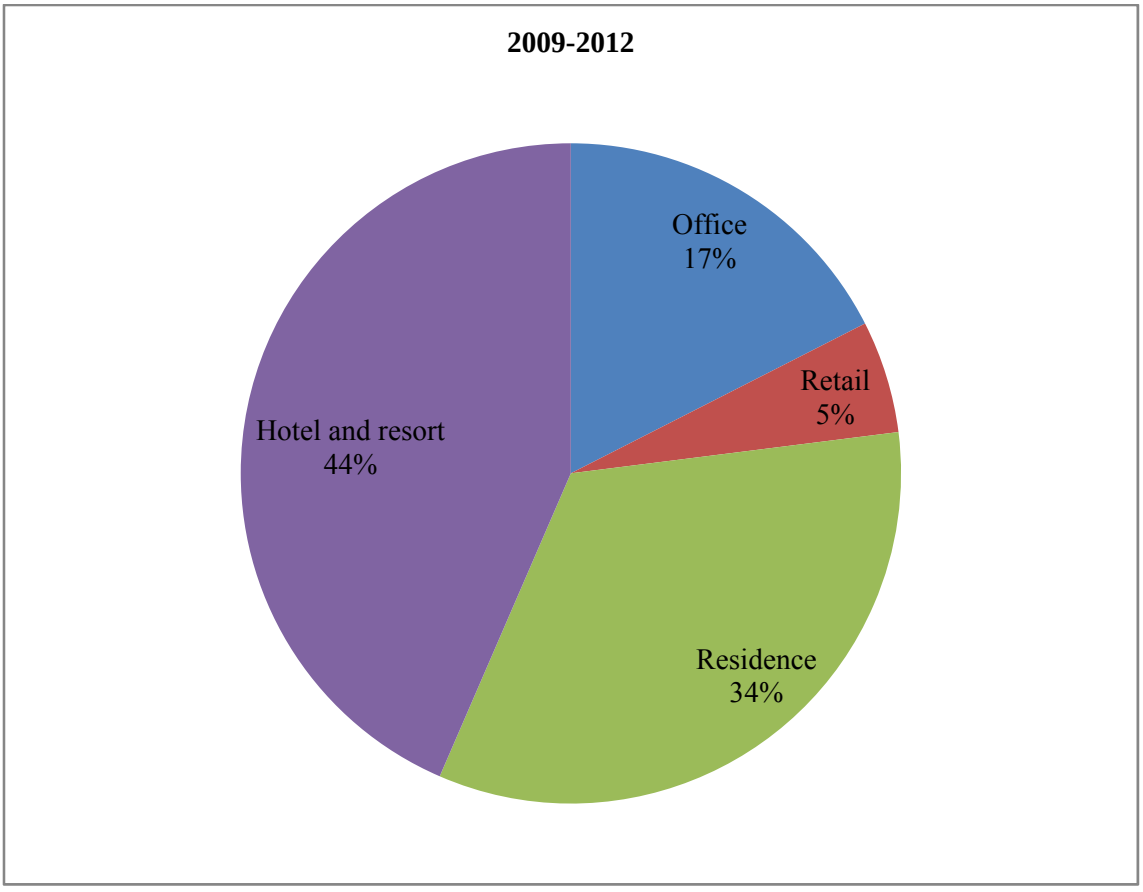


Figure 3.15 FDI in real estate 2005-2012 by categories

(Source: Vietnam General Statistics Office)

Two pie charts in figure 3.15 demonstrate the shift of FDI in Vietnam. My research divided 8 years from 2005-2012 into two periods, 2005-2008 and 2009-2012. All three areas, apartments, offices and retail decline after 2008. However, the tourism sectors show the opposite trend, which increased nearly two times in only 4 years from 25% to 44%. As discussed above, by owning many advantages and are not affected by bubble of real estate, this area maintains the development.

Conclusion:

- 2008 was a special milestone, marking the rapid collapse of the real estate market in Vietnam
- In the short and medium term, FDI capital flow into this segment are expected not recovery
- Vietnam government has some solutions to recover market as reduce interest rates and modify laws for foreigners to buy houses
- The tourism sectors show the opposite trend, which increased nearly two times in only 4 years.

Prediction:

- Because of the difficulties of the world economy, FDI inflows into Vietnam in general and the real estate market in particular are not expected to recover in the next year.

- Currently, foreign investors tend to purchase the project was nearly completed (M&A) instead of investing from the beginning.

3.2 Hypothesis Development

As stated in the previous chapter, the study hypothesized that there would be a shift in investment flows between four main categories: office, retail, residential and tourism.

As the data indicated, due to the large excess supply in the first three categories as well as sale and lease prices decline for several years, foreign investors are looking to transition to the other field, namely tourism real estate. According to foreign reports, Vietnam currently has over time developed hot economy and signs of slowing down in the next several years. Therefore, the domestic demand for these areas does not have the bright future. It is the appropriate time for investors to seek to new areas to absorb the revenue comes from overseas. For a country, that annually welcomes over 10 million foreign tourists and the tourism sector contributed 10 % of GDP, this smokeless industry is expected to be a key industry of Vietnam in the next decades. Foreseeing this trend, some foreign investors have begun to implement real estate projects related to tourism purposes with a total investment over 1 billion dollars , especially resort real estate projects combining casino.

3.3 Data and Variables

OLS (ordinary least squares) multiple linear regression analysis was chosen to test the hypothesis. 6 “Location” factor were taken into account, in order to test the null hypothesis that that the hypothesized variable has no significant impact, positive or negative, on the investment decisions of FDI inflows into provinces in Vietnam. Data were collected from 34/ 63 provinces and cities nationwide. These are also the provinces with the fastest growth in terms of FDI. This study divided the period 2005-2008 into two 4-year periods with the milestone - before and after 2008 in Vietnam. The empirical model is also shown:

$$FREI = \beta o + \beta 1\ Land + \beta 2\ Tour + \beta 3\ Loc + \beta 4\ Infras + \beta 5\ GDP + \beta 6\ Pop + \mu$$

Where βo is the constant, $\beta 1$- $\beta 6$ are the regression coefficients and μ is a random disturbance.

Table 3.1 Description of variables

Variables	Description	Source and Unit
Dependent Variable:		
FREI	Total FDI in Real estate in the provinces. The data is collected into 2 period 2005-2008 and 2009-2012.	Vietnam General Statistics Office (In million USD)
Independent Variables:		
Land cost	Average land cost in the provinces. The data is collected into 2 period 2005-2008 and 2009-2012.	Vietnam General Statistics Office (USD/m2)
Tourist (+)	The number of foreign visitors. The data is collected into 2 period 2005-2008 and 2009-2012.	Vietnam General Statistics Office (Thousand people)
Loc	Geographical location (is a dummy variable, we divide Vietnam into 2 kinds: Inland and Coastal location,)	Dummy Variables Coastal province = 1 Inland province = 0

Infras (+)	The level of infrastructure in the location through total money invested in infrastructure. The data is collected into 2 period 2005-2008 and 2009-2012.	Vietnam General Statistics Office (In million USD)
GDP(market size) (+)	GDP in the location. The data is collected into 2 period 2005-2008 and 2009-2012.	Vietnam General Statistics Office (In million USD)
Pop density (+)	Population density in the location. The data is collected into 2 period 2005-2008 and 2009-2012.	Vietnam General Statistics Office (people/km2)

3.3.1 Dependent Variable

Foreign Real Estate Investments (FREI): FREI is the direct investment by foreign individuals or firms in the host country's real estate sector by provinces across Vietnam. The data on FREI is average figures obtained from Vietnam General Statistics Office in two periods 2005-2008 and 2009-2012.

3.3.2 Independent Variables

Infrastructure: It cannot be denied the fact that infrastructure plays an important role in the investment decisions of FDI inflows not only in the field of real estate. There have been many previous studies indicate that for developing countries like Vietnam, the difference in infrastructure between the provinces is significant. Infrastructure investment always requires large capital and is often public investment. With foreign investors in the real estate field, it is always a hot field and requires high profit; therefore, to minimize capital investment and risk, they tend to select the area with

complete infrastructure in level high. Ramasamy and Yeung (2010) showed that countries which have well-developed infrastructure attract higher levels of FDI in service sectors (including real estate). Renaud (2010) argued that infrastructure development was one of the important factors that attract foreign investors into Dubai's real estate sector. Jones Lang LaSalle's (2009) report also noted that established infrastructure was one of the main factors for long-term investors when they assess any potential real estate transaction in the MENA region. Similarly, Chin et al. (2006) found that level of public infrastructure was one of the important factors for property investors in Southeast Asian cities' real estate markets. Lall et al. (2003) found that the physical infrastructure is a significant determinant of FDI in the Caribbean and Latin America regions. Harry and Xiaolun (1995) in the research in FDI inflows in China have recognized the provinces with complete infrastructure systems often receive great favor of foreign investment flows. He et al., (2009); Jiang et al., (1998); Zhu et al., (2006) also stated the Location factors have great influence on Frei, in which infrastructure is always the first priority. Therefore, it is expected that infrastructure is a positive and significant determinant of FREI. In order to reflect the level of infrastructure, this study collected data regarding total investment in infrastructure in the province from 2005-2012, the data were averaged at 2 periods in 2005-2008 and 2009 - 2012.

Market Size - Gross Domestic Product (GDP):

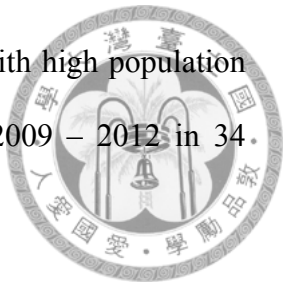
Another important factor, which investors always consider, is the market size. Harry and Xiaolun (1995) agree that GDP may point out fairly accurately the level of market development. GDP generally reflect the economic development of the country – or in my case in province. It reflects the province's potential demand and thus gives a good estimate of the province's market size. In this regard, GDP is usually an especially important factor for foreign investors seeking to sell as well as to produce in a local

market. Harry and Xiaolun (1995) conclude that GDP contributes the most essential factor for international investor's decisions when he research China's FDI inflows. Kok and Ersoy (2009); Luiz and Charalambous (2009) agreed that location factors play an important role in selecting the area of real estate investment, including market size. Lai and Fischer (2007) collected data from foreign investors that invested in Taiwan's property sector during 1997–2003. They found that the ranking of priorities for foreign real estate investment firms is led by economics, policies, market sizes, and society and product factors respectively. He et al. (2009) argued that a higher GDP would make a higher demand for properties, hence attracting more FREI (because more local demands and larger market size would create higher incomes for foreign real estate investors). Rodríguez and Bustillo (2010) also showed that GDP has the strongest effect on FREI in Spain. Falkenbach (2009) documented that market size is a significant factor in attracting foreign investors to the host country's real estate market (because market size reflects availability of investment possibilities). Similarly, in their study on OECD countries, Gholipour and Masron (2011) found that larger market size attract greater amount of FREI in these countries. The data collected regarding GDP were average figures at 2 periods in 2005-2008 and 2009 - 2012.

Population Density:

Population density is also a variable has been studied quite common in the previous researches. Especially in the real estate sector, it plays the more important role. No one is unaware real estate production primarily to serve to residents around it, from office, residential, and commercial center to the resort. Obviously, higher population density, higher demand for real estate. Practice has proved over the world, the city has the high population density of is often high price in real estate. It could be mentioned names like Tokyo, New York, Shanghai, etc. Zhu et al. (2006) investigate Shanghai market,

conclude that even in the cities, investors tend to choose the area with high population density. The data were averaged at 2 periods in 2005-2008 and 2009 – 2012 in 34 provinces across Vietnam.



Landcost:

As some countries have political model similar, for example China, land in Vietnam is state-owned. Therefore, to calculate the land cost is a very complex issue. In my research, I have collected data of land cost of the provinces yearly. These are the data used as a basis for compensation and ground clearance. It is well known in Vietnam compensation and clearance work is time-consuming and most controversial, those works take long time even than construction work. In Vietnam, land prices in the central areas are much higher than the suburbs. In addition, land prices in major cities have high demand for real estate is often higher than in the surrounding provinces. Raymond and Peter (2000), researching about residential property values in Hong Kong, has recognized that land cost account for a relatively large proportion of the sale price of this type of real estate. The data were averaged at 2 periods in 2005-2008 and 2009 – 2012 in 34 provinces across Vietnam.

Geographical Location:

As many countries, geographical location is likely to be important determinant effects on investment decisions. The inland provinces have the advantage of long-standing urban development; people have higher demand for housing and convenient transportation. Meanwhile, the coastal provinces have the advantage because the port is convenient for transport to a foreign country, and this province usually possesses beautiful beaches, an important factor for tourism business. In practice, in the coastal provinces, due to lower land prices and population density are often not high; therefore, the clearance work is easier and more convenient. Harry and Xiaolun (1995) in study of

FDI inflows in China have found that coastal provinces have a large advantage in attracting foreign investment. Therefore, geographical location is an important variable used to evaluate the initial assumptions about the shift of real estate investment in Vietnam. I use dummy variable to reflect coastal location with the value 1, while others is 0.

Tourist:

As mentioned in the hypothesis of a shift of FDI inflows and asset structure of foreign investors, the last and foremost factor needs to be mentioned is tourism. To assess the impact of tourism on FREI, my research will use data on the total number of foreigners traveling each province, the data was collected in 2005-2012, and taking the average of 4 year periods. Rodriguez and Bustillo (2010) believed that the increased FREI raises the tourism in the host countries, as tourism is the step that follows acquiring a property in a foreign country. This can influence tourism when the previous investment in real estate is introduced. In other words, tourism and real estate have close correlations. He and Zhu (2010) showed that FDI in real estate is common in large cities, which has larger number of population, foreign investments and tourists. Gholipour and Masron (2011) examined the effect of tourism agglomeration (learning about the host location) on FREI in OECD countries. Rodriguez and Bustillo (2010) also concluded that the attractiveness of the host country as holiday destiny related to FREI.

CHAPTER 4 DATA COLLECTION AND RESULTS

4.1 Robustness of OLS Regression Analyses

Several regression diagnostics are further conducted to ensure that basic assumptions for OLS regression are satisfied. OLS estimators are the best linear unbiased estimators (Wooldridge, 2003) under Assumption MLR.1 through MLR.5, such as:

1. White test (White, 1980) was performed to examine whether the sample met the homoskedasticity assumption of the OLS regression.
2. Ramsey reset test was performed to test specification errors such as omitted variables and non-linearity of functional form.
3. Variance inflation factor (VIF) test against each regressor was performed to test the no-multicollinearity assumption for OLS, especially for those with significant correlation.

The regression model was diagnosed to ensure no multicollinearity problems, specification errors and heteroskedasticity that would affect the robustness of models.

Under assumption of multiple linear regression, there should be no exact linear relationship among the independent variables, whereas some significant correlation found from Table 4.1 and Table 4.2. A variance inflation factor (VIF) test against each regressor was performed to justify the no-multicollinearity assumption (MLR.4). The VIF values from the test indicated that the figures are smaller than maximum value of 5 (Ryan, 1997). Thus, the correlations are acceptable.

Ramsey reset test was performed to test the linearity assumption for OLS. The results indicated the null hypothesis that the coefficient on the added variable is zero could be rejected at the 10% level of significance. It also implies that there are no

omitted variables and no general functional form misspecification detected from the regressions.

The F-statistics and p-values for White test indicate that homoskedasticity of model cannot be rejected at even at 10% level of significance. Under the OLS assumptions, the estimators can be presumed as the best linear unbiased estimators. The results of each test are shown in Table 4.3.

Table 4.1 Means, standard deviations and correlations of regression variables (2005-2008)

Variables	**Mean**	**SD**	1	2	3	4	5	6
GDP	1495.28	0.102677	1					
INFRAS	25.423	3.897537	0.434324	1				
LAND	1183.503	0.165791	0.469583	0.433511	1			
LOC	0.4705	149.4424	-0.11134	-0.12586	-0.14533	1		
POP	536.576	0.281624	0.81718	0.574624	0.533719	-0.31256	1	
TOUR	308.4011	0.381268	0.655727	0.562167	0.315769	0.010254	0.637595	1

Table 4.2 means, standard deviations and correlations of regression variables (2009-2012)

Variables	Mean	SD	1	2	3	4	5	6
LAND	1167.009	0.165791	1					
TOUR	356.2617	0.381268	0.591655	1				
LOC	0.470588	149.4424	-0.12009	0.128539	1			
INFRAS	31.77842	3.897537	0.741372	0.415277	-0.01739	1		
GDP	3055.318	0.102677	0.406763	0.521123	-0.114	0.622892	1	
POP	565.0702	0.281624	0.481511	0.280076	-0.3016	0.429595	0.345975	1

Table 4.3 Regression diagnostics

	VIF		Ramsey Test		White Test	
Variable	Variance	Centered VIF	F-statistic	P-value	F-statistic	P-value
2005-2008						
LAND	0,000808	4,979305				
TOUR	0,004275	4,638995				
LOC	656,8537	1,239338	0,55	0,46	0,59	0,84
INFRAS	0,653608	4,325606				
GDP	0,00031	4,109854				
POP	0,001609	4,400215				
N	34		34		34	
2009-2012						

LAND	0,000683	3,281106				
TOUR	0,002964	4,078735				
LOC	652,6132	1,329804	0,07	0,79	0,44	0,94
INFRAS	0,414256	4,577009				
GDP	0,000132	4,738171				
POP	0,001361	4,949035				
N	34		34		34	

4.2 Empirical Results of Hypothesis Tests

Table 4.4 Results of OLS regression analyses

Variables	**2005-2008**	**2009-2012**
Main Determinants		
Infras (Infrastructure)	2.778666 ***	2.812610 ***
GDP	0.045909 **	0.021045 *
POP (Population density)	0.103420 **	0.080085 **
Land (Land cost)	0.053289 *	-0.059859 **
Tour (Tourist number)	0,071198	0.115451 **
Loc (Location)	-45.9500 *	47.60422 *
R^2	0.676588	0.68415
Adj.R^2	0.641386	0.658405
F	187,7156***	34,34331***
n	34	34

Notes: * p<0.10; ** p<0.05; *** p<0.01 (two-tailed). [a] OLS standard errors are shown in parentheses. [b] Hetero-robust standard errors are shown in square brackets.

Table 4.4 reports the basic OLS estimation results. 2 sets of regression have been established. Model 1 has been shown in the table with data collected in 2005-2008 period and Model 2 with data collected in 2009-2012 period. Both of them were added full of 6 hypothesized determinants. As show in Table 4.4, the R-squares (R^2) and Adjusted R-squares (adj.R^2) is considerable high in both 2 model with 0.64 and 0.65 respectively. For example, the values for R^2 and adj. R^2 in Hassan and Usama (2013) four regression models for studying FREI obtain within 59%, 46%, 51% and 48% respectively. Therefore, statistically, based on the adj. R2 obtained in the study, it could be concluded that 6 variables – Infrastructure, GDP, Population density, Landcost, Tourist and Location - can explain 64% and 65% of FDI in real estate into provinces in 2 period.

In both 2 model the F-value which indicates a significance level well below 1%; thus, we soundly reject the null hypothesis that the 6 proposition variables together have no effect on FREI.

This table also shows that most of variables are strongly supported by a small p-value less than 10% that indicate that the hypothesized relationship between variables and FREI is strong.

In both two Model, all 3 variables: Infrastructure, GDP and Population density have p-value lower than 10% and positive sign (bear expected sign), we could conclude that the 3 factors are significant effects on FREI. This outcome is consistent with previous studies on FREI. The results also confirm our expectation that FREI goes to where there are greater development of basic infrastructure, higher GDP and Population density. In particular, p-value of Infrastructure in both two models are lower than 1%. This has been demonstrated in many previous studies that Infrastructure is always one of the most important factors in foreign investor's location choice. For example, Renaud (2010)

argued that infrastructure development was one of the important factors that attract foreign investors into Dubai's real estate sector. Jones Lang LaSalle's (2009) report also noted that established infrastructure was one of the main factors for long-term investors when they assess any potential real estate transaction in the MENA region. The coefficient estimate for these variable results is also the highest statistical significance among our explanatory variables.

According to the regression results, in the 2005-2008 period, the "Land cost" has positive sign and is significant at the 10 per cent level. It could be explained that the investors tend to choose the destination, which have the cost of land, and clearance is high. Because at that time, investors are likely invest in office and residential projects where land cost is often higher than other. In this period, housing prices in Vietnam rose by 40-50% within only 2-3 years that bring huge profits to investors. Besides that, "Location" has the negative sign and is statistically significant at the 10 per cent level. This finding implies that foreign investor favor Inland city. It is easily seen that most Inland city as Hanoi and Ho Chi Minh have many advantages for conducting residential and office projects. The Inland provinces have the advantage of long-standing urban development; people have higher demand for housing and convenient transportation. The empirical results also show that "Tourist" has the expected positive sign but is not significant.

Meanwhile, based on the 2009-2012 period result, we can see the opposite trends in comparison with the Model 1. Firstly, the "Land cost" sign is negative and is significant at 5 per cent level, suggesting that FREI sources tend to flow into new destinations which have land cost is lower. This is also consistent with the situation now. Due to the freezing of the real estate market, investors avoid capital investment in risky projects, especially the projects in special locations where land price is relatively high. As noted

above, Land cost is occupied a significant portion of the total investment of real estate's projects in Vietnam. It is the fact that in Vietnam, the costs for clearance and land often account for over 50% of the total project investment and these works also take long time that extending the project schedule, along with higher risks. Similarly, the dummy variable "Location" is positive sign, suggesting that the coastal region have 47.6 point in total FREI more than inland. The results are in line with the hypothesis of the shift of FREI in Vietnam from Inland to Coastal location. Finally, the "Tourist" is positive sign and has significant relationship to FREI. The result also confirms my expectation about the above trend. Indeed, most coastal cities have many tourism destinations and long and beautiful beaches and suits for hotel and tourist projects.

CHAPTER 5 CONCLUSION AND RECOMMENDATION

5.1 Conclusion

My research has analyzed the real estate market in Vietnam in a turbulent period from year 2005 to 2012. Many issues were outlined and discussed, such as the relationship between office, retail, residential and tourism market. Eclectic Paradigm (OLI theory) has been also employed to research Vietnam market. By the data was collected and analyzed, we obtain some outstanding results:

- The decline of the real estate market in Vietnam with the milestone before and after 2008. This was evident when analyzing every single market. However, this decline has different levels for each segment. The lower price segment is less affected than the high-end segment. The high profit segment like office and residential has fallen faster and sooner. This is consistent with previous studies in the emerging markets such as Shanghai, Beijing or Bangkok. This is a mandatory collapse to help the economy to improve and become more mature.

- By regression models and OLI paradigm, 6 "**Location**" factors (Tourists, Location, Land cost, Infrastructure, GDP, Population density) have significant impacts on foreign real estate investments (FREI) in Vietnam.

- Among them, 3 variables (Infrastructure, GDP, Population density) have been shown to have the greatest influences on FREI at any period, no matter before or after 2008 – the time witnessed the collapse of Vietnam Real estate market. Practice has proved that they are the top concerns of foreign investors to invest in Vietnam.

- In addition, the results also indicate a significant relationship between tourism and real estate in Vietnam. This is an important result of the thesis, it supports investors to view the new direction for investment. For policy makers, this is the time to ask the

question what a key market of the Vietnam's real estate industry is, instead of supporting to the entire market.

- The thesis also point out:

The shift of Real Estate Investment in Vietnam:

- From office and residential projects to tourism and resorts projects.
- From Inland to Coastal provinces.

5.2 Recommendations

Although this research has achieved some objectives, during the study I recognized some drawbacks must to recommend as below:

- My research only took into account 6 "Location" variables whereas some important factors (such as cultural and political environment, tax policies, financial structures, and so on) were ignored.
- These results are consistent compared with previous studies and they have made certain progress. However, the results still need to be studied more carefully in the next study before being recognized.
- Besides that, due to the limitation of time and information, the study cannot analyze all of the provinces and cities nationwide. In future research, I also will try to scale up all 63 provinces and cities in Vietnam.
- In addition, I will research comparable between regions in the country such as the northeast, northwest, southern, etc, instead of just studying coastal and inland.
- The study do not separate FDI sources between organizations, companies and individuals even though their purposes is fundamental different. (I still combine them together).

APPENDIX

Table A.1 Data collection 2005-2008

No	Province	FDI in province (mil USD)	Landcost (USD)	Tourist (Thousand people)	Loca-tion (Dummy)	Infra-struture (mil USD)	GDP (mil USD)	Popula-tion Density (person/ km2)
1	Ha Noi	1570,49	4.436	1.262	0	194	8.814	1906
2	Vinh Phuc	69,92	804	104	0	9	1.113	911
3	Bac Ninh	63,20	1.164	65	0	9	1.285	1225
4	Quang Ninh	239,34	1.396	1.159	1	33	2.617	182
5	Hai Duong	16,81	1.479	17	0	2	201	1027
6	Hai Phong	198,33	1.990	260	1	27	2.267	1183
7	Ninh Binh	55,80	945	168	1	8	591	656
8	Tuyen Quang	10,08	354	105	0	1	86	123
9	Lao Cai	82,69	616	499	0	11	706	93
10	Thai Nguyen	22,19	1.232	65	0	3	189	315
11	Lang Son	164,71	728	129	0	22	1.406	88
12	Bac Giang	32,27	657	136	0	4	275	405
13	Hoa Binh	163,37	547	266	0	22	270	180
14	Thanh Hoa	70,59	1.437	200	1	10	1.153	313
15	Nghe An	59,83	2.095	148	1	8	1.394	179
16	Ha Tinh	35,63	821	50	1	5	591	210
17	Quang Binh	69,92	642	108	1	9	121	104
18	TTHue	77,31	1.114	266	1	11	448	218
19	Da Nang	371,78	846	698	1	86	1.802	644

20	Quang Nam	75,97	246	456	1	10	321	137
21	Phu Yen	57,15	452	60	1	8	522	169
22	Khanh Hoa	171,44	1.039	547	1	23	889	217
23	Ninh Thuan	51,77	329	85	1	7	430	166
24	Binh Thuan	42,35	1.109	79	1	6	362	148
25	Lam Dong	75,97	702	152	0	10	648	119
26	Binh Duong	157,32	1.178	103	0	21	2.031	444
27	Dong Nai	149,92	1.185	157	1	20	1.280	393
28	BRVT	326,07	1.023	558	1	44	4.849	480
29	TPHCM	1858,24	4.388	1.723	0	181	10.696	3104
30	Long An	59,83	780	125	0	26	706	315
31	Tien Giang	52,44	1.021	184	0	7	625	668
32	Dong Thap	36,30	452	109	0	5	591	490
33	An Giang	35,63	1.186	94	0	5	304	608
34	Can Tho	113,62	1.848	347	0	15	1.257	824

Table A.2 Data collection 2008-2012

No	Province	FDI in province (mil USD)	Landcost (USD)	Tourist (Thousand people)	Loca-tion (Dummy)	Infra-struture (mil USD)	GDP (mil USD)	Popula-tion density (person/ km2)
1	Ha Noi	556,50	3.645	1.226	0	231	15.086	2000
2	Vinh Phuc	41,09	810	115	0	20	2.536	818
3	Bac Ninh	40,22	1.053	72	0	10	3.484	1278
4	Quang Ninh	199,34	1.530	1.476	1	47	5.404	190
5	Hai Duong	9,40	1.620	19	0	2	415	1038
6	Hai Phong	159,56	1.800	359	1	38	4.325	1228
7	Ninh Binh	48,96	1.035	246	1	12	1.221	658
8	Tuyen Quang	24,04	383	121	0	6	178	125
9	Lao Cai	45,03	675	439	0	11	1.339	99
10	Thai Nguyen	53,77	1.350	66	0	13	391	322
11	Lang Son	72,13	720	143	0	17	3.140	89
12	Bac Giang	12,24	720	161	0	3	924	408
13	Hoa Binh	53,77	495	282	0	13	1.031	173
14	Thanh Hoa	93,99	1.530	254	1	22	2.489	307
15	Nghe An	53,77	2.295	196	1	13	2.406	178
16	Ha Tinh	48,96	900	93	1	12	1.221	205
17	Quang Binh	85,68	703	173	1	20	249	106
18	TTHue	93,11	1.170	246	1	22	924	218
19	Da Nang	647,42	756	838	1	87	4.195	729
20	Quang Nam	135,95	248	559	1	32	664	137
21	Phu Yen	48,52	495	72	1	11	1.078	172

22	Khanh Hoa	227,76	1.013	732	1	54	4.207	224
23	Ninh Thuan	45,03	360	148	1	11	889	170
24	Binh Thuan	42,84	1.215	142	1	10	747	151
25	Lam Dong	53,77	748	174	0	13	1.458	124
26	Binh Duong	121,53	1.053	156	0	29	4.195	610
27	Dong Nai	155,63	1.125	222	1	37	5.013	442
28	BRVT	287,21	936	840	1	68	6.458	512
29	TPHCM	683,71	3.645	1.739	0	176	18.534	3555
30	Long An	37,60	855	78	0	9	1.458	322
31	Tien Giang	38,47	1.152	174	0	9	2.240	670
32	Dong Thap	23,17	495	114	0	5	1.458	495
33	An Giang	40,66	1.350	95	0	10	1.102	608
34	Can Tho	45,03	1.800	342	0	11	3.425	852

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