VAASAN AMMATTIKORKEAKOULU
VASA YRKESHÖGSKOLA
UNIVERSITY OF APPLIED SCIENCES

Linh Phan

THE HOUSING BUBBLE AND CONSUMER BUYING BEHAVIOR – A RESEARCH IN VIETNAMESE RESIDENTIAL MARKET

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VAASAN AMMATTIKORKEAKOULU

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Kiinteistökauppa on tärkeä osa vietnamilaista taloutta. Useina vuosina ennen vuotta 2008 Vietnam oli houkutteleva kohde sijoittajille voittojen saamiseksi. Vuonna 2008 asuntokupla puhkesi, ja tämä johti sekä kiinteistösektorin- että muun vietnamilaisen talouden kriisiin. Asuntojen ostaminen muuttui vaikeaksi sijoittajille ja asuntomarkkinat olivat pysähdyksissä. Syistä tuolloin syntyneeseen asuntokuplaan ja sen puhkeamiseen on keskusteltu myöhemmin. On havaittu, että syitä oli monia: talouspolitiikka, urbanisoituminen, inflaatio, spekulointi ym. Mainitut syyt ovat enimmäkseen kysynnän (kuluttajien) ongelmia, ja tämä johtaa asuntokuplaan. Tässä lopputyössä kysynnän ongelmat on selitetty kuluttajien/sijoittajien psykologisesta näkökulmasta ostopäätöksen syntyessä.

Tämä tutkimus on toteutettu analysoimalla kahdesta näkökulmasta: teoreettisesta ja empiirisestä. Teoreettinen osio sisältää analyysin vietnamilaisista asuntomarkkinoista (PESTLE-analyysi ja Porterin viiden kilpailuvoiman malli), teoriaa asuntokuplasta ja sen syistä sekä Kotlerin kuluttajien ostoteorian.

Tutkimuksessa käytettiin sekä kvalitatiivisia että kvantitiivisia tutkimusmenetelmiä. Tutkimuksen tulokset yhdessä teoriaosuuden kanssa auttavat lukijoita ymmärtämään asuntokuplan ja kuluttajien ostokäyttäytymisen suhdetta.

Avainsanat: Asuntokupla, kuluttajien ostokäyttäytyminen, vietnamilaisista asuntomarkkinoista

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ABSTRACT

Author	Linh Phan Thi Khanh
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The real estate market plays an important role in the Vietnamese economy. In several years before the year 2008, this was the attractive market to investors for gaining the profits. However, as in 2008 the housing bubble burst, this led to a crisis in this sector in particular as well as in the Vietnamese economy in general. The investors had to confront the difficulty of purchasing housing properties. The housing market was frozen. At this time, the causes of a housing bubble were discussed. There are many reasons for these issues: financial policies, urbanization, inflation, speculation, etc. However, the issue mentioned most are the demand problems (consumers' problems) and this matter mainly lead to the housing bubble. In this thesis, the demand problems are explained through consumer/investor making a psychology in buying decision.

This research is conducted by analyzing two sources: theoretical part and empirical part. The theoretical part of the study includes an analysis of the Vietnamese residential market (PESTLE analysis and Porter's 5 forces analysis), theory on the housing bubble and its causes and Kotler's consumer buying behavior theory.

The research method used in this thesis was both qualitative and quantitative. The results of the research together with the theoretical study helps readers understand the relationship between a housing bubble and consumer buying behavior.

Key words: Housing bubble, consumer buying behavior, Vietnamese residential market.

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1 INTRODUCTION

1.1.   Background

Vietnam –located in Southeast Asia- is considered as one of most dynamic economies in the region. Regarding the economic growth, Vietnam's growth rate was on average 6.4% in the last decade (Worldbank.org). Since Doi Moi (Renovation) in 1986, the Vietnamese market has been an influential appeal to the building of an open- market economy and the recognition of Vietnam's private economy and managed to reach the stability in macroeconomics (Vuong, 2004, p22). Thanks to this effort, Vietnam has been an attractive destination for foreign investments in the last decade. Especially, there has been a remarkable investment in real estate. The changes in business law and real estate investment policies has opened the opportunity for investors from the USA, Japan, Korea, China, etc who have their own projects in the Vietnamese market. According to Cushman &Wakefield in their research in 09/2013, the real estate in the Vietnamese market is divided into three investment segments of commercial property market (offices, retail), residential market, and investment market. Each segment indicates its value in bringing benefit for investors. However, the birth of the housing market is still new, it works based on the dispersion, individual investors and does not follow the common international rules. Therefore, investors have to consider carefully before choosing this challenging market which still can offer many opportunities.

In this research, the focus is on the real estate market. Like the real estate in general, the residential market has attracted particularly many investors in the last decade because it has been considered as the potential market with a large number of buyers. However, under the influence of global financial crisis in 2008, there was a significant drop in housing prices. At the same time the level of housing consumption slowed down. At this time, a housing bubble – a term which is used, for example, many times in articles, media, and the internet, etc became apparent. The term housing bubble describes an increase in demand while there is a limitation in supply and this requires a long-term plan in order to obtain a

balance again. Meanwhile, speculators believe that the profit can be generated through short-term selling and buying. That is the reason why the prices of houses are overvalued.

Although there are many reasons leading to a housing bubble, the buyers' psychology is mentioned much more often than other reasons in the Vietnamese market. Therefore, this research explains partly the relationship between the housing bubble and consumers' buying behaviour in Vietnam.

1.2. Research purposes, research problem and limitations

As mentioned above, the research purpose aims at indicating the intimate connection between the housing bubble and the Vietnamese consumers' buying psychology. With its approach method and analysis, the research can be considered as a reference for investors in making investing decisions in the residential market in the future. The main question is:

What is the relationship between the housing bubble and the buying behaviour of investors in the Vietnamese market?

To support this main question, some sub-questions have been raised:

- What are the main characteristics of the Vietnamese market?
- What is the role of consumers in creating this bubble?
- What are the causes of the housing bubble in Vietnam?
- Who are the main players in this game?
- What are the typical characteristics of Vietnamese buyers?
- Why do the characteristics cause a bubble in housing price?

The real estate topic is a broad topic that covers many sub areas. In Vietnamese market case, they are the commercial property market, the residential market and the investment market. As a constraint, the emphasis is on analysing the residential market with purpose of providing the readers with some basic knowledge in order to make a two investment decision rather than one based on peer pressure.

It should be noted that this thesis just studies about the consumer psychology – one of many reasons for causing a housing bubble. This factor is mentioned frequently in Vietnam these days. In addition, this thesis topic is limited to the Vietnamese residential market. Thus, it cannot be applied to other markets which have a similar economic climate with Vietnam. Moreover, the research is conducted from the author's point of view, the source of information supporting the thesis might be restricted. Therefore, it is suggested that the investors should find other information before determining how to spend their money on any projects.

1.3.Theoretical framework

This thesis is divided into two main sectors: theoretical study and an empirical study. Different sources of data are collected for each section. In the theoretical section of the thesis, the data is collected from secondary data such as books, articles, reports, etc. This section describes the theories which provide the knowledge for the thesis analysis. This section aims at explaining in terms of theory the relationship between a housing bubble and consumer′ buying behaviour. These theories based on the strategic model are very popular in market research. The theoretical framework explains the following issues:

- Housing bubble knowledge
- PESTEL analysis
- Porter's five forces
- Consumer buying behaviour
- Buying decision process

These models are necessary for analysing the empirical study later.

1.4.Research methodology

According to Saunders et al (2009), the research methodology is a vital part in a research study. A clear and efficient approach leads to the most exact result. There is a distinction between research method and research methodology (Saunders M., 2009, p3). The term method represents techniques and procedures to analyse data which is considered as two methods: quantitative (statistical) and

qualitative (non-statistical). In this thesis, both quantitative method and qualitative method are applied in order to give the most reliable result. The quantitative method is designed as a questionnaire and will be sent to respondents. Meanwhile, an interview is used to collect the opinions from investors relating to residential investment. The results from both methods will be collected and analysed.

It is also mentioned by Saunders et al (2009) that there are three research approaches which are used in a market research: inductive, deductive and combination. The inductive approach starts with the observations and theories are formulated towards the end of the research and as a result of observations (Goddard and Melville, 2004). Contrary, a deductive approach is concerned as "reasoning from the general to particular" (Pelissier, 2008, p.3). This thesis is developed based on an inductive approach, which means the results of thesis are drawn from the theories, the collected and analysed data as well as from empirical observations. The process approaching data and information in this thesis is described in the Figure 1 below.
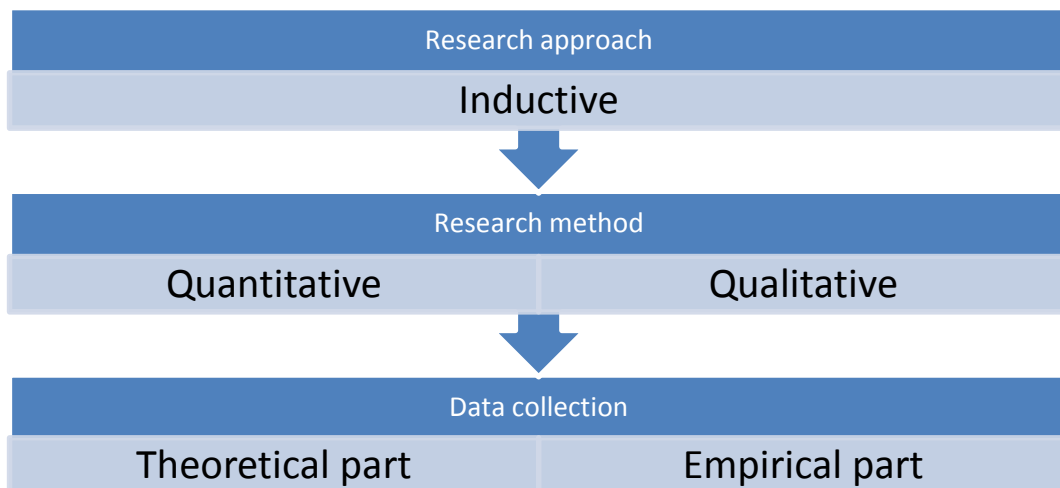
Figure 1. Research design of the thesis

The empirical study is built on both primary and secondary data. Primary data is collected using a quantitative method (questionnaire) and a qualitative method (interview). While the quantitative method provides the general observation, the qualitative method indicates the in-deep knowledge and opinions

of the respondents. Secondary data is drawn from articles, reports, and statistics from official sources such as government, agencies and prestige organizations.

1.5. Thesis structure

The thesis is divided into two main sections: theoretical and empirical themes as described in Figure 2 below.

Introduction
- Background
- Research purposes, problems, limitations
- Theoretical framework
- Research methodology

Theoretical part
- Analysis of Vietnamese housing market (PESTLE, Porter's 5 forces)
- Housing bubble and its causes
- Vietnamese customer buying behaviors

Empirical part
- Research on Vietnamese consumers (quantitative)
- Interview
- Analysis

Conclusion
- The relationship between housing bubble and customer buying behaviours

Figure 2. Thesis structure

The thesis structure is divided into four parts: introduction, theoretical part, empirical part and conclusion. The introduction describes the basic

information about the thesis: the background of Vietnamese economy, the purposes, problems and limitations of the research. It also provides general information on the theoretical framework as well as the methodologies approaching the results.

The second section in this thesis is one of the main sections in this writing. It indicates the theories and information which is used to make clear the provided arguments. The PESTLE analysis and Porter's 5 forces are used to analyse the Vietnamese real estate market. Thanks to that, a general picture of the main topic will be provided to readers in order to offer them an overall view about the Vietnamese real estate market. The other theory is about housing bubble. The definition of this term will be provided along with its causes, which relate directly to the main problem of this thesis. The last theory which is introduced is consumer buying behaviours. It aims at analysing the characteristics of Vietnamese consumers. Consumers' characteristics and other catalytic problems will help readers understand the connection between a housing bubble and consumers' psychology.

The third section provides information on the research which helps to make clear the main research problem. Two study methods will be integrated: quantitative and qualitative in order to confirm the arguments raised in the theoretical study.

Last but not least, a conclusion part will re-consolidate the previous results as well as provide assessment and suggestions for further research.

2. THE VIETNAMESE HOUSING MARKET

2.1. PESTLE analysis of Vietnam

Before studying the influences of the housing bubble in Vietnam, it is necessary to give the overview of the Vietnamese housing market. In this chapter, the PESTLE analysis is used to provide readers with a general knowledge of the Vietnamese housing market.

PESTLE is known as a useful tool in business analysis. The factors in PESTLE are represented by the letters P, E, S, T, L, and E are political, economic, social, technology, legal and environmental factors. This analysis assists the organizations in finding the own strategies. According to Johnson et al (2009), strategy is the direction and scope of an organization over the long term, which achieves advantage in a changing environment through its configuration of resources and competences. In the limitation of this thesis, strategy can be considered as a compass for the investors to find out the right direction.

2.1.1. Political factors

Political factors include government attitudes to employment, consumer protection, the environment, taxation, trade registrations and social reforms, as well as the burden of bureaucracy and the level of corruption. In addition, factors in legal problems are also considered including the current and impending legislation that may affect the industry in areas such as employment, competition, and health and safety (www.free-management-ebooks. com).

According to Vietnamese Competitive Report 2010 (Ketels et al, 2010, p.66), Vietnam is considered as a country with a high level of political stability. This index is compared to neighbouring countries in the region, thus it is an important advantage for Vietnam to attract foreign investments and enhance its competitive advantage.

Vietnam's economic policies focus on broadening the relationships with many countries. Since the Doi Moi (Renovation) in 1986, Vietnam established the diplomatic relationship with 170 nations, opened the commercial exporting

relationship to 230 markets. Moreover, Vietnam actively participates in international organizations such as Asia Development Bank (ADB), International Monetary Fund (IMF). The participation of Vietnam in Association of Southeast Asia Nations (ASEAN) in 1995 and ASEAN free trade area (AFTA) in 1996 opened a new chapter in penetrating the international market of Vietnam. In the same year – 1996, Vietnam joined the Asia-Europe Meeting (ASEM) and until 1998, Vietnam was accepted to be a member of Asia-Pacific Economic Cooperation (APEC). The internationalization process of Vietnam took an important step when Vietnam officially became a member of World Trade Organization (WTO) in 2007 after a 11-year negotiation.

Becoming a membership of WTO brought both opportunities and threats to the Vietnamese market. It applied for many sectors in economy in general and for real estate field in particular. There are more and more foreign investors finding the potential in the real estate market, especially in the residential market. The real estate projects in recent years have shown that there has been a boom in construction projects which includes foreign factors. However, the loosing of local legislation framework when entering the international market made many holes into the Vietnamese real estate law. This is like a double-edged sword; it can bring quick riches but take all from an investor just in a second, especially from most investors who lack experience. Therefore, it is very important for investors to understand the political and legal environment before determining any investments.

2.1.2. Legal factors
  ❖ The Law on Land 2013 and 2014

In 29/11/2013, The Law on Land 2013 has been ratified by Vietnamese Parliament and came into force on July 1, 2014 (The 2014 Land Law). At the same time, the Vietnamese issued Decrees No.43, 44 and 47. The highlight issues mentioned in this law are: (according to a general report of author Vinh Quoc Nguyen, on official page of Tilleke & Gibbins – a leading regional law firm in Southeast Asia)

The Equal for both domestic and foreign investors: Under the Law on Land 2003, while local investors were allowed to acquire land via land allocation, foreign investors leased directly through the government as the most common form of land acquisition. Local investors were also able to lease the land from the government and pay rent on annual basis, meanwhile foreign investors paid rent either on an annual or on upfront basis. The Law on Land 2014 removes all these differences between local investors and foreign investors. It should be noted that land allocation is just available for residential land.

More Conditions for Land Acquisition: The new requirements include the following: First of all, the lease (or allocation) of the land must have been provided for in the annual land use plan issued by the district-level People's Committee. Secondly, the developers must meet a minimum level of statutory equity capital. For a project that has a land area of less than 20 hectares, the developer's equity capital must be at least 20% of the total estimated investment capital of the project. For a project of 20 hectares or more, the equity capital must be at least 15%. Thirdly, the developers must pay deposits to the government

Uncertainty Over Land Prices: The Law on Land 2003 stipulated that the land price (i.e., the land rent or land use fees) for a specific plot of land could be calculated based on the table of land prices annually published by the provincial People's Committee. The Law on Land 2014, however, requires the land price to be determined on a case-by-case basis by the provincial People's Committee. The government may hire land valuation firms to determine and advise on the land prices.

More Restrictions on Land Withdrawal: The Law on Land 2003 stipulated that the grounds for land withdrawal by the government for the development of a commercial or residential project were very broad. Developers were able to ask the government for land withdrawal from individual land users for their development of a three-star hotel or any residential project. This is no longer permissible under the Law on Land 2014. Land withdrawal for a commercial or residential project must satisfy two conditions: (i) it may only be for significant projects, such as construction of a new township; and (ii) it must have prior approval for land withdrawal from the provincial People's Council.

More Options for Residential Projects: For the first time, the 2014 Land Law allows a residential project developer to transfer part of its project. Also, for the first time, the 2014 Land Law allows a residential project developer to transfer individual plots of land in a project (without any houses constructed on them). In response to the recent downturn of the real estate market in Vietnam, however, the Law on Land 2014 allows a developer to transfer bare land to buyers, so long as some conditions about payment, construction, location and legal are met.

❖ The financial policies

According to information from official website of Ministry of Finance, the following policies mention the issues of tax and income tax, land use, land rent, solution for economy difficulties, etc.

Circular 103/2014/TT-BTC published on 06/08/2014 guides the fulfilment of tax liability of foreign entities doing business in Vietnam or earning income in Vietnam.

Circular 16/2013/TT-BTC published on 08/02/2013 guides implementation of the extension of time limits, reduction of a few state budget revenues according to the government's resolution No. 02/ND-CP, of January 7th, 2013 on a number of solutions to remove difficulties for business production, market support, settlement of bad debts.

Circular 216/2012/TT-BTC published on 10/12/2012 guides the calculation of the land rents applicable to rubber plantations.

Circular 60/2012/TT-BTC published on 12/04/2012 guides the executing of tax liability applicable to foreign organizations, individuals doing business or earning incomes in Vietnam.

Circular 153/2011/TT-BTC published on 11/11/2011 guides non-agriculture land use tax.

2.1.3. Economic factors

Economic factors include assessing potential changes to an economy's inflation rate, taxes, interest rates, exchange rates, trading regulations, and excise duties. Official economic indicators, most of which are available online, such as GDP (Gross Domestic Product), GNP (Gross National Product), and consumer-

based indices often highlight areas where more detailed information is required (source: www.free-management-ebooks. com)

Since the Doi Moi (Renovation) launched in 1986, Vietnamese economy transformed from one of the poorest countries in the world into a lower middle economy (World Bank). It is an important step in the development of the Vietnamese economy. Generally speaking, the renovation in the last 30 years brought the Vietnamese's economy the basic success. Vietnam transformed to be a dynamic and competitive economy. The economy is developed in every aspect. The economic policies had opened to many foreign markets, reduced the tariff and non-tariff barriers and attracted many sources of foreign investment. The Vietnamese goods had exported to more markets in the world. According to *heritage.org*, Vietnam's economic freedom score is 51.7%, making its economy the 148th freest in the 2015 index. Thanks to the improvement from government spending control, corruption freedom and monetary freedom outweighing declines in labour freedom and business freedom, Vietnam's score has increased 1 point since last year. The Figure 3 shows the Vietnam's open market in the world rank. It can be seen three elements of an open market in the Figure 3: trade freedom, investment freedom and financial freedom. The back line in the Figure 3 expresses the world's average level. Of these, the investment freedom (15 points) is very low compared to the world's average level (56 points). This element ranks the 168th in the world map. Next, the financial freedom is 30 points under the 50-point world's average and it ranks the 131st in the world map. Trade freedom (78.6 points) is in the better case when it is approximately the world's average (76 points). It ranks the 77th in the world map.
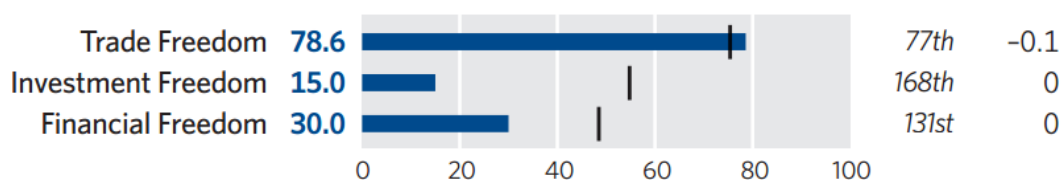
Figure 3. Vietnam's open market score in the world map in 2015 (heritage.org)

❖ Gross domestic product (GDP) and GDP per capital

Vietnam is considered as one of the fastest growing economies in the world. From 1990 to 2009, GDP of Vietnam was recorded as the average growth level of 6% that belonged to the fastest growing GDP (Figure 4). Vietnam's GDP in 2014 is $359.8 billion according to heritage.org.
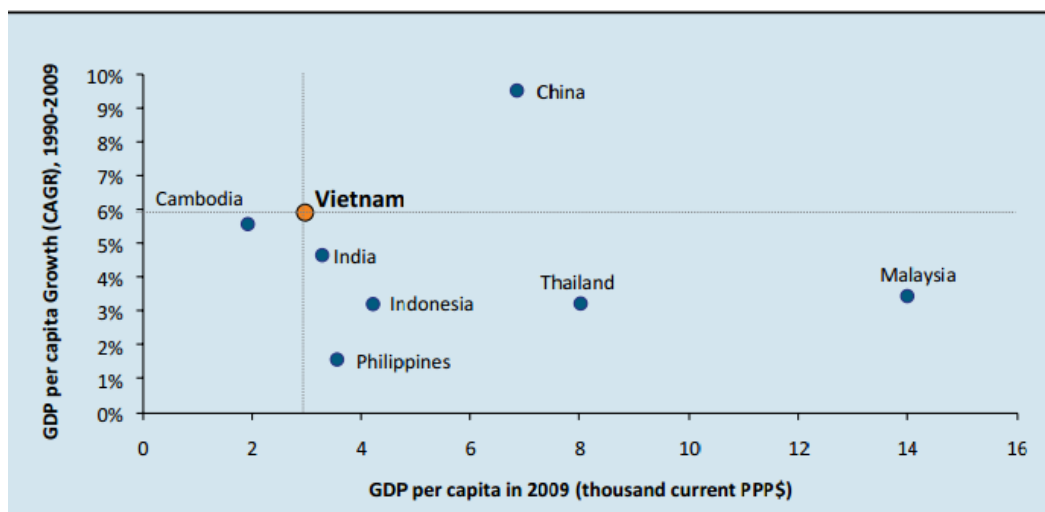
Figure 4. Comparison of GDP per capital growth (1990-2009) (Source: World Development Indicators)

Note: GDP per capital growth (CAGR) for Cambodia is for the period 1993-2009.

The living standard expressed by GDP per capital is still low if it is compared to other countries in the Asia-Pacific region. However, if the history is considered in this measurement, the growth of GDP per capital in Vietnam has shown the success of Doi Moi period. This success has been expressed when Vietnam reached the lower-middle income group in 2008 when its income per capital exceeded $1000.

❖ Inflation and exchange rates

Inflation is mentioned many times along with the fast growth in Vietnam. The rapid development, at the same time, leads to the increasing in inflation. In the recent financial crisis, Vietnam's rate is recorded as one of the highest

inflation rates in the world – 18.7% in 2011 (CIA World Factbook 2013). However, under the control of the government, this rate reduced to 6.6% in 2014 (heritage.org). This result came from the policies of the State Bank of Vietnam in reducing the amount of money in the market such as increasing the interest rate as well as tightening lending policies to individuals and companies.

Due to the influence of inflation, Vietnamese currency-VND has had to face devaluation compared to USD. In the last 10 years, VND has confronted the down trend of value. According to Bloomberg, in order to help spur export, the State Bank of Vietnam devalued the dong by weakening the rate for VND by 1%. It means that USD 1 converts to VND 21,246 (date June 19, 2014).

❖ Foreign investment

Foreign investment plays an important role in the Vietnamese economy. The most important capital investment is Foreign direct investment (FDI) and Official Development assistant (ODA). The official information from Foreign Investment Agency (a department of Ministry of Planning and Investment of Vietnam) exposed the investing number at November 2014 – USD 17.33 billion (source: www.fia.mpi.gov.vn). However, this number just accounted for 83.3% of the foreign investment at the same period in 2013. In these investments, real estate sector plays an important part. Also according to this source, the real estate sector ranked the second in the list of foreign investment. Until November 2014, there were 32 new projects with the investing capital of 1.27 billion USD that accounted for 7.3% of the total registered investing capital. The construction sector ranked the third in this list with the investing capital of 1.02 billion USD. It is implied that the investing foreigners found the potential investment in this sector in Vietnam.

❖ Labour cost trends

Vietnam has always been known as a cheap labour cost country. That is the big advantage in attracting foreign investment. According to the information from Vietnam Investment Review, a webpage information under the Ministry of

Planning and Investment of Vietnam, in the period 2006-2010, the average nominal salary increased by 26.8% per year. If the inflation is taken into account, the real wage increased by 12.6% annually (source: www.vir.com.vn). This is an important step in improving the living quality. Although there is a trend in increasing the labour costs, however, the payment for labour is still low if it is compared to other countries such as China, Indonesia, Malaysia, etc. That is the reason why Vietnam is still an attractive destination for foreign investors.

❖ Unemployment rate

According to CIA World Factbook, there is a downward trend in unemployment rate. The unemployment rate in 2012 was 3.2% and to 2013, this rate reduced to 1.3%. This downward trend in unemployment rate shows the positive signal in the economic development and employment policies in Vietnam.

Figure 5. Unemployment rate (%) (Source: CIA World Factbook)

2.1.4. Social factors

Social factors include age distribution, population growth rate, employment levels, income statistics, education and career trends, and religious belief, as well as cultural and social conventions (source: www.free-management-ebooks. com)

❖ Demographics and social mobility

Vietnamese society combines the old and modern factors. It is a typical example of an emerging economy with a day-by-day transforming society. Vietnam is considered as a young country with an exuberant labour force. The Vietnamese's population is 93,386,630 in January 1st, 2015 (worldometers.info) and it ranks 14th in the list of country population. In this number, there are 33% of the total population living in the urban area. Because of this reason, this market is considered as a high potential area for real estate investment. According to the statistics of Central Population and Housing Census Steering Committee of Vietnam in 2009, there are 22,628,000 households. The average number of persons per household is 3.8 persons.

The Social-Economic development Strategy (SEDS) 2011-2020 of Vietnamese government draws a structural reform, environmental sustainability, social equity, and emerging issues of macroeconomics stability (Source: www.worldbank.org). Therefore, in the past, Vietnam's age structure showed the large share of under-working age. In the recent years, this has changed into working age. The median age is recorded in worldometers.info as 30.3 years. Figure 6 shows the Vietnamese population pyramid in 2014. Based on the information in Figure 6, it can be concluded that the Vietnamese population is mainly in the working age sector (from 20-59 years old). The under-working age share also accounts for a large part in the total Vietnamese population (from 0-19 years old). It is implied that in the current times and in the future, Vietnam is always an attractive labour market.
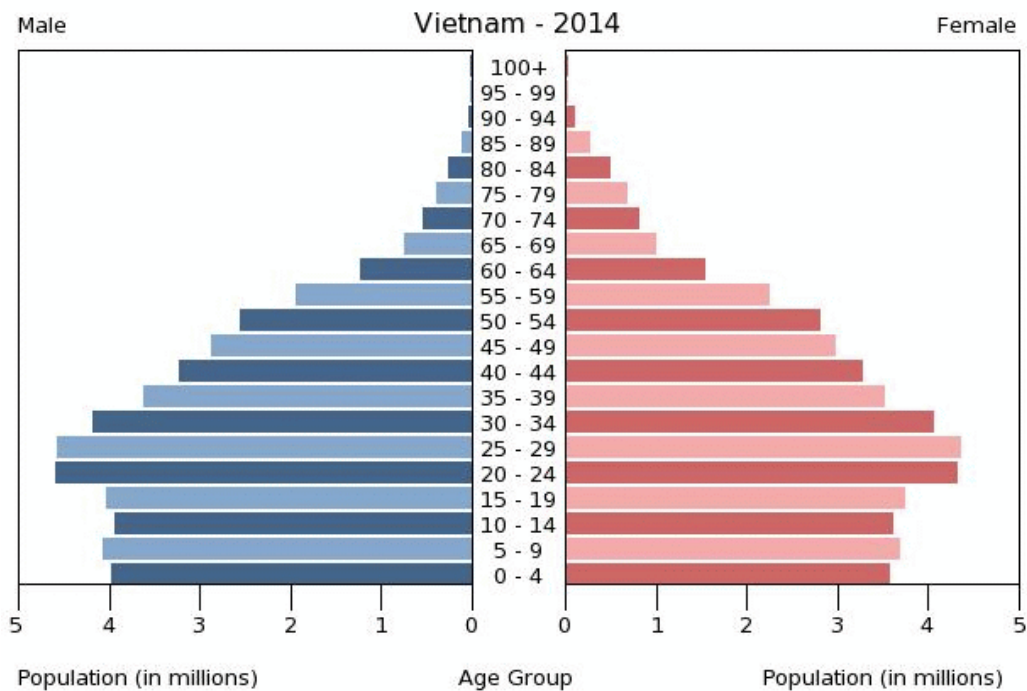
Figure 6. The Vietnam population pyramid (Source: CIA World Factbook)

Vietnam is proving its own advantage in competitive labour market compared to China because of cheap prices. According to wageindicator.org, the minimum wage in Vietnam (period 2013-1014) is approximately 3 million VND/ month (about 130 Euro). Meanwhile, in the same period, the minimum wage in China is approximately 1100 RMB/ month (about 163 Euro).

❖ Education and health care

Education and health care are also the important issues that are of concern for the government. Thanks to benefits of reforms, these two sectors gained a remarkable achievement. The rate of literacy has been increased. The adult literacy rate is mentioned here as the percentages of people ages 15 and above who can, with understanding, read and write (source: United Nations Educational, Scientific, and Culture Organization (UNESCO) Institute for Statistics). The Figure 7 shows the literacy rates of adult total. Figure 7 can be seen from an upward trend in literacy rate. In 2011, this rate was 93.4% (Source: Institute for Statistics, UNESCO).

Figure 7. Literacy rate, adult total (% of people ages 15 and above)

Year	Rate
1979	83.83
1989	87.6
1999	90.28
2000	90.16
2010	93.18
2011	93.4
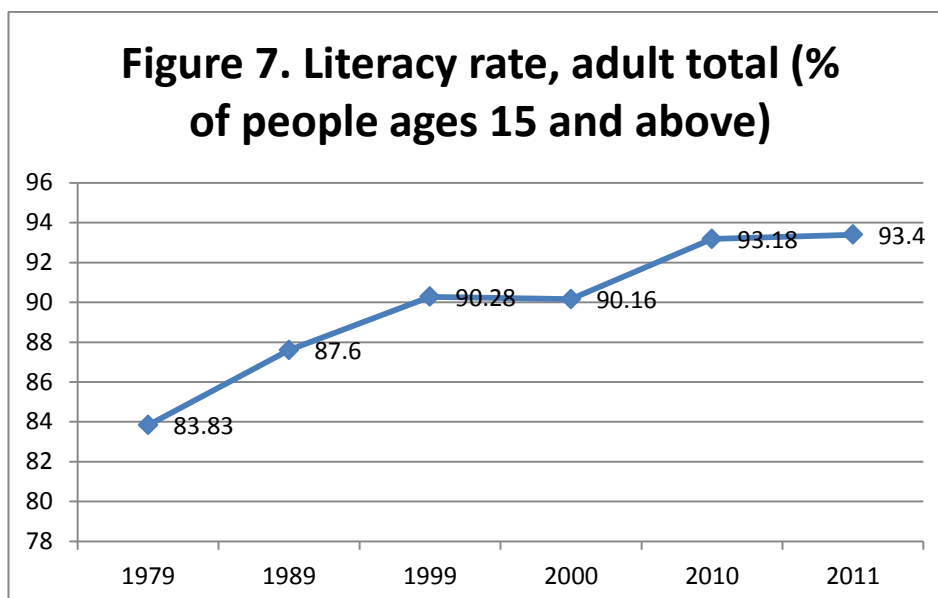
(Source: Institute for Statistics, UNESCO)

The number of schools, colleges and universities is greater than before. There are more and more colleges and universities have built in the big cities such as Ho Chi Minh City, Hanoi, Danang, Haiphong, etc. Besides the official language – Vietnamese, English is taught in every school from primary to university. It is the preparation for the Vietnam's market integration into the world market. The expenditures for education in 2010 accounted for 6.3% of total GDP of Vietnam (CIA World Factbook). It proved the importance of education in the domestic economy.

Health care service is still developing in Vietnam. It accounted for 6.8% of total GDP in 2011 (CIA World Factbook). There is a significant improvement in both state and private hospitals. However, the medical service has to confront many difficulties in quality and price.

❖ Religion and belief

Vietnam is a multi-ethnic nation with 54 ethnic groups. The biggest part in this map is Kinh (Viet) group, accounts for 85.7%. There are also many religions in Vietnam. However, the largest part of population has no religion.

2.1.5. Technological factors

      This element has become a key factor for organizations in assessing and listing issues that could have a potential impact on its operations and that could be critical to its long-term future. The pace of change in technology is becoming more rapid, and often changes that impact your market come from unexpected sources (source:www.free-management-ebooks.com). Along with the development of the internet and technology, the information reaches to customers in an easier way. Therefore, customers have many reference sources before reaching the final decisions. All the goods and service information now appears on the Internet. The real estate information is not an exception.

      Vietnam started the first Internet service from 1997. It was quite late if it was compared to other countries in the Southeast Asia region such as Thailand (1991), Singapore (1987), Malaysia (1995), etc. However, the internet has been adopted rapidly by the young population's influence and the development policies. Figure 8 below describes the internet penetration in some countries. The data indicates the internet penetration in 2009 in Vietnam is approximately 26%.
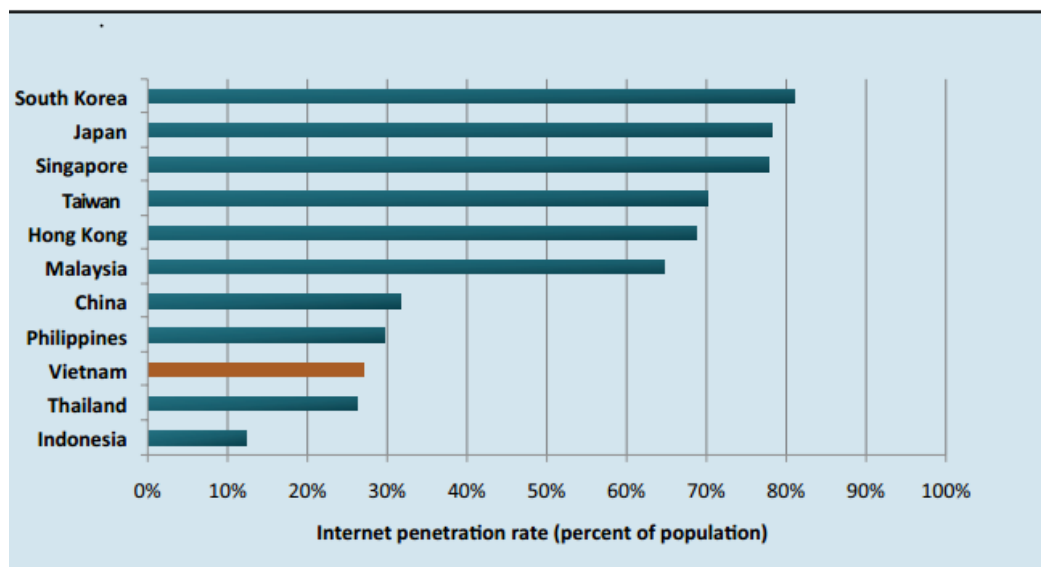
Figure 8. Internet penetration rate for Vietnam and comparison countries (second quarter of 2009) (Source: Internet World Stats)

Vietnam belongs to nations having the medium rate in internet penetration between 24% and 27%, which also includes China, the Philippines and Thailand. Similarly, in the telecommunication market, Vietnam had a slow start before. However, in recent years, this sector has a faster improving and especially in the mobile telephone market. The rising of smart phone today creates an open and potential market for mobile marketing. It can be applied with the real estate marketing.

2.1.6. Environmental factors

The issues surrounding environmental protection have become increasingly important in recent years. Environmental factors include infrastructure, cyclical weather, and disposal of materials, energy availability and cost, and the ecological consequences of production processes (source: www.free-management-ebook.com).

Vietnam is a developing country. There are many industrial zone projects as well as other real estate projects in Vietnam. The fast urbanization brought the causes for environment and it is also the reason for bad influence on citizen's health. This problem happened not only in big cities which have a high speed of urbanization such as Ho Chi Minh City, Hanoi, etc but also in cities which have the large industrial factories such as Binh Duong, Quang Nam, Ha Tinh, etc. Environmental pollution is the problem which influences on land, water, air, forest. According to bienphongvietnam.vn (the official page of Vietnam Border Defence Force), there are seven urgent problems that Vietnam has to face now:

- The resources have been exploited too much
- The lack of forest resources and other resources
- The reduction of soil quality for agriculture
- The sea resources are on the verge of disappearing, the sea coasts have been polluting
- The results of war still affect on the land, water and air in some provinces
- Urbanization
- The loosing of legal in protecting environment

2.1.7. Summary of PESTEL analysis

This analysis cited the general point of view of Vietnam as a developing economy. Although the threats still exist such as high inflation, low living standard, high rate of unemployment, inefficient policies, weak social welfare, etc, Vietnam still proves its own ability to attract foreign investment. The reason can come from the potential of a new market.

The development in the economy shows the potential towards investors who are looking for a chance of an effective investment. The policies are often modified in order to approach the real business environment. The inflation has been improved. Additionally, a young and dynamic society is one and foremost reason which enhances the social situation, especially when the quality of education is increasing – it means that the quality of employers is better and better. .

In the real estate market, the development of the economy and living standard is the one of the factors that plays the crucial role in expanding the Vietnamese housing market. The increasing income of people and the high demand create the opportunity for investing in housing market. However, the threats can start from the instability of this market, especially with the small-size investors.

2.2. Industry analysis – Porter's 5 forces analysis

The model of the Five Competitive Forces is a very popular theory developed by Michael E. Porter. This theory is presented in his book "Competitive Strategy: Techniques for Analysing Industries and Competitors" in 1980. From that time, it became the official and essential tool for anyone analysing an organization′s industry structure.

The Porter's competitive five forces are suitable for every industry and for every market. They determine the importance of competition and identify what is the profitability and attractiveness of an industry. The aim of this model is to focus on the insight industry factors and then to provide the strategy that meet the industry's opportunities and threats. Based on the information of this analysis,

managers can develop the strategy for organizations. The Five Forces of Michael
Porter are described in Figure 9 below:
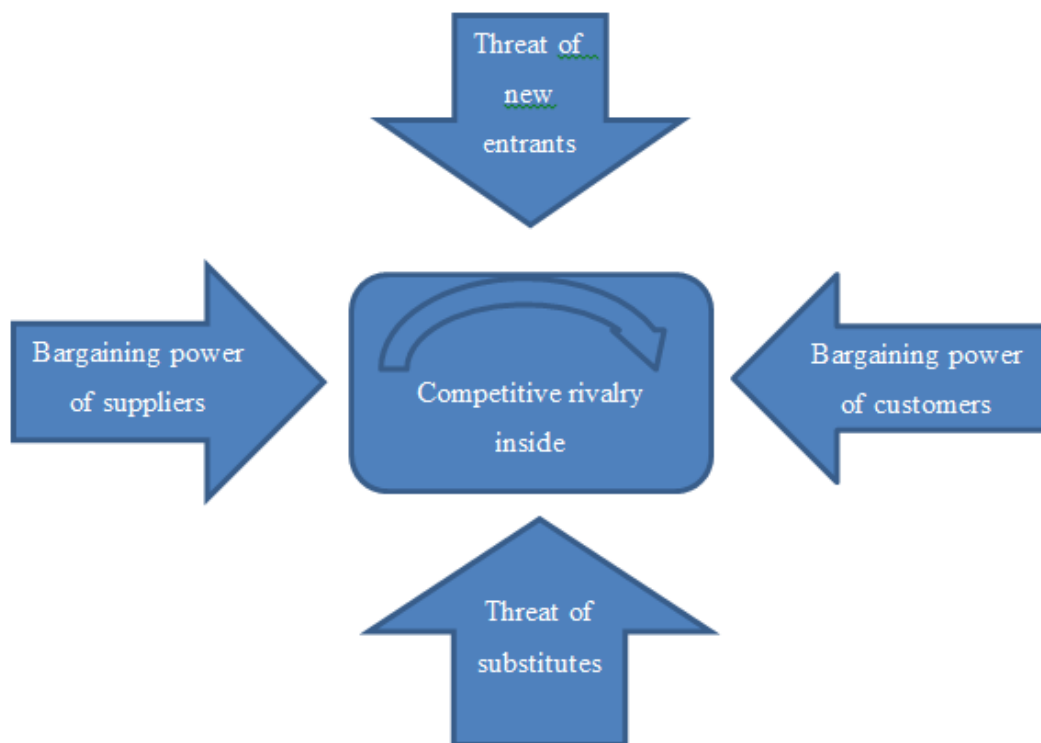
Figure 9. Porter's five forces (source: www.free-management-ebooks.com)

The structure of the Vietnamese real estate market can be described with a
concentration on retail residential real estate market. According to the information
in the official website of Woori CBV Securities Company, the history of
Vietnamese real estate is divided into 6 stages (www.wooricbv.com):

Before the year 1990: the economy in this stage had not yet developed.
The demand for using land or purchasing houses was still on a low level. It could
be said that there was no real estate market at this time.

- The first peak time (1993-1994): The Vietnamese real estate market in this
  period improved quickly. The reason came from the rising of people's
  housing and land demand, especially in the big cities. The government, at
  this time, released the Land on Law 1993 which focused on Land and
  Land Using Rights.

- The first down period (1995-1999): Due to the boom of the real estate market, the government intervened to change the market with the Decrees number 18 and 87 to avoid price speculation in this sector.

- The second peak time (2001-2002): After a long quiet time, the housing prices started to increase again. It came from the investors' prediction and new policies which opened the market for Vietnamese living abroad.

- The second down turn period (2002-2006): The real estate market was quite again. At this time, the government interfered to the market with Law on Land 2003 and Decree 181.

- The third peak time (2007-2008): this time focused on the luxurious apartment and villas segmentation. It is caused by the surplus from Stock market which transferred to real estate market and heated this segment.

- The third down period (2008-present): The tight credit policy was made by the Vietnamese government to control the housing bubble.

2.2.1. Threats of new entrants

The higher the competition will be in an industry, the easier it is for other investors to enter to it. To this situation, new entrants could determine the main factors of the market environments such as market shares, price or customer loyalty, etc. The threats of new entrants depend on barriers to entry that are: economies of scales (minimum size requirements for profitable operations), high initial investments and fixed costs, cost advantages of existing players due to experience curve effects of operation with fully depreciated assets, brand loyalty of customers, protected intellectual property, scarcity of important resources, accessing to raw materials controlled by existing players, distribution channels controlled by existing players, the close customer relations of existing players, high switching costs for customers and legislation and government action (Recklies, 2001). Vietnam is showing itself as an unstable but potential market that creates the opportunities for both professional and individual investors to enter the real estate market. There are many foreign investors choosing Vietnam for their investments. Mr.Su Ngoc Khuong, an expert in real estate market in Vietnam, explained that "Vietnam's real estate market had been seen as reaching

its bottom. This presents an opportunity for foreign investors to enter Vietnam's real estate market, bringing a remarkable increase in FDI into the sector in 2014. Investors from Japan, the Republic of Korea, and Singapore are leading in participation in the Vietnam market" (vovworld.vn-published on March 3rd, 2015). Their projects not only invests on the special cities like Ho Chi Minh City and Hanoi but also extends on medium-size cities such as Da Nang, Hai Phong, etc.

Over the last several years, Singaporean investors to Vietnam have increased remarkably. Many large-size Singaporean developers including Keppel Land, CapitaLand, VSIP, Sembcorp, Ascott, Mapletree, etc are present and had great success. As a July 2014, Singapore was Vietnam's third biggest foreign investors with 1294 projects and total registered capital of nearly $30.6 billion, of which one third belonged to the real estate sector – according to the official page of Danang People's Committee. Additionally, more Japanese has poured money in this sector recently. Creed Group, Daibiru, etc are becoming the familiar in this sector in Vietnam.

Besides the main investment flow from large-scale groups, it mentioned the importance of individual investors in Vietnamese real estate market has to be. There were a large number of individual investors five years ago who poured their money into residential apartments. At the peak time of housing price – year 2007, the apartment projects which had just built were sold quickly to individual investors. They bought one or some new apartments, besides the living purpose, aimed at reinvesting. That is the reason why the real estate market had been "hot" these years. According to an article on Vneconomy, published on November 2007, the apartments ranging in size from 106 – 216m2 at The Manor building (Hanoi) were interested by buyers. The price for this kind of an apartment had increased by 50%-60% of the previous price. And because there were many investors who found the investing opportunities in this sector, these very high prices were accepted.

2.2.2. Competitive rivalry within industry

This force shows the competitive strength among the existing companies in an industry. The competition expresses itself in decisions about prices, profits, strategies, etc. Competition is considered as being high when there are many comparable companies. They can have similarity in size, strategies, products, prices. Moreover, the low rate in market growth is also a reason because the development of a company can mainly come from the expense of a competitor. The high barrier for exit is one more reason. They are economic, strategic and emotional factors that prevent companies from leaving the market. High exit barriers could lock companies into an unprofitable industry, which can lead to more intensive rivalry as companies have to cut down prices in order to gain more market share, often with very low profit (Porter, 1998, p45).

In Vietnam, the number of big real estate companies which control the main portion of the number of housing sales is increasing day by day. They include both domestic and foreign companies. In addition, they have to compete with a large number of individuals who buy and sell just one or two apartments. Therefore, it can be said that the competitive rates in Vietnam are comparatively high but not very tough. It can be explained by the unique characteristic of this industry. Many sectors in this business are able to cooperate with each other in the same projects. Therefore, it harmonizes the threats and opportunities in this field.

Some popular domestic investors are VinGroup, Bitexco Group, Lilama Land. Some foreign investors are CapitaLand, Keppel Land (Singapore), CreedGroup, Daibiru (Japan), Samsung, Lotte Group (Korea), etc.

2.2.3. Threats of substitutes

According to Porter.M (1998), the threats from substitutes arise if there is any alternative product or service at a lower price and with a similar or better performance. This factor attracts the customer's attention and encourages them to choose this alternative product. As a result, this reduces the potential sales of the existing competitors and helps one product or service have an advantage over the others.

The competition has become tougher and tougher when there are more and more investors entering to the real estate market. Especially from the third price

escalation in 2007 until now, the rapid increase has focused on the middle-size and large-size residential segmentation. Both domestic and foreign investors took the advantages of this opportunity to provide the apartments and houses which meet the customers' demand. The big projects of groups such as VinGroup can be mentioned. There are 1,200 apartments and 60 villas built belonging to the Vinhomes projects. Dai Quang Minh Group is going to release a project with 5,000 apartments. Novaland bought tens of projects and released approximately 10 projects. The common thing in these projects is that they used the advantages of the important ways in Ho Chi Minh City to attract the customers' attention. However, under the price policies' pressure, the companies cannot just depend on the reducing price to approach customers in the same product segmentation. The main threats of substitutes depend on the location of apartments or houses, the quality of living atmosphere and the enclosed services. Moreover, the reputation of the investors plays the important role in housing business. Price is just the supporting reason in choosing a house because it has the similarity in price among real estate companies. Therefore, it can be said that the threats of substitutes are influenced by the large and famous investors, not the small investors. Mr. Nguyen Le Ngoc Hoan, Managing Director of King Long Investment Company, said that from 2015, the dominance in real estate investment will belong to the investors who have transparent information and procedures; the new investors have to confront the difficulties of the new land price policies as well as end the over-24-month "hanging" projects.

2.2.4. Bargaining power of suppliers

The term "suppliers" includes all the input sources for providing goods or services. Supplier bargaining power will go high when there are some of the following factors. Firstly, the market is controlled by some large suppliers rather than many small sources of supply. Secondly, with some inputs, there are no alternative products. The next factor is the high switching cost from one supplier to another. There is the possibility of the supplier integrating forwards in order to obtain higher prices and margins. This threats is especially high when

- the buying industry has a higher profitability than the supplying industry

- forward integration provides economies of scale for the supplier,
- the buying industry hinders the supplying industry in their development
- and the buying industry has low barriers to entry (Recklies, 2001)

Developers are considered as suppliers. Developers are a group of people purchasing land, designing and building their own projects in order to sell or rent. In the Vietnamese market, suppliers are an important factor; especially at the peak time of real estate market the demand is many times higher than supply. The bargaining power of suppliers in the Vietnamese market is quite low. Besides supply from the large investors, individuals who own housing properties are considered as a source in the residential segmentation. Customers, therefore, have the advantage of choosing and determining what house or apartment is suitable for their demand and budget.

Passing over the crisis period in 2008, the Vietnamese real estate market has shown signs of recovery. Besides the small and individual suppliers are still waiting to return, the medium and large investors have prepared for an increase in the housing supply. Mr. Nguyen Van Minh, the president of Vietnamese Real Estate Association, confirmed that after the government's stimulus package recently, many projects have continued to proceed. Therefore, there will be a rise in real estate supply and people who have a real demand in buying a house or an apartment will have more chance to approach housing projects. Thanks to that, not only the high-income people can think to have their own house, but also the low-income people like factory workers can manage to have an apartment or a house. According to the statistics of Department of Housing and Real Estate Management (Ministry of Construction), 54/64 provinces sent the investing-housing-student-project reports to Ministry of Construction. There were 267 projects registered to complete in the period 2009-2010 in order to build approximately 5 million square meters of houses and apartments on 554 hectare of lands. These projects helped to deal with the accommodation for over 800 thousand students. At the same time, the house projects for workers in the period 2009-2015 were conducted with the size of 6-million-square-meter land (Vneconomy.vn).

On the first days of the year, thanks to the warmer real estate market, hundreds of new project have started. Not just focusing on the cheap housing segmentation, the housing supply has now developed in various pricing sector, from cheap to medium and luxurious segment. According to the real estate transactions on February 2015, the market approved the purchase of over 1,200 apartments in Hanoi and approximately 1,100 apartments in Ho Chi Minh City (statistics from the Real Estate Association Reports 2/2015). In addition, the new real estate enterprises established is the roots of increasing supply in the future. The information from the Department of Business Register Management (Ministry of Planning and Investment) showed that there were 13,776 new enterprises in two first months of 2015 that increase by 26.6% of the total enterprises and 23.3% of the registered capital compared to the same period last year. Among them, the real estate is the field that have high rate of the new registered enterprises, increased by 88% of the total real estate enterprises comparing to the same period last year (www.trithuctre.info).

2.2.5. Bargaining power of customers

Similarly, the bargaining power of customers determines how much customers can impose pressure on margins and volumes. Customers bargaining power is likely to be high when they buy large volumes or there is a concentration of buyers. Another reason is when the product is undifferentiated and can be replaced by substitutes; the simple-but-not-expensive switch to an alternative product also accelerates the bargaining of customers. Additionally, customers have advantage in bargaining when they know about the production costs of the product.

In the residential market, there are two types of customers: buyers and tenants. Each kind of a customer has his/her own characteristics in the market.

The first type of buyers is people who achieved the surplus in one or many other investments and want to find new opportunities in housing market. These people mainly buy houses or apartments in the purpose of investment. In this case, they will play a role as investors and sell their properties to other customers. In this group, buyers can be medium-size companies, large-size companies or they

can be individuals. The second type of buyers is people who have a real demand in looking for living quarters. Their purchase is aimed at living, not investing. In this group, buyers are often individuals. The third type of buyers is experienced investors in the housing market. They have luckily escaped the housing crisis in 2008 and 2009 and are searching for a new opportunity when the market is becoming stable.

The tenants in the residential market are people who are not able to buy or own an apartment or a house. They can be students who do not work or group of people who have the low income in society.

Depending on the market characteristics and the situation, the bargaining power of customers will be strong or weak. At the inflated time of the real estate market 2007, when the demand was higher than the supply, the bargaining power of customers was weak. In these days, when the real estate market has recovered from the crisis and the supply is still higher than the demand, the bargaining power of customers is becoming stronger. However, generally speaking, the Vietnamese consumers have low power in bargaining the price in this field.

2.2.6. Summary the competitive analysis

After conducting the 5 forces analysis for the Vietnamese real estate market, it can be concluded that Vietnam is a potential market for investors in spite of the fact that an unstable market can have risks.

The market is still in the first stages of the development, but it can be considered as being on a relatively high competitive level. This development happened when there is more and more the investment has flown from outside organizations and companies to this sector in Vietnam. The domestic companies have to adjust to the rivalry from the foreign opponents. They are forced to think about the higher quality houses or apartments, not just the normal quality products like before. However, it is not just about the competition, they also collaborate with each other when they share a common purpose. Because of this reason, the rivalry among companies has not become so tough. It also creates the positive conditions for new entrants who can join this large market.

The investors' advantage in this sector is quite strong when both the direct sellers and buyers do not have the right in determining the price. It is influenced by the demand-supply rule in the market. However, it is also a threat because the demand-supply can be changed by the speculation of the other competitors or individual investors who often make the housing decision emotionally. The foreign investors can have the negative influence, on what they are not as familiar with the market as the domestic investors.

To sum up, the real estate market is still in the developing period if it is compared to other markets in the area. Recently, the competition has still been at the relative high level. However, it can be predicted that the market will become more competitive in the future when the policies are tighter and investors have more experience. The current unsustainability of the economy is an opportunity for the investors.

3. HOUSING BUBBLE AND ITS CAUSES

3.1. What is housing bubble?

The term "bubble" has been used widely in many means of communication recently. This term can be used in many aspects such as a real estate bubble, a property bubble, a consumption bubble, a stock bubble and even a tulip bubble, etc. Despite its popular, the term "bubble" is hardly defined clearly. Citing from the definition from Investopedia, a bubble can be considered as "an economic cycle characterized by rapid expansion followed by contraction". In a clearer way, it is "a surge in equity prices, often more than warranted by the fundamentals and usually in a particular sector, followed by a drastic drop in prices as a massive selloff occurs. The price after that will rise over real value of the product and will continue until prices go into free fall and the bubble burst."

Similarity, the housing bubble is also explained in the same way. The housing bubble happens when there is a rapid increase in prices. The price for each house or apartment at that time can be called a preposterous price or an unstable value. This overvalued price does not express the customers' satisfaction or the demand in the real situation. The housing bubble's root comes from the speculation towards the housing properties. The later result is always a sudden down fall is called as the bubble bursts. The prices of housing properties in the time of the bubble have fluctuated erratically and chaotically and it is very difficult for investors to predict the price.

Also, the structure of the housing bubble can be explained by the behaviour of people who enter the market. They have the same over-optimistic view of future prices. These people are ready to buy the houses or apartments which have many times higher than the real value. They expect to be able to sell them to other people in a higher price level. This bubble will continue to grow bigger until people find the ultimate investors who are ready to buy those houses and apartments and cannot find anybody to resell to. That is the time of bubble burst.

Economists recognize the housing bubble as a negative phenomenon that causes bad influence on the economy. In addition, a bubble burst can destroy an economy and cause a long-term unsustainable period to that economy. The

consequences of the problems do not only destroy the domestic economy but also expand beyond the borders.

In real life, it is very difficult to distinguish a housing bubble and a normal fluctuating price. People only mention the "bubble" when it has already burst. The bubble only becomes real when it burst.

3.2.Supply-demand and the housing price

The real estate can be considered as a special product. As the definition of the housing bubble above, it is said that bubble is the result of the continuous increase in housing prices. Therefore, in order to explore the housing bubble, one should have a general perspective about the relationship between supply-demand and the housing prices in the market. The supply-demand graph (Figure 10) below describes this issue.
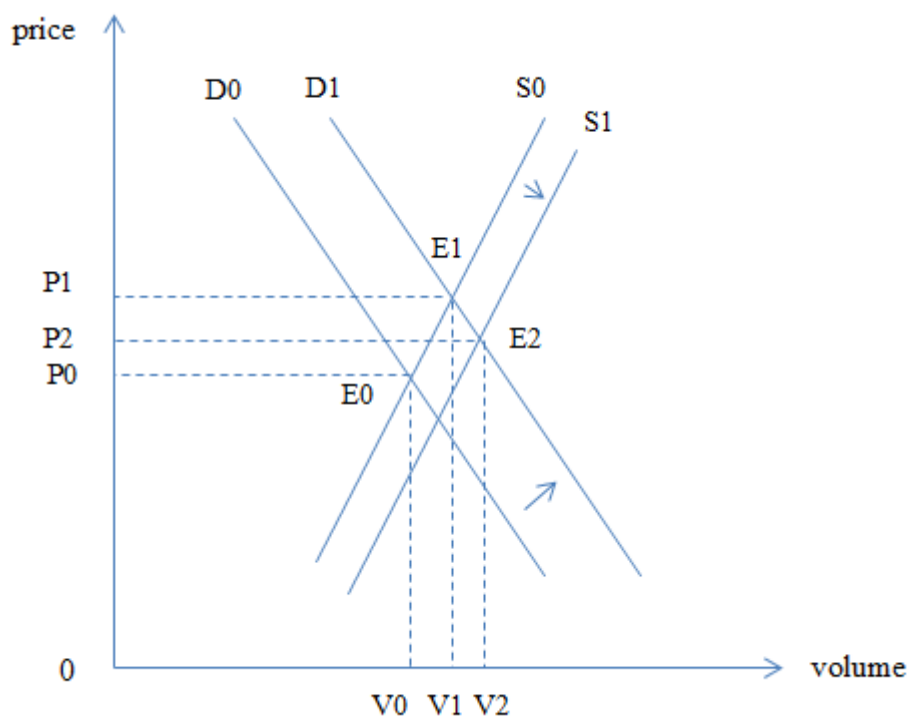
Figure 10. Supply-demand relationship (Dilts, 2004, Introduction to Microeconomics)

❖ In short term

The housing supply is relatively fixed in the short time and hardly shows in any price fluctuation. The housing demand, in contrast, can change quickly. Therefore, when the housing prices are high because of any reason and the housing demand is still the same, speculation is stimulated and leads to price escalation. The supply-demand graph above describes this issue.

- First case: The housing demand increases slightly. It is not strong enough to cause pressure on the prices. The change of supply and demand is similar with the other normal products. The market price development is at the level of normal products.

In the normal condition of the market, the initial demand line is D0 and the initial supply line is S0, the balance between supply and demand is E0 with the price P0 and the volume V0. If there is an increase in demand (the new demand line is D1) and the supply remains, the new balance point is E1. E1 is the intersection between D1 and S0. The new price, at this time, increases to P1 and the new volume increases to V1. However, the buyers can estimate the increase of price and the supply in the market now increases (the new supply line is S1). The balance point in this situation is E2, the volume increases from V1 to V2 and the price decreases from P1 to P2.

- Second case: The housing demand increases remarkably. It is strong enough to cause a pressure on the prices. The market expresses the typical signs of a speculation. This situation is described in Figure 11.
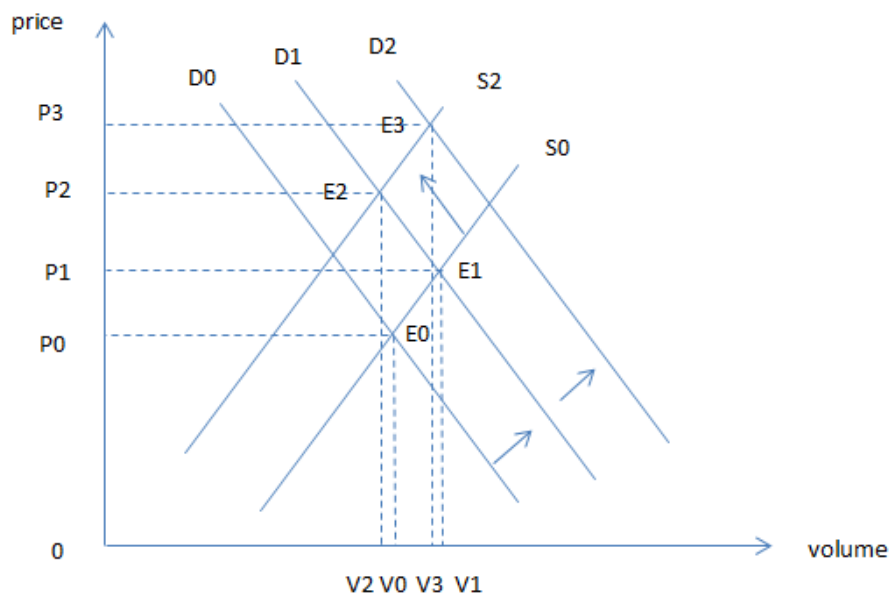
Figure 11. Supply-demand relationship in a bubble market (Le, 2014, Bong bong bat dong san nha dat de o tai thanh pho Ho Chi Minh)

If there is an increase in demand, the demand line moves from D0 to D1 (Figure 11 above). If the supply line is still the same, the balance point will move from position E0 to E1. Respectively, the price increases from P0 to P1 and the volume increases from V0 to V1.

However, there is a speculation in the market, the supply decreases due to holding properties of speculators. The supply line moves to the left, from S0 to S2. The new balance point now is E2 (E2 is the intersection between D1 and S2). The volume decreases from V1 to V2, meanwhile, the price increases from P1 to P2. It can be seen that the housing price has continued to increase from P0 to P1 and then to P2. The increase of housing prices, the customers' psychology and influence of media stimulates other people in joining into the market. As the result, the demand is increasing remarkably. The new demand line is made, line D2. In case the supply line still remains S2, the new balance point is E3. The new volume is V3 and the current price is at the very high level - P3. Generally, the graph shows the increase of price, from P0 to P1, and then P2, and then P3. Respectively, if the supply line moves to the left of line S2, the price continues to increase.

❖ In long term

The housing supply can change significantly. The investors can have the time to build and develop the new real estate projects. This change in housing supply contributes to the real estate market's stability.

3.3. Causes of housing bubble

There are many hypotheses that explain the reasons for a housing bubble but two aspects can be mentioned: supply-side problems and demand-side problems. The supply-side problems show that "the housing bubble was caused by a growth in the supply of housing finance, thereby enabling consume" (Levitin and Wachter,2012). On the other hand, the demand-side problems indicate that "the housing bubble was caused by a growth in consumer demand for housing, which pushed up housing prices" (Levitin and Wachter, 2012).

Because this thesis aims at indicating the intimate connection between the housing bubble and the Vietnamese consumers' buying psychology (mentioned in the previous parts), the focus is more on the demand-side theory. However, it is very important to emphasize that there are many factors leading to a housing bubble: money policies, housing policies, irrational exuberance, etc. There is a certain thing that each factor itself cannot be the reason for the bubble. It has to be a resonance of many elements. Therefore, it is a deficiency if one reason of the bubble is mentioned. And in order to provide a comprehensive perspective of this issue, the supply-side problems are also explained.

3.3.1. The supply-side problems

Next, the supply-side problems are described as "the oversupply of housing finance rather than an excess of demand for housing" (Levitin and Wachter, 2012). There are many elements that affect on the housing prices such as money supply, real estate credit, GDP, stock index, foreign investment flow, etc.

❖ Money supply and real estate credit

According to Collyns and Senhadji (2002), almost all of the research indicates that the development of money supply as well as the real estate credit is the most important reason leading to an increase in the housing prices. The housing market is influenced by the increasing money supply through two factors.

Firstly, there is a change in income of investors and speculators. Secondly, banks are always ready to loan more and more and the potential buyers are also ready to receive mortgage loans. All these issues accelerate the increase of housing prices. The increase of housing prices also makes the condition for the appearance of more and more capital flow in the real estate credit package. This is a two-way problem. Basing on the research of the housing market in Thailand in the 1990s, Wong (2001) indicated that the freedom of the capital flow brought the opportunities for borrowing for the foreign investment in order to develop the domestic projects. This led to the housing bubble in Thailand which came from the over-increase of houses and the redundancy of supply. The biggest consequence of this problem is the financial crisis in Asia in 1997.

❖ The increase of GDP

Basing on the information from PESTEL analysis, it can be seen that Vietnam is an emerging economy. GDP per capital in this country is increasing year by year. When the real GDP increases, it means that the income of people is higher. A big part of the accumulated income will be invested in many fields, especially in real estate market. Because one of many typical characteristics of the real estate market is the long-term time period (it means that people have to take from several months to several years to complete a real estate project), the supply of real estate cannot meet the market demand in a short time. Therefore, if there is any change in supply, the housing prices will also increase as a result. According to Pillay (2005), the increasing of GDP has had a certain influence on the housing prices in Singapore. Zhang (2012) also showed the relationship between the increasing in GDP and housing price in the period 1999-2010 in China.

❖ Stock index

It is believed that the stock market can have some influence on the residential market. The development of the Vietnamese stock exchange market has brought opportunities for many people who can accumulate more and more money. Later, these people, withdraw their capital and re-invest it in the real estate market. According to Bardhan and Datta (2003), there was an impact between the increasing income in the Vietnamese stock market and the increasing

number of newly built houses. Therefore, it can be said that the income in the stock exchange market will spread to the real estate market. This issue was raised in the thesis when the analysis of competitive factors in Vietnam was provided.

❖ Foreign investment

The investment from the foreign companies, especially in the real estate market, is the reason for increasing of housing supply. At the same time, this type of investment increases the sum of capital in the market and it plays a certain role in leading to inflation. Then inflation is the cause of increases in the housing prices and leads to a bubble. This problem can be explained in the inverse way when the increase in housing prices is the cause for higher inflation (Guo and Huang, 2010).

3.3.2. The demand-side problems

The most popular and well-known explanations of the housing bubble′s causes mention the demand elements. Robert Shiller (2000) - the pioneer in explaining the process of bubble through human psychology. It indicates that although the economic factors can influence on creating a bubble, the more important reasons come from the psychological factors of consumers. The bubble burst happens when the investors are too optimistic in believing in their success in the market – irrational exuberance. This type of emotion is the reason of accepting the higher risk of consumers. The high benefit of the housing prices is the reason leading to the speculation. The economic decisions are affected by emotional factors. As a result, the housing bubble becomes bigger and bigger.

Next, first of all, the typical types of consumer characteristics that influence on the investors′ decision are described.

❖ ″Afraid of a loss″

According to the research of two economists Kahneman and Tversky (1979), ″afraid of a loss″ psychology was mentioned as the ordinary emotion of people. It is expressed through preferring profits than losses. At the first stages, this type of psychology seems to oppose a housing bubble because people are not ready to buy any houses. However, under the bubble′s characteristics mentioned in the previously chapter, it is very difficult to distinguish the housing bubble

from normal price fluctuation and people just realize it when there is any mass panic from other investors. That is the reason why in the bubble period when the housing prices are at the highest level for a long time and the prices are many times higher than the housing average prices in the past; people are still ready to buy housing properties. The reason is that the high price has remained long enough to be considered as the normal price.

When combining these problems, it is seen that the "afraid the loss" psychology can lead people to the thought: if they do not buy it today, it will be at the higher price tomorrow. It is the psychology that causes the enlargement of the housing bubble. From another aspect, when the housing market is going down, the investors still keep the assets and waits for a recovery. In other words, this type of psychology is a lie that helps investors to ignore their failure risks. The demand, as a result, is higher and higher.

❖ Herd mentality

"The truth belongs to everyone" is the normal thought of many people. It is true in many aspects not just in real estate sector. When the investors are not confident in their own valuation and analysis, they have the tendency to follow the most popular decision of the crowd. This problem happens not only to the individual investors but also to the professional investors. Even if they believed that the housing prices in the market are too expensive, they still choose to do as many people rather than decide to go against what is commonly done.

❖ Biased-self attitude

This problem expresses that whenever investors decide on a problem, they have a tendency to find proof which supports their determination and ignore the reasons which are against it. Daniel and Hirshleifer (1998) introduced this problem in their study. First of all, investors establish the initial belief about the property value. Due to the biased-self attitude, the information which has the same quality with the initial information is memorized and it consolidates to the first information. When there is any opposite information raised, people omit or ignore it; and the property value does not decrease. Gradually, the property value can

increase to the level of a bubble. The housing bubble will burst when the opposite information is large enough that investors lose the initial belief. This issue also explains the real situation at the bubble time, investors do not like the negative comments and ignore the warning of a decrease in price in the future. Contrary, they often focus on the analysis which shows the positive perspective about the market.

❖ Irrational exuberance

This type of psychology is created when the bubble is happening. People are excited by the profits that can be earned easily from the market (due to bubble). In addition, they also are influenced by the optimistic information from the media; they experience irrational exuberance. Shiller (2000), in his research, argued that the attention from the media created a big influence in this market. The more the investors pay attention to the housing market, the larger scope the media reports in this field. The new potential investors are also attracted by this information from media. They, after that, buy the housing properties and these property prices increase. The increasing price, in addition, attracts more the attention of media and other potential investors. This integration is still proceeding and pushes the housing prices up. At the same time, people think that the higher price in the market is the normal state. These factors combine and create an overrated housing market. Only the first comers who escape from the market before the bubble bursts can earn a profit as the late comers lose.

The second issue which should be mentioned in the demand-side problem part is the mortgage interest rate. This interest rate plays a certain role in changing the housing price because most of the housing buyers relay on a mortgage loan. In term of the Vietnamese market, there are more and more banks attracting customers with interesting and open policies such as Vietcombank, Techcombank, HSBC, etc. These policies allow households or individuals to take a loan easily. That is the reason why the demand for houses is increasing and it is leading to the increase in housing prices.

3.4. The observable effect of housing bubble in Vietnamese market

The real estate market is the most important part of the each country's economy. It accounts for approximately 40% of the total property of each country. In Vietnam, the bubble burst in the period 2007-2009 and had a negative influence on the domestic economy. There are four main forces that were hit heavily by bubble: the commercial bank, the real estate companies, the fields relating to real estate and the labour forces.

3.4.1. To the commercial banks

The influence of the housing bubble on the commercial banks can be expressed through the real estate bad debt. Bad debt comes from the insecurity of investors' financial power. These investors just focused on the bank loan to buy housing property. When the housing market was struck by trouble, the financial liquidity was low and the housing prices plunged and the real estate debt was likely to be bad debt.

The bad debt of GDP rate expresses the bad debt paying ability of the total country's GDP. It can be seen in Figure 12 that although the bad debt/GDP fluctuated in the period 2004-2008, it still kept below the level of 2%. Especially in 2007, when housing price reached the peak, the bad debt/GDP was at the lowest rate, 1.4%. In the period 2009-2012, the bad debt/GDP rate was increasing continuously and reached the highest rate of 12.8% in 9/2012.

Figure 12. Bad debt/GDP rate - period 2004-9/2012
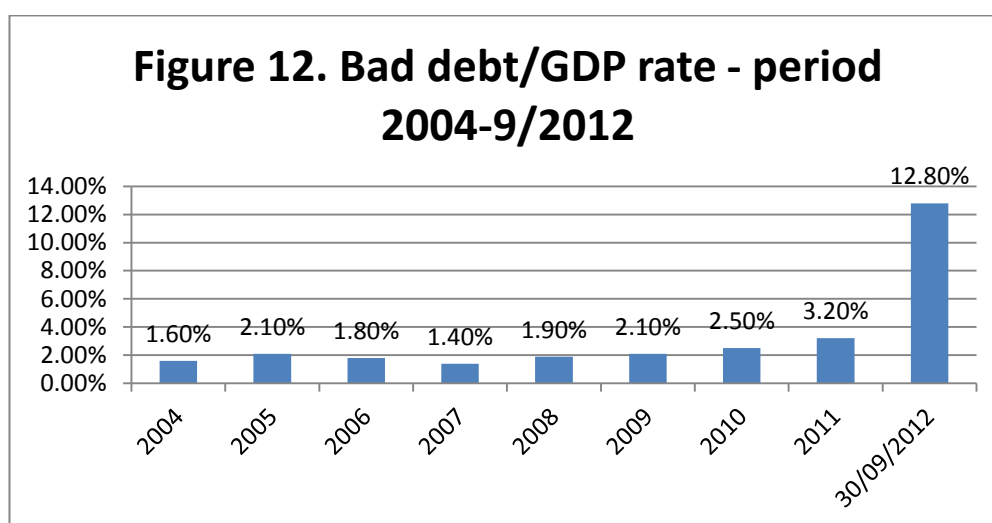
(Source: State Bank of Vietnam, Institute of Banking Research – Vietnam Banking Academy)

Figure 13 shows the change in bad debt from 2005 to September of 2012. In the period 2005-2007, the bad debt was in a downward trend. The bad debt in 2005 was 51 %, until 2006 it was only 3% and in 2007, the bad debt was -11%. However, from the 2009-2012, this bad debt rate increased through the years. The bad debt in 2009 was 27% but it reached the level of 211% in September of 2012.

Figure 13. The change in bad debt, period 2005-9/2012
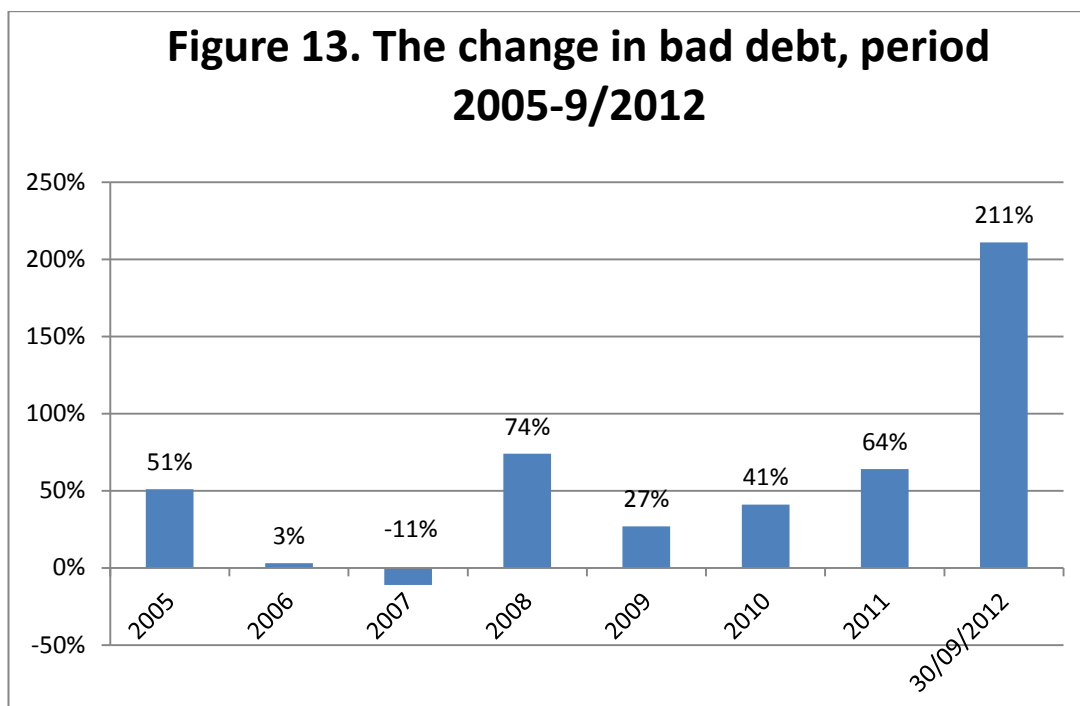
(Source: State Bank of Vietnam, Institute of Banking Research – Vietnam Banking Academy)

3.4.2. To real estate companies

In the down time of the real estate sector, hundreds of real estate companies had to confront the losses and they were on the verge of bankruptcy.
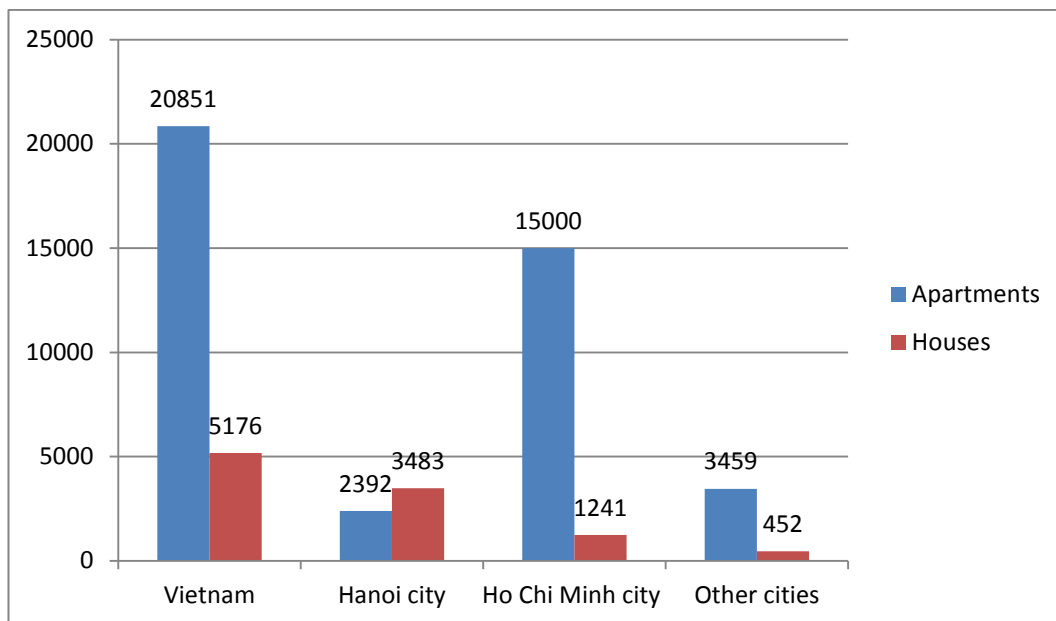
Figure 14. House and apartment inventory in 2012 (Source: Vneconomy)

According to the statistics from 63 provinces throughout Vietnam in 2012, the inventory was 20,851 apartments, 5,176 houses, 1,890,667 m2 of land, 64,847 m2 of offices and the total capital was calculated is 52,542 billion VND (approximately 2.3 billion EUR, exchange rate in April, 2015). It can be seen from Figure 14 that Ho Chi Minh City and Hanoi are the two most important real estate markets of Vietnam, therefore they account for the main part of the inventory of the housing sector in the market's down time.

In addition to the information from each province, the Dragon Capital Vietnam fund also provided their own assessment. They assumed that the inventory of houses and apartments in Vietnam in 2012 could reach up to 70,000. If the average price for each house or apartment was 2 billion VND (approximately 87,000 EUR), the total money of inventory cost would be 140,000 billion VND (approximately 6.1 billion EUR).

According to the statistics from Ministry of Construction in 2012, the bankruptcy rate of real estate companies increased by 24.1% compared to 2011 (Figure 15).
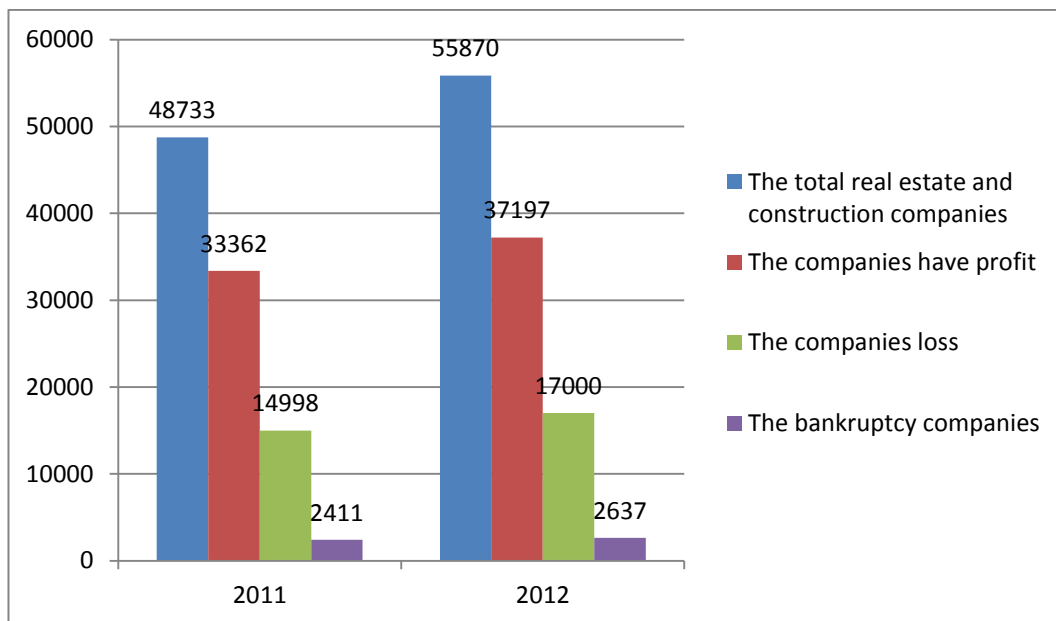
Figure 15. The number of real estate and construction companies period 2011-2012 (Source: Ministry of Construction Vietnam)

The loss and bankruptcy companies accounted for a large part in total real estate and construction companies. In 2011, the loss companies accounted for 30% of the total companies, the bankruptcy companies were approximately 5% of the total companies. In 2012, the loss companies did not show any decrease in the rate on the total real estate and construction companies. They still accounted for 30% of the total companies. The bankruptcy companies in this years accounted for 4.7% of the total real estate and construction companies.

In the first two quarter of year 2013, although the economic index showed a positive sign, the real estate and construction companies still was faced to challenges, especially with the small-size companies, when they do not have the strong financial power and have to focus on the bank loan or capital from customers.

3.4.3. Other fields

The downturn in the real estate market has created a decline of some related fields such as cement, steel, glass, plastic, brick, furniture, etc.
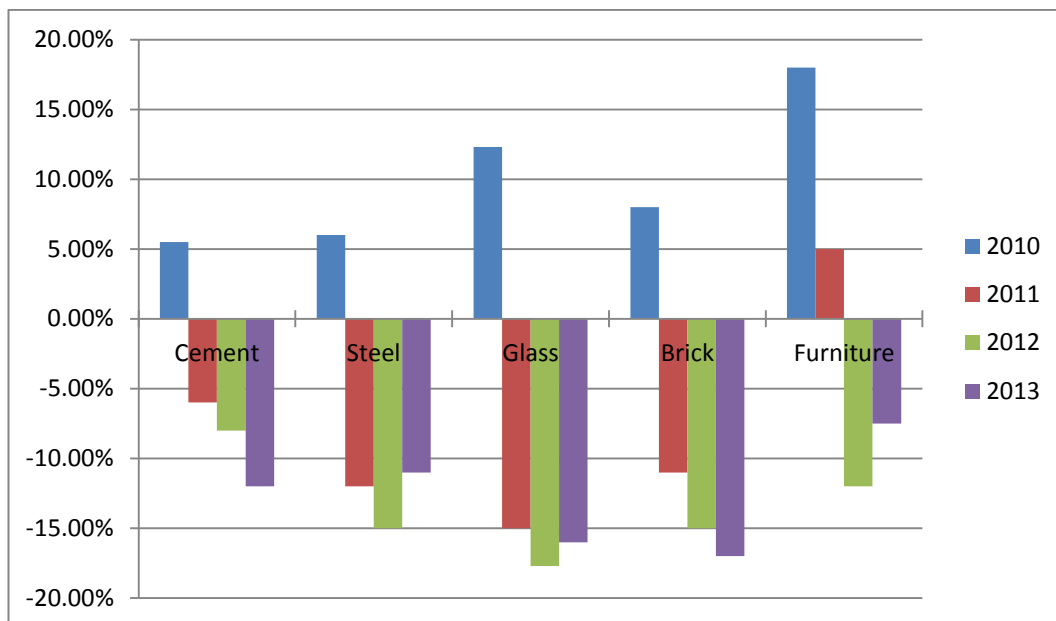
Figure 16. The development of a few fields relating to real estate – period 2010-2013 (Source: National Financial supervisory commission)

As can be seen in Figure 16, the other fields confronted to the downgrade together with the real estate sector. In 2010, these fields still developed with a positive number. However, until year 2011, these indexes went down under zero. Even if from 2011-2013, the losses were increasing gradually, especially in brick and glass for the construction field.

Housing bubble is the reason for all downtrend. The housing prices have decreased remarkably, while the inventory increases day by day. As a result, not only real estate companies but the other enterprises from other relating fields also are in trouble. Many enterprises cannot participate in the market effectively. Some companies also are on the verge of bankruptcy because of bad debt.

3.4.4. Labor forces

The downgrade of real estate market is leading the reason for the increasing unemployment rate. Many investors and companies have to fire the employees to guarantee their financial ability. It is difficult for these fired employees to find a new job because most of companies are in the same difficult situation. They are not able to pay the salaries. Therefore, the life and income of employees are influenced seriously. The unemployment rate, as the result, is

increasing continuously. Not only people who work in the real estate field are influenced, employees of other fields such as banking, construction and building materials, furniture, household appliances, etc are also confronting the unemployment.

3.5. Summary

The reason leading to housing bubble is the imbalance between the supply and demand in the market. There are many causes of this problem but the reason mentioned most is buyers' psychology. This explanation is applied to the Vietnamese real estate market. Based to that, the problems of the housing bubble in Vietnam are approached.

The housing bubble burst caused the serious negative influences onto the Vietnamese economy. This problem is the main threat for the Vietnamese commercial banking system and is leading to the high rate of unemployment. It is also the reason for the losses of many speculators, in the real estate companies and in other fields. The existence of this problem is a threat to the Vietnamese economy in its totality.

4. VIETNAMESE CONSUMER BUYING BEHAVIOR

Through the housing bubble analysis in the previous chapter, it can be realized that there is a strong connection between the customer buying behavior and the housing bubble. The consumer is always the core factors in all aspects of the economy and real estate is not an exception. The fluctuation of housing prices is identified by the supply-demand relation. The development of price leads to the increasing of demand continuously, until a ripe time, when the bubble will be busted. Therefore, demand factors - implying buyers – play an important role in stimulating the bubble formation. It is very important for market developers as well as investors to understand consumer behavior which is defined by Kotler (2012): "consumer behavior is the study of how individual, groups, and organizations select, buy, use and dispose of goods, services, ideas, or experiences to satisfy their needs and wants". This is also the reason speculators used to create the housing price escalation.

Kotler (2012) in his book "Marketing Management" introduced the model of consumer behaviors.
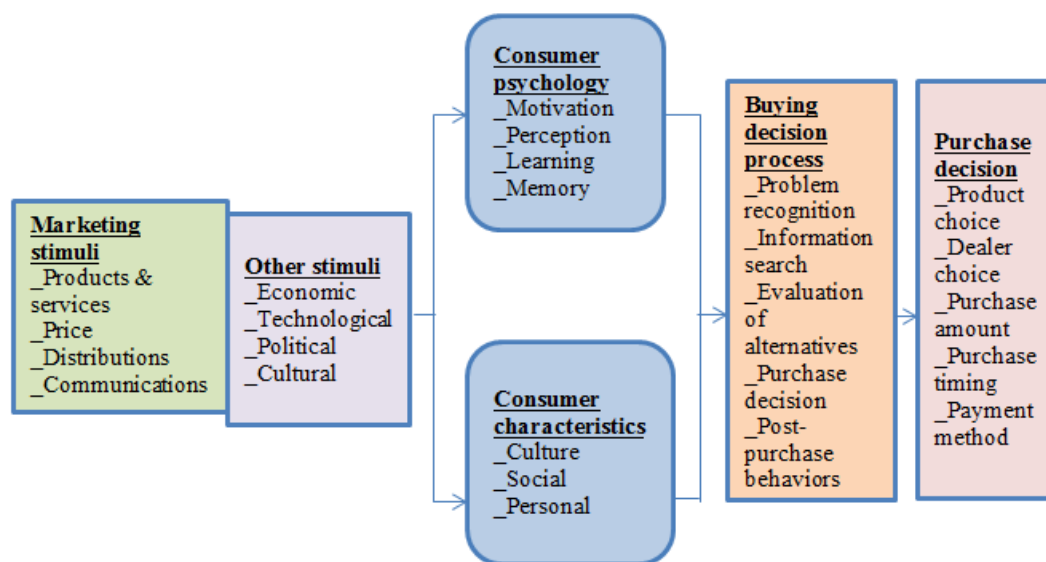
Figure 17. Buyer behavior model (Kotler and Keller, 2012)

This is also called as the stimulus-response model. Marketing and environmental stimuli influence customers' awareness. These factors impact on the consumer psychology and consumer characteristics to result in decision processes and purchase decision (see Figure 17).

Because this thesis is studying the relationship between the housing bubble and consumer buying decision, the issues of post purchase will be not mentioned.

4.1. Consumer psychology

Consumer psychology, according to Kotler's model, is expressed through four factors: motivation, perception, learning and memory.

4.1.1. Motivations

"Sigmund Freud assumed the psychological forces shaping people's behavior are largely unconscious, and that a person cannot fully understand his or her own motivations" – quoted from Kotler's book "Marketing Management". Freud's argument explained the buying behavior situation in Vietnam. Vietnamese consumers, in term of real estate market, have not much information of the housing investment. All the information which is given to consumers is the general information from television or newspapers. On the other aspect, Vietnamese people showed an optimistic view in the consumer's belief index. According to the research of Nielsen Vietnam – a leading global information and measurement company, Vietnamese consumers' belief has increased through years in spite of a tough economy. Although the private financial circumstances of Vietnamese is just at the medium level compared to the other nations in the region, Vietnamese consumer's belief index is always at a high score. In 2013, this score was 98, just behind Indonesia, the Philippines and Thailand. Nielsen indicated that Southeast Asian consumers are the people who have the highest optimistic belief in the world (see Figure 18).
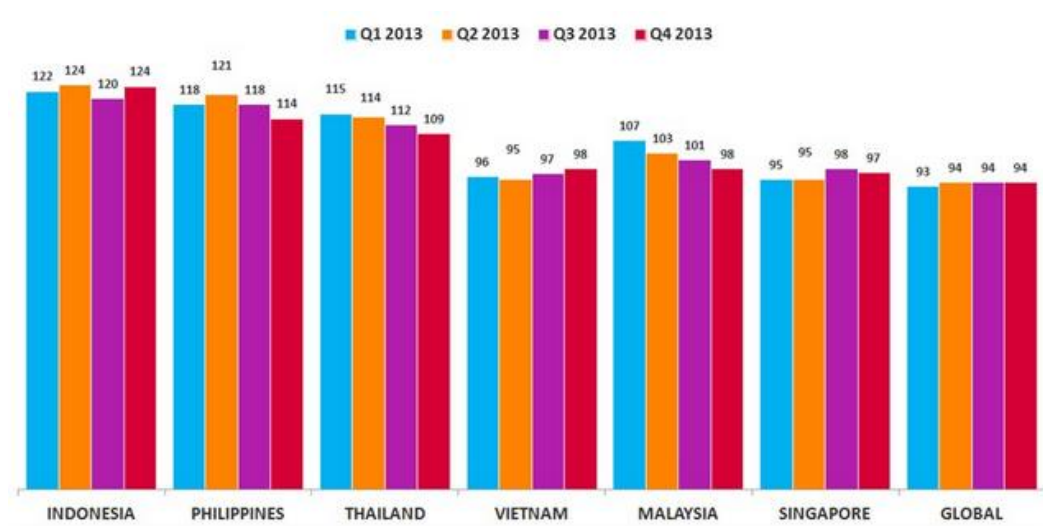
Figure 18. Consumer belief score in 2013 (Source: Nielsen Vietnam)

Until the fourth quarter of 2014, the Vietnamese consumer's belief improved significantly and led to the ninth rank of optimistic-belief-towards-economy nations with score 106 (see Figure 19).
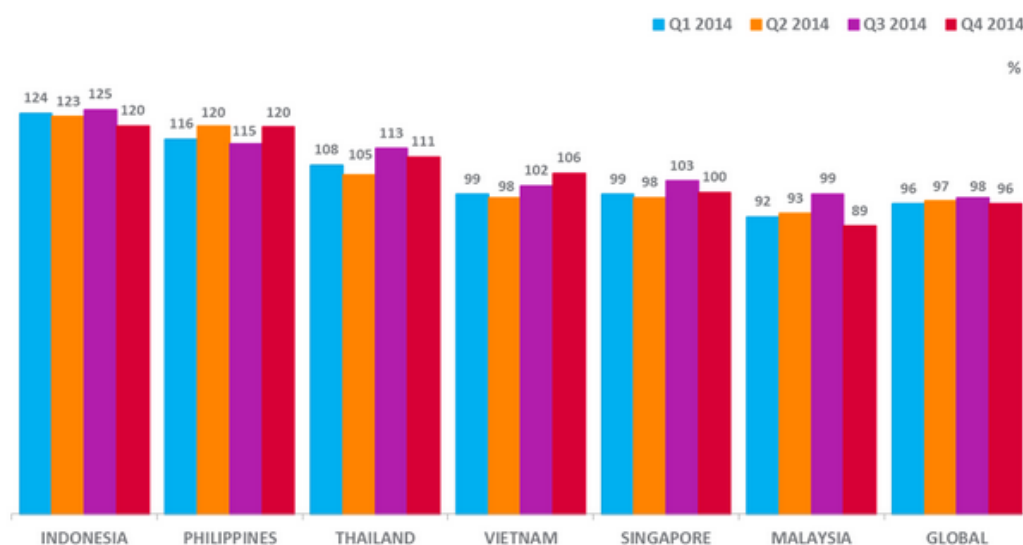
Figure 19. Consumer belief score in 2014 (Source: Nielsen Vietnam)

Also in this research of Nielsen (information published on January, 2015), the Vietnamese consumers are considered as the most thrifty people in the world (77%). The countries behind are Indonesia (70%), Malaysia (67%), the Philippines and Thailand (63%) and Singapore (62%). The saved money is transferred to a saving account or an investment and investing to real estate sector

is always one of priority choices of the Vietnamese. This behavior is also mentioned in Maslow's theory "human needs are arranged in a hierarchy from most to least pressing – physiological needs, safety needs, social needs, esteem needs, and self- actualization needs. People will try to satisfy their most important need first and then try to satisfy the next most important" – quoted by Kotler (2012). It is also supported by the information provided in the previous chapters: there are more and more people who have earned the profits from stock market and other sectors and accumulated a surplus; and they have transferred their money to real estate investments. In addition, the population is increasing day by day and it is also the reason for the increasing of the housing demand.

4.1.2. Perceptions

Perception is one of important factors that is mentioned by Kotler (2012). He defines it as "more important than reality" and "affecting consumers' actual behavior". "Perception is the process by which we select, organize, and interpret information inputs to create a meaningful picture of the world" – Kotler (2012). Three perceptual processes are interpreted: selective attention, selective distortion, and selective retention. As is mentioned, there is the shortage of real estate information of Vietnamese consumers is mentioned. This problem assisted to organize a positive perspective in investing to housing market. And when consumers are determined to believe in real estate investment, they receive the supporting information and ignore the opposite ideas (selective attention). They have a tendency to explain the opposite ideas in a way that fits their preconceptions a (selective distortion). This knowledge of Kotler is also explained before through the self-biased attitude section. The result can be seen through the last crisis. Although there were warnings and advices about an unstable housing market, many companies and individuals chose to invest in this sector and went bankrupt. It can be seen by the bad debt increase of commercial banks and the bankrupt real estate companies (see section 3.4.1 and 3.4.2).

4.1.3. Learning

Good experience from colleagues, relatives and friends, etc who have earned profits from the real estate market is the reason for accumulating consumers in investing in the housing market. These problems were explained

before in the part "herd mentality" and "irrational exuberance". If their experience is good, they can choose to continue investing. The investors who have had the negative experience in the real estate market, because of "afraid of a loss" psychology, they are likely to invest on real estate. These facts led to the escalation of housing price in Vietnam in the last years. As a result, the housing bubble had grown more and more and busted.

4.1.4. Memory

The power of media provides the positive signs in the Vietnamese real estate market through the increase in prices that stayed in the consumers' memory. Therefore, they are tending to choose this market when determining investment.

In his book "Marketing management", Kotler (2012) described memory as "constructive process, because we do not remember information and events completely and accurately. Often we remember bits and pieces and fill in the rest based on whatever else we know". Memory encoding of housing investment approaches consumers via many sources: media, mouth-to-mouth, etc. And also these sources provide the negative information which is then accumulates enough to lead to selling mass properties. At this time, the price declines quickly and the bubble bursts.

4.2. Consumer characteristics

A consumer's buying behavior is influenced by cultural, social and personal factors. Of these, the cultural factors express the broadest and deepest influence (Kotler, 2012).

4.2.1 Cultural factors

Culture is the cornerstone which determines people's wants and behavior. A Vietnamese consumer will have different behaviors and choices from an American or a European consumer. The provident characteristics can be considered as a feature of an agricultural economy; many countries in the same region with Vietnam have this type of feature also for example Indonesia, the Philippines, Thailand, etc. Therefore, the surplus in the current economy now is transferred to investment for the future. The culture also makes a strong impact in the consumer's awareness. In addition, the feature of exchanging information outside at office at lunch or dinner leads to the information transmission.

Therefore, a consumer's success in a housing investment transfers through mouth-to-mouth channel to many other people. It contributes to the boom of the housing market and leads to a bubble.

In addition to culture, subcultures and social class are also the important factors. Subculture provides "more specific identification and socialization for their member. Subculture includes nationalities, religions, racial groups, and geographic regions. It is expressed in the regional differences inside the country between the North, the South and the Middle Vietnam. Because of this reason, the interest in choosing to invest in an apartment or a house is very different in each region. The real estate developers always have to consider this matter in order to offer the suitable choices.

Social class is another aspect in cultural problems. The social hierarchy is quite strong in Vietnam and the worker class is still the most affluent class in Vietnam. These people also have the demand in buying a living space. Therefore, the cheap and medium-price apartment segmentation has been in focus in the last years. According to the report of Savills Vietnam, an international company in market study, the medium-price apartments account for 70% of the total transactions in the market. The housing projects of approximately 70m2 with 15 million VND are always the attractive section (Source: savills.com.vn). Even consumers who have the quite a high income decide to choose this type of an apartment because of convenience and reasonable prices. In addition to that, the apartments and houses in the medium and luxurious segmentation are also developed.

The below figure 20 shows the trend in purchasing an apartment or a house from 2008 to 2013. The statistics is concluded by muabannhadat.com.vn which is the largest online website for purchasing houses in Vietnam. As it can be seen in Figure 20, there are three types of housing segmentation: cheap price, middle price and high price. In a 100-apartment sample, the high-price segmentation accounted for 55% of the total houses in 2008 which dropped by 27% down to the lowest level (28%) in 2013. In contrast, the cheap price segmentation, which was not many consumers' interest, accounted for 12% of the total houses in 2008. It increased to 32% in 2013.
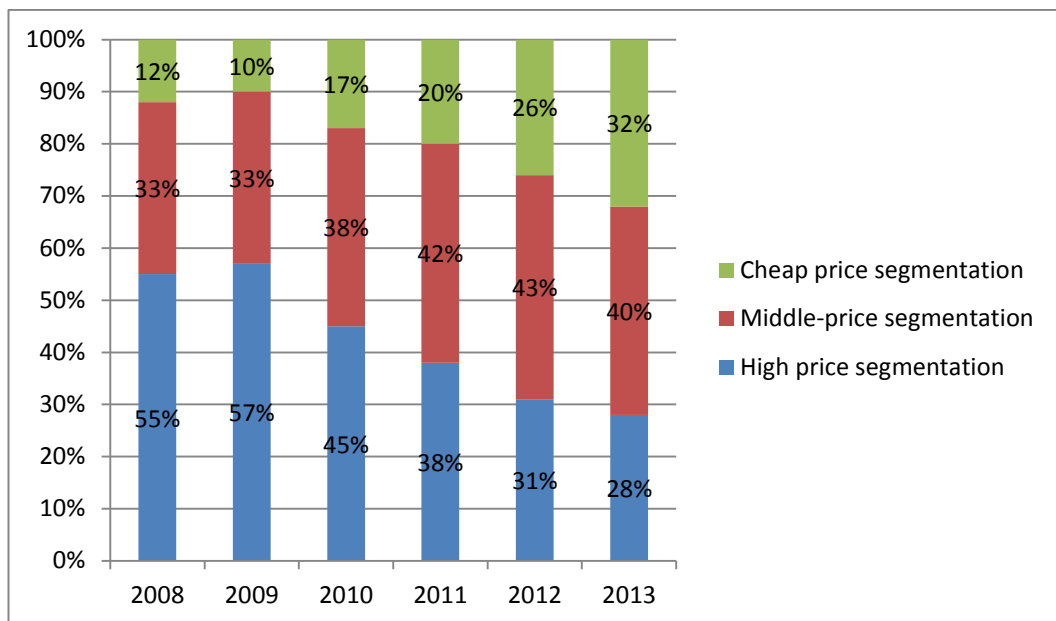
Figure 20. The trend of purchasing housing properties in the period 2008-2013)

Source: muabannhadat.com.vn)

4.2.2. Social factors

In addition to cultural factors, social factors such as reference groups, family and social roles, or status, also influence on buying behavior.

References group – according to Kotler (2012) - are "all the groups that have a direct (face-to-face) or indirect influence on their attitudes or behavior". There are two types of groups: primary group and secondary group. Of these, the primary group is people who interact fairly continuously and informally, such as family, friends, neighbors and colleagues. The information to buy a house or an apartment can come from a member of family, a close friend or a colleague because they are reliable people, especially in the big decisions like a house purchase. Moreover, the motivations of a house purchase can come from parents, children – the members of this group. Children can be an element that influence on their parent's housing buying determination. In addition, a secondary group such as religion, professionals, etc also impacts on the housing buying decision for example the house location. Aspirational reference can be a reason which leads to a house buying decision. It is influenced by social conception when owning a house can express success, especially to the high-social-status people.

4.2.3. Personal factors

Kotler (2012) indicated that "personal characteristics that influence a buyer's decision include age and stage in the life cycle, occupation and economic circumstances, personality and self-concept, and lifestyle and values".

❖ Age and stage in the life cycle

According to Kotler (2012), "our age taste in food, clothes, furniture, and the recreation is often related to our age". The consumption, therefore, is also shaped by family cycle life and the number, age and the gender of the household at any point of time. Therefore, it is necessary to consider critical life events or transmissions- marriage, childbirth, illness, relocation, first job, career change, retirement, etc in order to rise consumer's needs. For example, people who are in the marriage age tend to find and buy a house because there is an enlargement in family size.

❖ Occupation and economic circumstances

Kotler (2012) mentioned that "Occupation also influences consumption patterns. As the recent recession clearly indicated, both product and brand choice are greatly affected by economic circumstances: spendable income (level, stability, and time pattern), savings and assets (including the percentage that is liquid), debts, borrowing power, and attitudes towards spending and saving". In term of housing section, people who have the demand in buying a house, of course, have a stable job as well as income. This is the most important factor in housing demand, both living purpose and investment. A stable job and income is also the necessary condition if they want to loan from bank.

❖ Personality and self-concept

Kotler (2012) indicated that "each person has personality characteristics that influence his or her buying behavior. By personality, it can be a set of distinguishing human psychological traits that lead to relatively consistent and enduring responses to environmental stimuli (including buying behavior)". This issue is used in analyzing consumer brand choices and consumers have a tendency to choose the brand which matches their own personality.

❖ Life style and values

According to Kotler (2012), people from the same subculture, social class, and occupation may lead quite different lifestyle. A lifestyle is a person's pattern

of living in the world as expressed in activities, interests, and opinion. Therefore, Investors need to understand consumer's personality and value in order to provide the suitable determination for their own investment.

4.3. Marketing stimuli

Marketing stimuli includes the four factors of marketing mix: product, price, place and promotion.

4.3.1. Products

Product in the real estate market, especially in this thesis's limitation, is the residential properties like houses and apartments. They are all tangible products. Residential properties can be considered as consumer goods. These products can serve the living purpose or investment of buyers.

4.3.2. Price

Price is the main core value in decision making of house buyers. Because real estate is a special product with huge value, real estate companies have to base on the current economy to adjust the price. For example, the price in bubble times is higher many times than in the normal period. According to Kotler (2012), price can be considered as an indicator of quality. The less consumers pay for a house, the poorer quality they expect to. The good quality of a house or an apartment is expressed by good location, the convenience and other surrounding factors such as market, school, roads, etc. And because of the buying trend, the residential projects are built in the suburban areas where consumers can buy a convenient house at a reasonable price.

4.3.3. Promotion

Promotion is a communication process that takes place between a business and its public. Promotion in the real estate sector, especially in the bubble times, is supported by the media. The potential of real estate, the high price of houses and apartments, etc are communicated to consumers via the daily news in television, newspapers, social network, etc. It creates a certain impact on consumers' perspective. Shiller (2000), in his research, argued that the attention from media created a big influence in this market. The more investor are

concerned with the housing market, the larger scope media expands in this field. This continuous process leads to the escalation price and a bubble.

4.3.4. Place

According to Kotler (2012), place refers to having the right product, in the right location, at the right time to be purchased by customers. This proper placement of products is done through channel of distribution (middleman). In the real estate sector, intermediate agents play an important part in creating the bubble. They are often the first group that approach the houses and speculates for the increase in price. This problem was mentioned as the reason of the housing bubble.

4.4. Other stimuli

Other stimuli including economic, technological, political and cultural also have the critical impact on real estate consumer's buying behavior. These matters were analyzed in PESTEL analysis of Vietnamese real estate market.

❖ Economic factors

There is a development in Vietnam's economy in general and in real estate market in particular. The positive economic climate accumulated the increase in housing demand and consumer index. The development of economy influences on the supply of the housing market, foreign investment as well as the increase of commercial banks (see part 2.1.2).

❖ Technological factors

The development of technological factors is the reason for the change in consumer buying method. Consumers today search for the information on the internet when they are concerned with any issues, and the real estate issues are not an exception. Figure 21 and 22 below show the Google searching trends in the real estate sector. It was conducted with the word "bat dong san" (meaning in Vietnamese of "real estate"), the location is in Vietnam and the period is from 2004 to present.
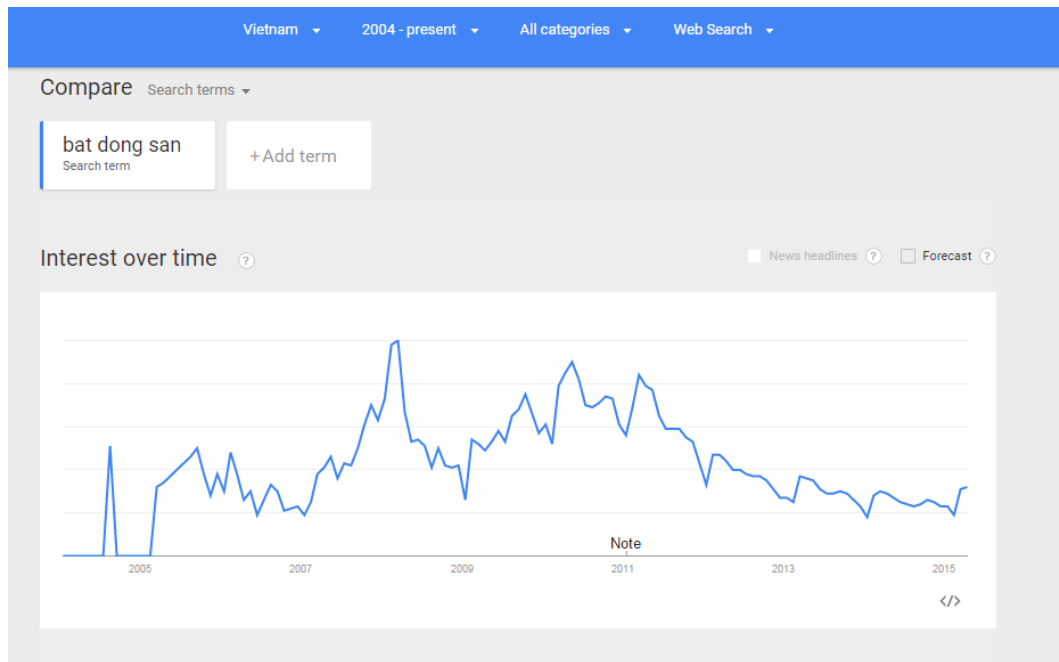
Figure 21. Interest over time of Vietnamese consumers in real estate sector (source: www.google.com/trends)

Figure 21 shows an increasing trend in "real estate" searches from 2004 to 2011, especially in 2007 and 2008. In the period 2011- present, when the real estate market's development was in a slowdown, consumers' need in searching real estate information also decreased. It proved that the development of technology assists consumers usefully for searching information on demand.
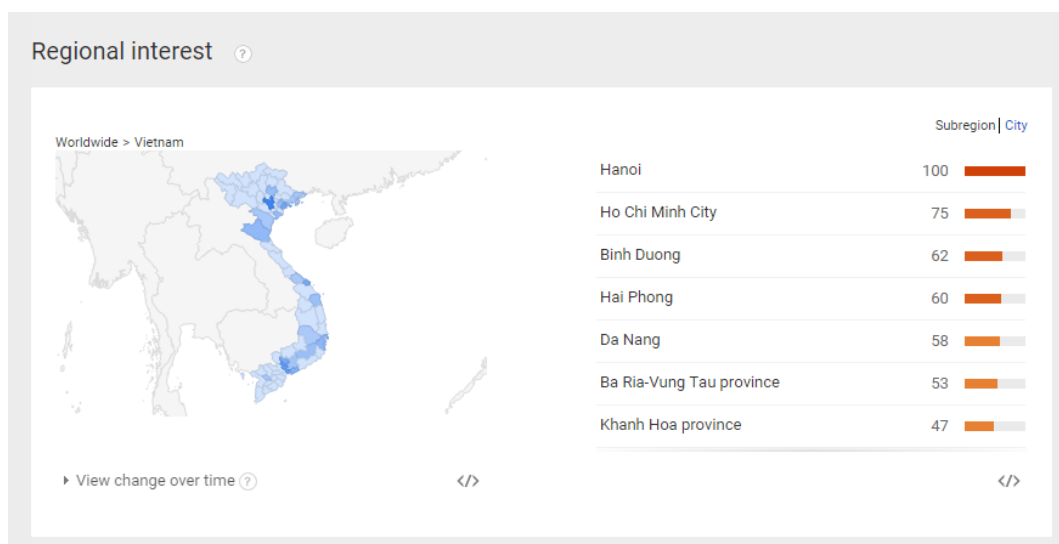
Figure 22. Regional interest of Vietnamese consumers in real estate sector (source: www.google.com/trends)

Figure 22 shows the regional interest of Vietnamese consumers in many parts of Vietnam. This information indicates consumers' interest in real estate markets in many parts of Vietnam.

In addition, hundreds of real estate agency websites have been published such as muabannhadat.com, real-estate-vietnam.com, Chesterton.com.vn, vnhousing.com, hanoihousehunter.com, etc bringing the convenience for consumers in information search.

❖ Political factors

Political factor plays an important in deciding the increasing or constraining of the housing market. The government's policies influences directly on the supply and demand of houses in the market. This is the most important factor leading to the escalation prices in bubble times as well as the sudden decrease of prices leading to a bubble burst (see previous parts). An article of Mr. Ngo Tran – published on 05/11/2014 in official website of Vietnam Public Procurement Review confirms the importance of housing investment policies that protects the buyers, lenders as well as sellers in the real estate sector.

❖ Cultural factors

This issue is analyzed in the consumer's characteristics (section 4.2.1)

4.5.   Buying decision process

In his marketing book, Kotler (2012) mentioned the five stage model of the buying decision process. The consumer typically goes through five stages: problem recognition, information search, evaluation of alternatives, purchase decision and post-purchase behavior. It can be realized that the buying process starts long before the actual purchase and has continued after that. The below figure 23 describes the consumer buying process model of Kotler.

| Problem recognition | → | Information search | → | Evaluation of alternatives | → | Purchase decision | → | Post-purchase behavior |
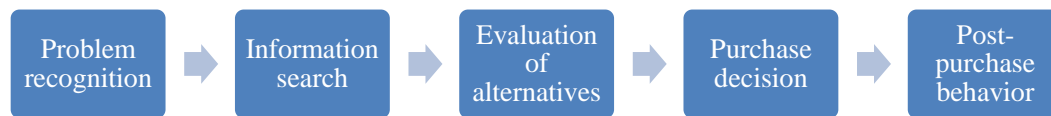
Figure 23. Consumer buying process (Kotler 2012)

Kotler emphasized that consumers do not always go through all five stages – they may skip or reverse some. It depends on the urgency in the demand of consumers; they can skip information search and evaluation of alternatives.

- ❖ Problem recognition

This issue is always the first factors in choosing any products. "The buying process starts when the buyer recognizes a problem or need triggered by internal or external stimuli." – Kotler (2012). Problem recognition in this sector to each buyer is a living purpose or an investing purpose. Consumers are impacted by their own private demand or their friends when they buy or invest into a housing property.

- ❖ Information search

Because of the big value of each housing property, consumers always have gone through a careful information search before making any housing buying decision. It can be distinguished between two levels of engagement in the search: heightened attention and active information search. Table 1 below indicates the view of a real estate website in 2013.

Table 1. The average view of residential property (Source: muabannhadat.com.vn)				
Year	High price segmentation	Medium price segmentation	Cheap price segmentation	Total view
2008	2,475	1,957	550	4,982
2009	23,918	23,440	7,501	54,859
2010	39,578	68,370	30,390	138,338
2011	51,064	412,765	58,610	522,439
2012	45,823	143,456	47,084	236,363
2013	17,714	23,546	17,042	58,302
Total view	180,572	673,534	161,177	

According to Kotler (2012), major information sources to which consumers rely on are four groups:

- Personal: Family, friends, neighbors, acquaintances
- Commercial: Advertising, Websites, salespersons, dealers
- Public: Mass media, consumer-rating organizations
- Experiential: Handling, examining, using the product

❖ Evaluation of Alternatives

According to Kotler (2012), some basic concepts will help us understand consumer evaluation processes: "First, the consumer is trying to satisfy a need. Second, the consumer is looking for certain benefits from the product solution. Third, the consumer sees each product as a bundle of attributes with varying abilities to deliver the benefits".

The Vietnamese economy creates opportunities for the development of real estate market companies. According to Yellow Pages of Vietnam, there are 1,697 companies found. Of these, there are 1,059 companies in Ho Chi Minh City and 314 companies in Hanoi. Therefore, consumers have many alternatives to choose.

❖ Purchase decision

In his book, Kotler (2012) states two factors which are between the purchase intention and purchase decision (intervening factors), they are the attitude of others and unanticipated situational factors (see Figure 25).
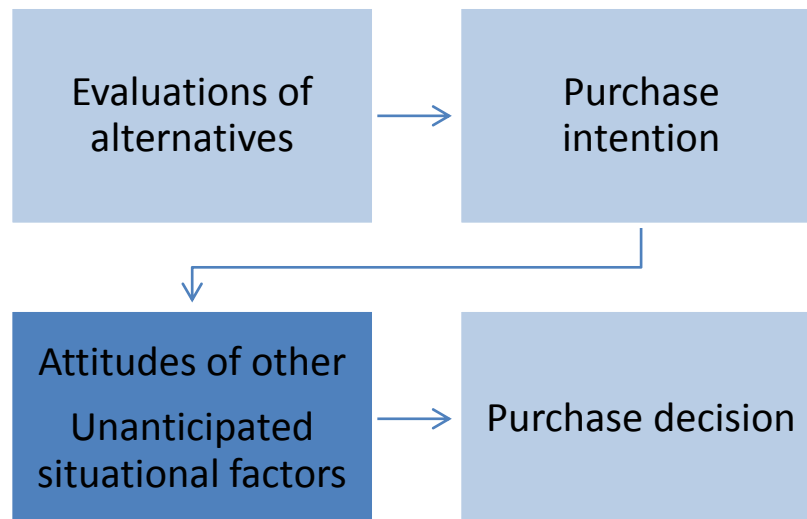
Figure 24. Steps between evaluations of alternatives and purchase decision (Kotler, 2012)

Disagreeing attitudes from a parent, spouse or friends can influence on the ultimate decision of consumers. A positive comment will enhance the buying decision, and contrary, a negative comment will prevent or delay the final buying decision.

An unanticipated situation factor has an impact on the purchase intention. In the bubble burst moment, a person who is planning to buy a house can stop this idea because of financial crisis. If a consumer perceives any risk, he can postpone the buying decision. There are six types of risk that a consumer can perceive

- Functional risk: the product does not perform to expectations
- Physical risk: The product poses a threat to the physical well-being or health of the user or others
- Financial risk: The product is not worth the price paid
- Social risk: The product results in embarrassment in front of others
- Psychological risk: The product affects the mental well-being of the user
- Time risk: The failure of the product results in an opportunity cost of finding another satisfactory product.

The degree of perceived risk varies with the amount of money at stake, the amount of attribute uncertainty, and the level of consumer self-confidence (Kotler, 2012).

❖ Post-purchase behavior

After purchasing the product, the consumer will experience a level of satisfaction or dissatisfaction.

4.6. Summary of consumer buying behavior

The Vietnamese consumers buying behavior provides the general point of view about characteristics and feature of consumers in Vietnam, especially in the real estate market. It can be implied from the analysis that Vietnamese consumers are impacted strongly by psychology factors. Of these, cultural factors, subculture and social class play the main role in leading consumer buying behavior. External factors, such as marketing stimuli and other stimuli, contribute to the purchasing decision.

Consumer buying process in the residential market in Vietnam is defined as five stages. The most important stages are information search and evaluation of alternatives because the housing property a special type of product. The consumer, before making the buying decision, has to consider carefully about what they will buy or invest in.

5. RESEARCH ON VIETNAMESE CONSUMER BUYING BEHAVIOR IN THE RESIDENTIAL MARKET

5.1. Data collection methods

The research methods used in this thesis, as was mentioned in the introduction, are quantitative methods and qualitative methods. They are used to collect the primary data. In this thesis, quantitative methods is expressed through a questionnaire which is designed for this thesis's purpose. Quantitative data can range from simple counts such as the frequency of occurrences to more complex data such as test scores, prices or rental costs. These data collected will be transferred to quantitative analysis using techniques such as graphs, charts and statistics to analyze and interpret the gained information. Meanwhile, the qualitative method is based on the results of a short list of responses to open-ended questions in an online questionnaire to more complex data and transcripts of in-depth interviews or entire policy documents. Qualitative data analysis procedures assist in the understanding knowledge and allow developing theory from the data. Another way to differentiate these two methods is numeric (numbers) or non-numeric (word) data (Shaunders et al., 2009, p414 and p480).

Because of this thesis's aim, the questionnaire was designed in order to collect data about customers buying trends in the Vietnamese residential market. The choice of this type of a method provides a general perspective to the Vietnamese consumer buying trends that support to the theoretical study. In addition, a face-to-face interview is conducted with an experienced person in the Vietnamese housing market in order to get a more in-depth understanding of the matter.

5.1.1. Questionnaires

As mentioned before, the quantitative data is collected from a survey. The questionnaire is based on the combination between the Kotler's model of consumer buying behavior and some facts of the Vietnamese housing investment. The questionnaire is designed with 16 questions. The questionnaire is anonymous and it was sent to several companies in Hanoi and Ho Chi Minh City via email. These companies were chosen based on my connection with staff members there. Some friends were asked in order to have their colleagues' email addresses. The

focus is on the people who had a paid job because they are likely to think about buying a house and they have to afford on residential property. The questionnaire is designed as a form of multiple choices; therefore it does not take so much time from the respondents. The explanatory box is also included if they want to describe their perspectives more. Because the survey is aimed at Vietnamese people, the survey form is translated into Vietnamese in order to create the most comfortable survey for the respondents. The collecting process is the most challenge time in the study process because the respondents did not have any motivation to answer. A reminder email was sent several times as well as some motivational activities were conducted.

This questionnaire was sent to 356 people and there were 103 respondents that answered the survey. The survey can be seen in the appendix.

5.1.2. Interview

The interview is conducted to collect ideas from professionals in the housing sector. The interviewee is Mr. Nguyen Van Hai, who is working in real estate sector of Vingroup, Vietnam. He has experienced many years in residential field in the Hanoi market. This interview's results aim at supporting the questionnaire's results. This way, these issues can be understood from many perspectives. This face-to-face interview was conducted on March 10th, 2015 in Hanoi, Vietnam. In order to save time and guarantee the interview's quality, the questions were sent to the interviewee for preparing in advance through email.

5.2. Reliability and validity

Reliability and validity are two important factors that express the credibility of research findings. Reliability refers to which data collection techniques or analysis procedures will bring the correct findings (Shaunders, 2009, p.156). The understanding of questions in a questionnaire has to be guaranteed one meaning, avoiding the misunderstandings. Therefore, the questions were written in easily understandable words and in a coherent structure. The thesis reliability should be expressed by the matched results that are similar with the other secondary data. It means that the result is also observed by other

observers. Validity is concerned with if the results are really about what they appear to be about. Is the relationship between two variables a causal relationship? Therefore, the questionnaire for the research study needs to be built based on the theories. Choosing the theories which are applicable to the thesis's aim is very important.

The questionnaire based on the customer buying behavior theory aims at finding the most popular choices of Vietnamese customers. These trends, after that, will be linked to one of most important causes leading to a housing bubble. The interactive relationship created the bubble in the residential market and that is also the matter which I would like to discuss and emphasize. The questions in the questionnaire are written from an objective perspective and do not touch to any sensitive problems in order to avoid any dishonesty in the answers. One situational question is included to collect information on the customer's common sense.

A researcher always tries to keep the reliability and validity on a high level during the research process. However, it is also possible to get random answers of respondents in a questionnaire as well as from an interviewee. The interviewee's perspective is sometimes just true from the individual aspect. Additionally, a face-to-face interview can reduce the possibility of providing more sensitive ideas.

5.3. Questionnaire analysis

In this chapter, the results of the research are provided. The questionnaire includes 16 questions and is divided into three sections:

- The first part includes the basic background of respondents. There are six questions in this section: gender, age, living area, average income, working years and family members.

- The second part collects the housing investment information. These information influences on a buying decision of a Vietnamese consumer. There are eight questions in this section: housing buying intention, banking loan, land location, extra factors, price, purpose, etc.

- Last one situational question about an investing decision is asked. This question is given after the causes of the housing bubble were studied.

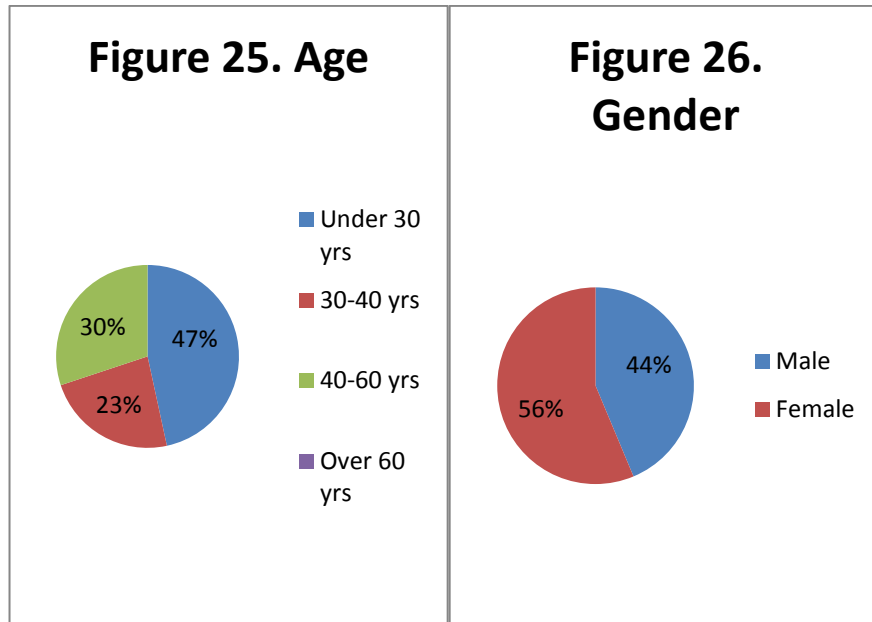5.3.1. Respondent's basic information

According to the information from secondary data, the factors such as age, living area, income, social status as well as gender determine strongly on consumer buying behavior. The information of age, working experience year and income indicate the financial status of buyers. Additionally, the people who depend on the respondent's income are restricted in the payment capability for a housing property. From another view, this factor (how many people there are in a family) determines the size of a desired house, and whether the respondent would like to buy a house/an apartment.

Questions: Age and Gender

The age groups are divided into four categories: under 30 years, 30-40 years, 40-60 years and over 60 years. The crossed table between age and gender is expressed as the table 2 below. The rates of gender and age of respondents are transferred into pie charts (Figure 25 and Figure 26) as below. It can be seen in the table 2, Figure 25 and 26, of the 103 respondents, there are 45 men (44%) and 58 women (56%). The largest ratio of age belongs to group under 30 years old (47%). The group of 40-60 years old is 30% and the group of 30-40 years old is 23%. There are no respondents who are over than 60 years old. In the segmentation of less than 30 years old and 30-40 years old, there are more female respondents than male. However, in 40-60 year-old people, the number of answers from men is higher than that one from women.

	Under 30 years	30-40 years	40- 60 years	Over 60 years	Total
Male	14	10	21	0	45
Female	34	14	10	0	58
Total	48	24	31	0	103

Table 2. Respondents' age and gender

Figure 25. Age

Figure 26. Gender

■ Under 30 yrs	47%
■ 30-40 yrs	23%
■ 40-60 yrs	30%
■ Over 60 yrs	

Male 44%
Female 56%

Question: Where is your living area?

The living location of the respondents is quite various: Hanoi, Ho Chi Minh City, Da Nang and other provinces. The distribution of living location is described in Figure 27 below.

Most of the asked people are living in Hanoi (61 people) and next Ho Chi Minh City (23 people). As explained previously, the survey was sent to some companies in Hanoi and Ho Chi Minh City. It also shows a limitation of this thesis, almost answers express the consumers' perspective in Hanoi and Ho Chi Minh City market, especially in Hanoi.

Figure 27. Respondent's residential location

Hanoi	Ho Chi Minh City	Da Nang	Other
61	23	3	16
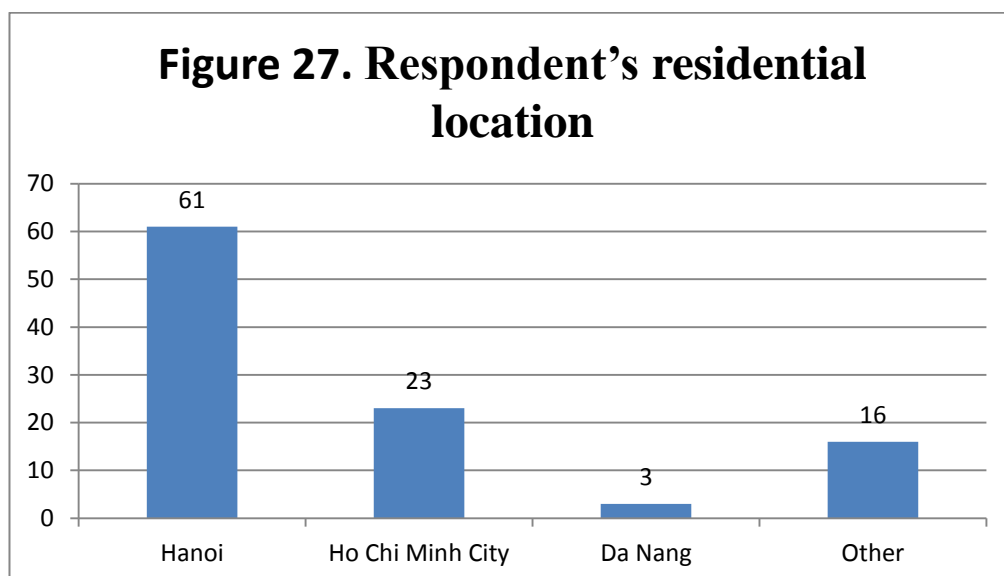
Question: What is your average income per month?

The next matter is the income per month of each respondent. It shows the financial capability of the asked people. It also links to the determination of buying housing property. Table 3 below indicates two variables: income per month and age.

It can be seen from Table 3, of 103 respondents, there are 32 people having the monthly income from 5-10 million VND but there are only 15 people having the monthly income over 20 million VND. The monthly income of the respondents depends on their age. The number of people who have the monthly income of less than 10 million VND mainly belongs to group under 30 years old. Meanwhile, the number of people who have the monthly income of over 10 million VND mainly belongs to group of 40-60 years old. It can be inferred that the number of respondents who have the higher income level are mainly older people.

Table 3: Income/month and age				
	< 5 million VND	5-10 million VND	10-20 million VND	>20 million VND
Under 30 years	23	20	4	1
30-40 years	5	7	12	0
40-60 years	2	5	10	14
Total	30	32	26	15

Currency exchange: (rate in April/2015)

5 million VND ≈ 215 euros

10 million VND ≈ 431 euros

20 million VND ≈ 862 euros

Figure 28 shows the monthly income rate of four salary sectors: <5 million VND, 5-10 million VND, 10-20 million VND and >20 million VND. It can be seen from this figure, of 103 respondents, group "5-10 million VND" accounts for

31%, the next is group "under 5 million VND" (29%), group "10-20 million VND" accounts for 25% and group "over 20 million VND" just accounts for 15%.

Figure 28. Monthly income of the respondents

- <5 million VND
- 5-10 million VND
- 10-20 million VND
- >20 million VND
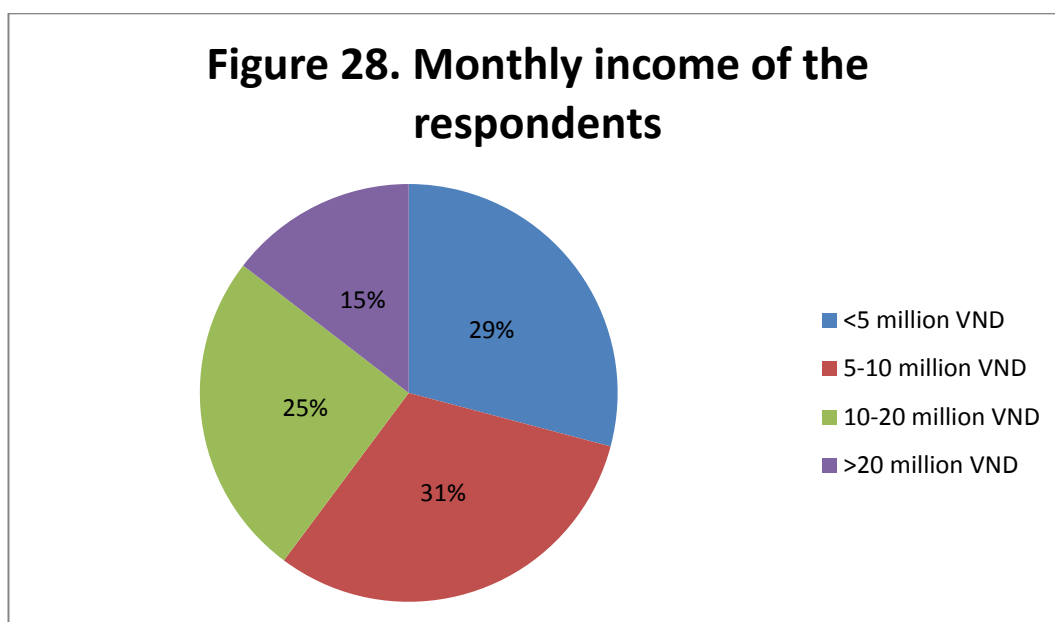
Question: How many working experience years do you have?

Table 4 describes the correlation between income per month and working years. The monthly income of less than 10 million VND mainly belongs to group under 5 working experience years. Meanwhile, the monthly income over 10 million VND, especially over 20 million VND belongs to the group with over 15 working experience years. Therefore, it can be inferred that the higher income level mainly belongs to people who have more than 15 working years.

Table 4. Income/month and working years					Total
	<5 million VND	5-10 million VND	10-20 million VND	>20 million VND	
<5 years	19	18	7	1	45
5-10 years	5	2	2	0	9
10-15 years	3	7	8	3	21
>15 years	3	5	9	11	28

Figure 29 describes the rate of respondents' working years. There are 44% of all respondents who have less than five working years. The people who have more than 15 years of working experience account for 27 %. The group of 5-to-15-years of working experience accounts for 29% of all the respondents.

Figure 29. Working years
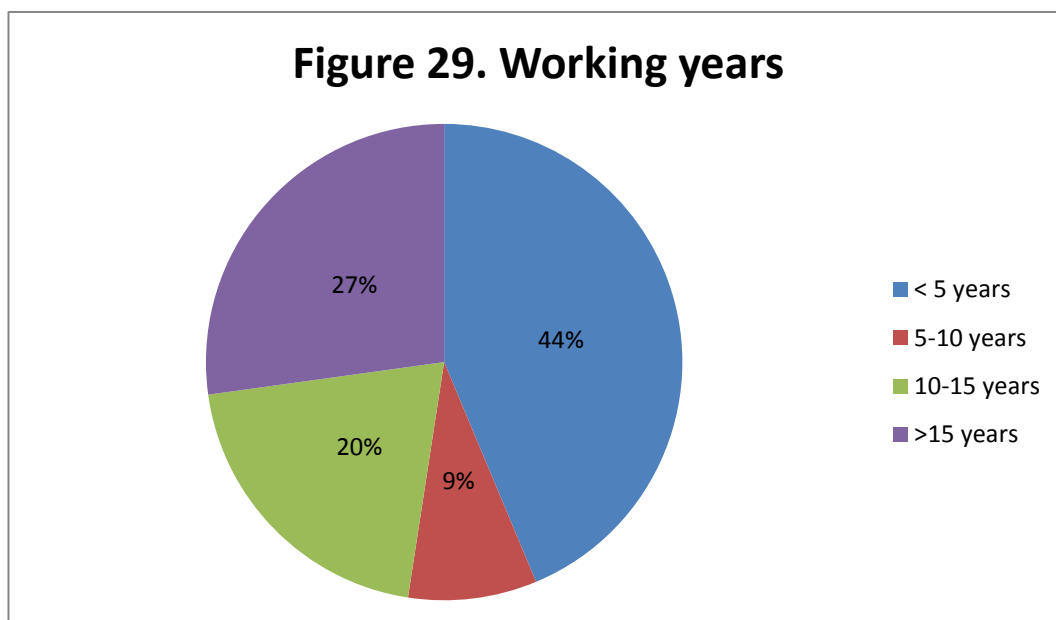
Question: How many people are there who depend on your income in your family?

The table 5 shows the correlation between the respondent's monthly income and the number of family members depending on his/her income. Figure 30 shows the percentage of the number of dependent family members. It can be seen from Figure 30, in respondents' families, nearly half of all respondents answered that there were 1-2 people depending on their income. Of this group, most of the answered people have the income of less than 20 million VND. It adds a pressure on these people's housing buying decision. There are 34 % of all the respondents who answered that they live alone. However, these people's income is in the range of low to medium level (less than 10 million VND. There are 17% of respondents who answered "3-4 people" and just 1% of respondents answered "5-6 people".

	Number of family members depending on respondent's income				
	0	1-2	3-4	5-6	>6
<5 million VND	13	15	2	0	0
5-10 million VND	14	14	4	0	0
10-20 million VND	7	14	4	1	0
>20 million VND	1	7	7	0	0
Total	35	50	17	1	0

Table 5. The respondents' income/month and the number of family members depending on the respondents' income.

Figure 30. Number of family members who depend on respondent's income
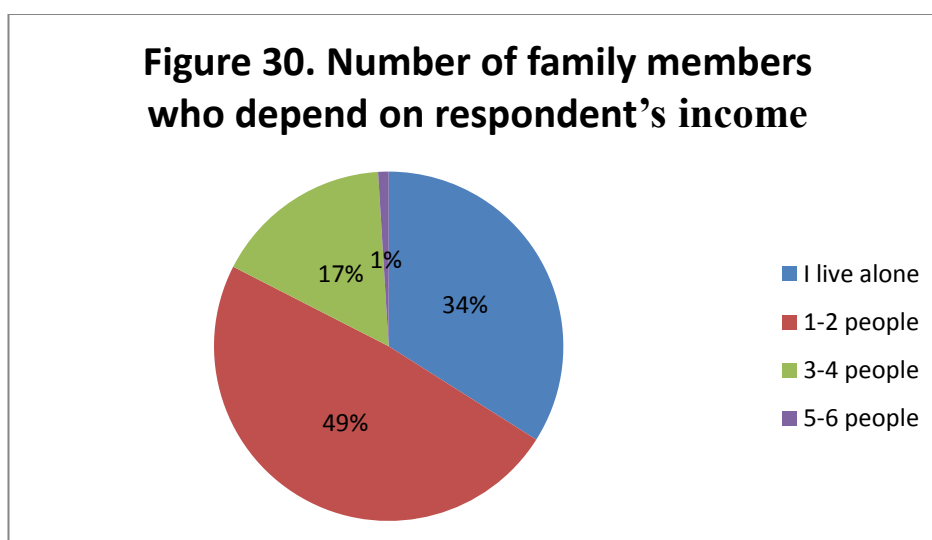
5.3.2. The respondents' buying decision

In this section, the questions relating to the housing buying determination were asked. The questions' content is about the housing buying plan, bank loan determination, the interest in housing location and other determinative reasons, house price, buying purpose, information sources and the role of a real estate agency.

Questions: Are you planning to buy a house/an apartment? Do you plan to loan from a bank to buy a house/an apartment?

Figure 31 shows the relationship between the buying determination and the bank loan determination. There are 82 people who said "yes" and 21 people who said "No" in the question "are you planning to buy a house or an apartment?". The ratio for this question is 4:1 which is equivalent of answered Yes: No. In the question "Do you plan to loan from a bank to buy a house/an apartment?", there are 90 people said "Yes" and 13 people said "No". It means that there is 1 person refusing to loan from a bank in every 7 people agreeing. It expressed that housing buying demand among Vietnamese consumers always exists and they are ready to loan from a bank to buy a house.
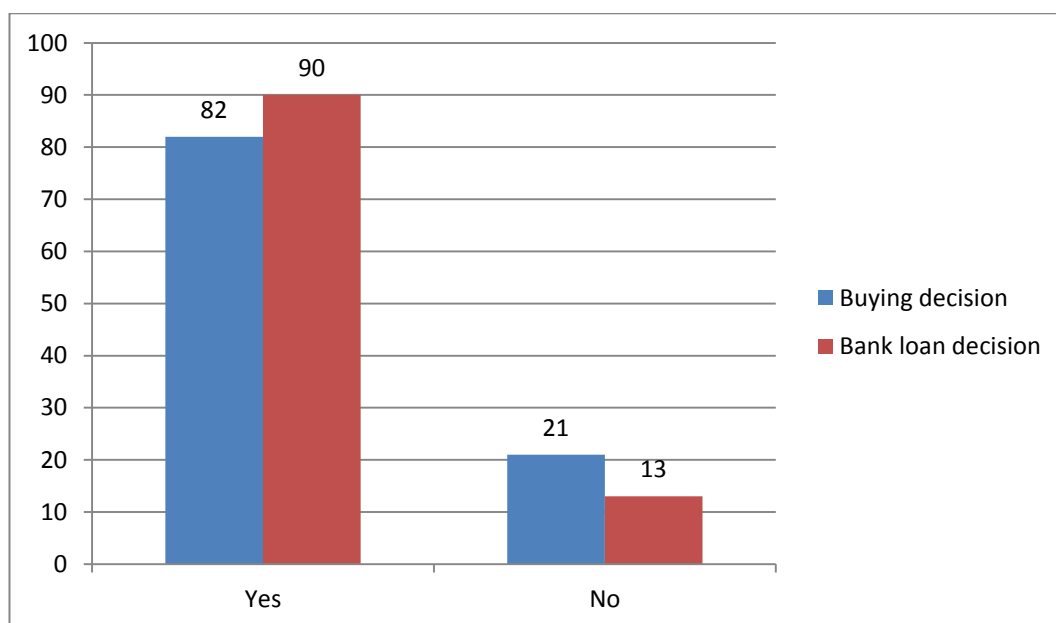
Figure 31. Buying decision versus bank loan decision.

Question: If you decide to buy a house/piece of land, which area do you choose?

The Figure 32 below expresses the interest of 103 respondents in their interest of house location. Because the answerers can choose more than one choice, the total received answers can be different with the total respondents. There are 73 answerers choosing "around city center", 31 answerers choosing "in city center". There is just 8 people preferring "the suburban area" and 2 people

choosing "rural area". It shows the Vietnamese consumers tend to choose to buy a house/an apartment around city center.

Figure 32. House location interest

In city center: 31
Around city center: 73
Suburban area: 8
Rural area: 2
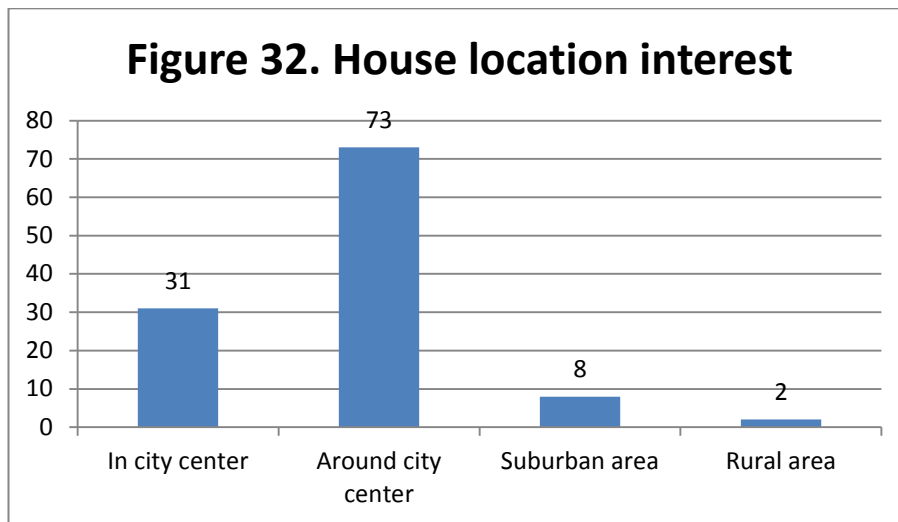
Question: What factor(s) does(do) it(they) influence on your buying decision?

Figure 33 shows some of reasons which influence on the housing location interest. It is noted that the respondents can choose more than one alternative, so the total answers is not equal with the total number of respondents. There are 66 respondents who ch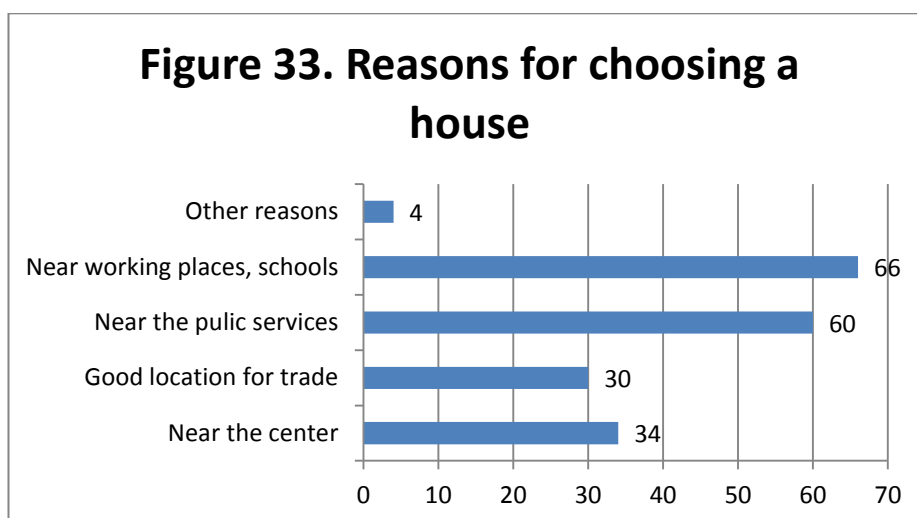oose a house near the working places and schools. 60 would like to buy a house near the public services. "Near the center", "good location for trade" are also the reason for this determination (34 people choose "near the center" and 30 people choose "good location for trade"). Four respondents choose other reasons which are mentioned as a quiet place and an unpolluted environment.

Figure 33. Reasons for choosing a house

Other reasons: 4
Near working places, schools: 66
Near the pulic services: 60
Good location for trade: 30
Near the center: 34

Questions: How much per square meters in a house/an apartment is affordable to you? How much are you willing to pay in total price for a residential property?

Table 6 below shows the equivalence of three factors: the number of respondents, the housing price per square meter and the total desired price for each house or apartment. Figure 34 shows the percentage of deciding the housing price per square meter. The Figure 35 shows the percentage of deciding "how much a consumer will pay for a house?". It can be seen from this table that most of all respondents choose to buy a house in the segmentation of less than 1 billion VND and from 1 to 4 billion VND. These houses and apartments belong to the cheap and middle price segmentation (according to the information on muabannhadat.com.vn). There are 31% of all respondents preferring the price of less than 1 billion VND and 62% of all the respondents prefer the price from 1 to 4 billion VND. Most of all the respondents prefer the 20 million VND per meter square (63% of all the respondents) and there are 30% of all the respondents who can afford to pay 20-30 million VND per meter square. The total meter square for each house/apartment can be inferred from the correlation between the housing price per square meter and the total desired price for each house/apartment. The formula is shown as below:

$$\text{The total square meter} = \frac{The\ total\ desired\ price\ for\ each\ house}{Price\ per\ square\ meter}$$

Therefore:

$$50\ m2 = \frac{1\ billion\ VND}{20\ million\ VND} \qquad\qquad 133m2 = \frac{4\ billion\ VND}{30 million\ VND}$$

$$175m2 = \frac{7\ billion\ VND}{40\ million\ VND} \qquad\qquad 200m2 = \frac{10\ billion\ VND}{50\ million\ VND}$$

In conclusion, most of all the respondents would like to own a house/an apartment which is from 50 square meters to 200 square meters.

Table 6. The housing price per square meter and the total desired price for each house/apartment

	20 million VND/m2	20-30 million VND/m2	30-40 million VND/m2	40-50 million VND/m2	Total
<1 billion VND	26	5	1	0	32
1-4 billion VND	37	23	2	2	64
4-7 billion VND	2	3	1	0	6
7-10 billion VND	0	0	1	0	1
Total	65	31	5	2	

Currency exchange: (rate in April/2015)

20 million VND ≈ 853 euros

30 million VND ≈ 1279 euros

40 million VND ≈ 1706 euros

50 million VND ≈ 2132 euros

1 billion VND ≈ 42650 euros

4 billion VND ≈ 170600 euros

7 billion VND ≈ 298550 euros
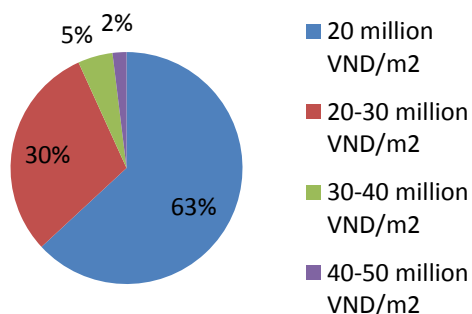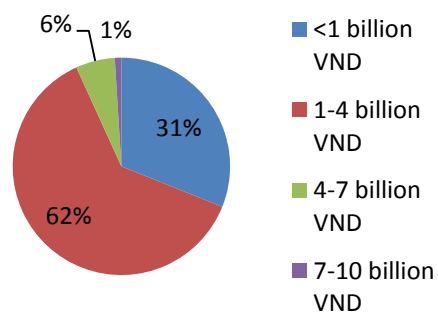
10 billion VND ≈ 426500 euros

Figure 34. Price/m2

Figure 35. Total desired price

Question: If you want to own one or more residential property, what is your purpose?

There are four answers for this question and respondents can choose more than one alternative. Figure 36 shows that most of all the respondents choose their purposes as living and investing. There are 75 people who choose "living purpose" and 61 people choose "investing purpose". "Giving purpose" and "other purposes" are not the choices of many people.

Figure 36. Purchase purposes
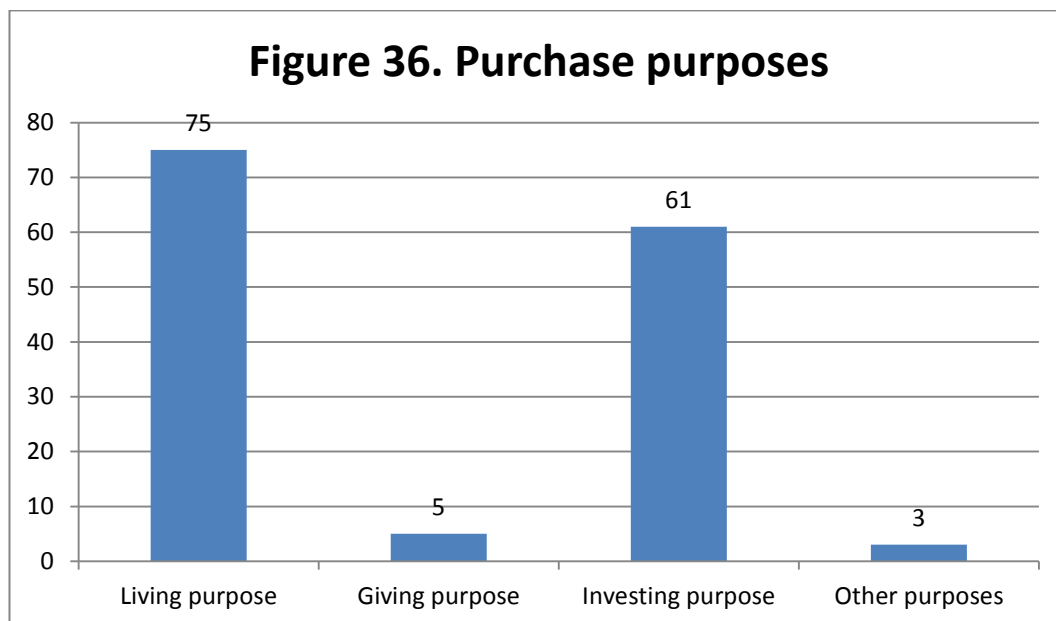
Question: Which sources do you know that residential property information from?

In this question, the respondents can choose more than one alternative. Therefore, the total answers are not the same as the total number of respondents. Figure 37 shows the main information sources that a consumer relies on when deciding to buy a house. 80 people reveal that they know the housing information from relatives and friends. 53 people choose that they know the information from advertising in the newspapers and on the internet. 48 people choose "housing agency" and 42 people choose "government information". It shows that the "relatives and friends" source influences on consumers' housing buying determination quite much. Besides that, consumers also receive information from many other sources such as advertisements, housing agencies and government information.

Figure 37. Information sources

A bar chart titled "Figure 37. Information sources" with the y-axis ranging from 0 to 90. The bars show: Government information = 42, Housing agency = 48, Relatives, friends = 80, Ads (newspaper, internet) = 53, Other sources = 1.
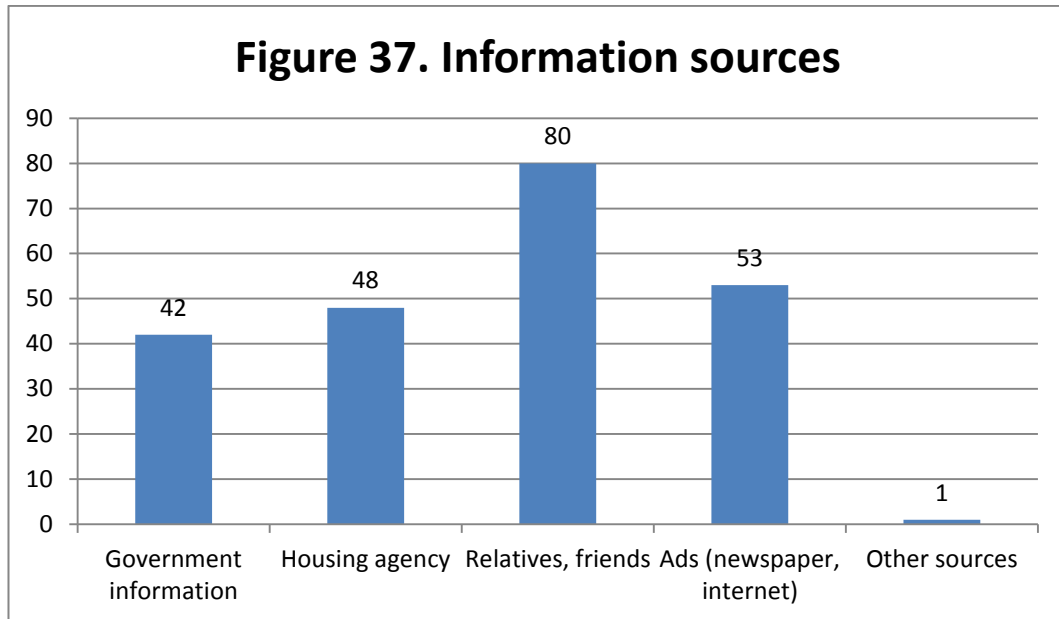
Question: If you decide to buy a residential property, will you choose to find the information by yourself and contact to landlords directly or will you use housing agencies?

Figure 38 shows that 80% of all the respondents choose to find information by themselves and contact to landlords directly. Meanwhile, there are just 20% of all respondents choosing to use a housing agency. There are many reasons which explain for these question choices. The following information summarizes the reasons of the respondents.

Figure 38. House buying preferences

A pie chart titled "Figure 38. House buying preferences" showing two segments: "Find info by myself, contact to landlords directly" = 80% and "Use housing agency" = 20%.

	Choose	Not choose
Find information by myself, contact to landlord directly	- The service fee is lower than the housing agency. - It is easier to negotiate the price with a landlord. -The information is more reliable. Therefore, it is safer than using an agency.	- The respondents are not familiar with purchasing houses - The respondents do not have time to find the information themselves
Use housing agency	- Housing agencies provides more information for respondents - Respondents can save the time	- Housing agencies in Vietnam are too complicated. Therefore, respondents do not trust them. - Respondents do not want to pay service fee for agency.

5.3.3. Situational question

Question: You heard from your friend that government is merging Ha Tay province into Capital Hanoi. The price of each plot of land in Ha Tay will increase 300% compared to the previous time price. Do you decide to invest?

Figure 39. The rate of choice in situation question
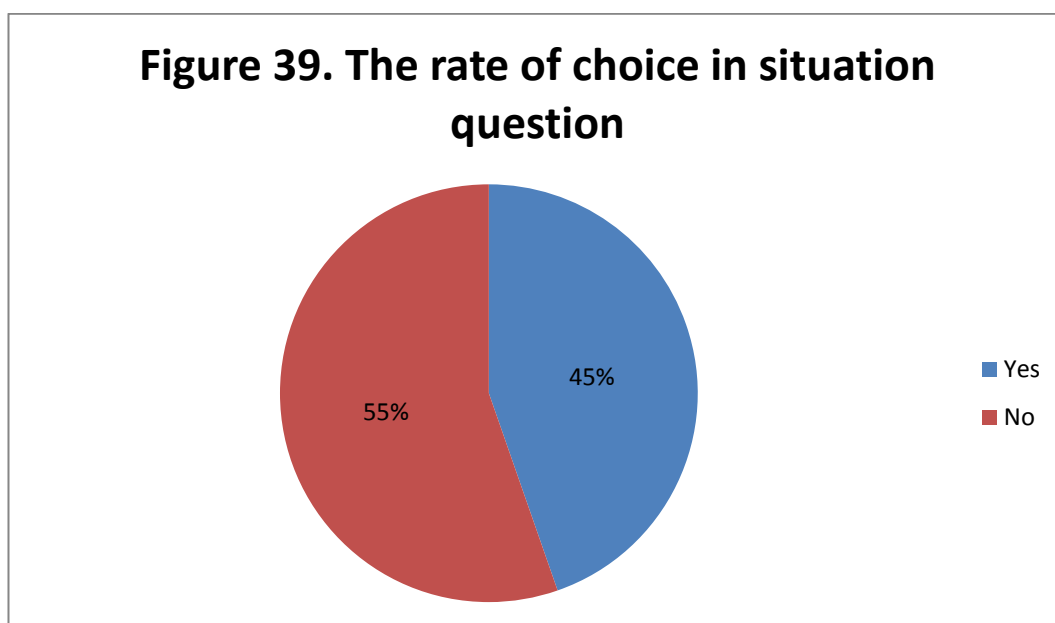
This question is raised as a situation that aims at trying the respondents' reactions and psychology. Therefore, the value of this question, in some ways, is just true for each certain time.

It can be seen from Figure 39 that 45% of all the respondents who said "Yes" and 55% of all respondents said "No". Just five of the people who said "Yes" explain the reason for their choice. The reasons are listed below:

- The risk will bring a large profit

- It is a good choice for investing because they can earn a profit later

However, there are 26 respondents, or 55%, said "No". They explain their reasons:

- The information is not reliable enough

- This opportunity is too risky and they just invest in something they know clearly

- A housing purchase in the Vietnamese market now is too complicated

- The respondents do not have enough money to invest

This question results reveal that housing investors currently are quite careful in the investing information. Most of all the answerers consider the risk of investment and do not want to take this risk. Besides that, there are a few investors who believe in earning profit in this type of investment.

5.4. Interview analysis

The interview content is expressed by a person who has a long experience in the real estate field. The interview results can be influenced by his perspective and experience in the Vietnamese real estate market.

➢ *In your opinion, what are the factors which pushed the housing prices in Vietnam higher in the last year?*

According to Mr. Nguyen, there are many reasons leading to this issue in Vietnam. Firstly, the reason of urbanization should be considered. Since the renovations in the economy, urbanization in Vietnam has developed rapidly. This means the causes of moving waves from the rural areas to the urban areas, especially to the big cities such as Hanoi and Ho Chi Minh City. It has created an increase in the housing demand in these cities. Currently, this moving wave has expanded to other cities such as Da Nang, Nha Trang, Hai Phong, Binh Duong,

etc. Because of the increase in demand, developers have to improve the supply capability. Secondly, land law is the crucial part in this field. Because of the continuous changes in housing market, the land law is always adjusted to be suitable with the real situation. However, there is a constant thing that land is owned by the Vietnamese government. Developers from both domestic and foreign investors can lease the land from the central government. The Land Law does not stipulate any exact price for land in each area. Therefore, central government gives the land use right to the highest bidders. Therefore, the price of a house is high when the ultimate consumer buys it. Thirdly, there is a speculation in the Vietnamese market. This issue always exists in the market. However, it could be observed clearly in several years before 2008. Many people earned large sums of money in the stock market and they wanted to invest in another field and they chose real estate. One more case, there were many people who owned a valuable piece of land in some center districts, they sold that land and bought a cheaper one in another area. The rest of this sum of money was reinvested in another cheap piece of land. This situation had continued and led to an increase in housing price. Last, the central bank created a bank loan for housing purchases with an easy policy. People could loan in all commercial banks in Vietnam. The demand has increased in a short term and developers could not meet this demand immediately. They are the reasons which push the house price higher.

> *Based on which criteria does a Vietnamese consumer choose to buy his/her house?*

According to Mr. Nguyen, the price is the crucial factor. There still exists a gap between personal income and housing prices. Therefore, to each Vietnamese consumer, the housing buying decision is a very important decision in his/her life. The price is the first and foremost element when a consumer buys a house. He/she has to choose the most suitable price with his/her income as well as minimize the bank loan. One more reason is the location of the house. It is better if the house location is near the buyers' working places or their children's schools. The other conditions are located near the market, near hospitals, near big roads, etc. The issues of electricity, water, etc must be guaranteed. The state office, the

companies, schools, hospitals, etc have a tendency to move out of the central districts. That is the reason why the houses and apartments in extended districts are the consumers′ interest. It meets all the conditions above: a reasonable price and convenience for living activities.

> ➢ *In your opinion, what is the current situation of the Vietnamese residential market?*

According to Mr. Nguyen, the Vietnamese real estate is now recovering from the housing bubble in 2008-2009. The price for each house now is not too high as the price was in 2007. The number of resident projects is increasing these days. Some projects such as Times city, Royal City, Star City Le Van Luong, etc (they are all in Hanoi) can be mentioned and they have attracted many consumers. The housing prices are now reasonable for many families. The most preferable price for each house/apartment is from 1 billion VND to less than 3 billion VND. Although there are many suppliers now, the housing choice is not easy for consumers. It is necessary to find the reliable sources and choose the suppliers with a good reputation. Mr. Nguyen suggested that if consumers have the demand and good financial condition, they should buy a house at this time.

5.6. Research conclusion

The purpose of this research is to study the consumer buying behavior in the Vietnamese residential market. The content of the research is based on Kotler's consumer buying behavior. The issues in the research are living location, age, gender, income, family size, rate of buying determination, rate of bank loan determination, readiness to purchase a house, purchase information, attitudes to investing situation, etc. In addition, the perspective of an experienced person in this field consolidates the results of the questionnaire. Although there is a big gap between income and housing prices, the housing demand in the residential market is quite high. Consumers are ready to loan from a bank to purchase a house/an apartment. Vietnamese consumers tend to choose a house with the price under 3 billion VND which belongs to the cheap and medium price segmentation. There are many reasons for choosing a house: a reasonable price, a convenient location and being located near the working places, schools, etc. There are many different

aims in housing buying decision. However, two main reasons can be mentioned: living and investing. It proved that there is a group of consumers choosing to invest in the residential market. Consumers in Vietnam can collect information from many sources but the main source is from relatives and friends. It confirms the importance of mouth-to-mouth channel in a housing buying decision. In addition, there are still a few people who are thinking about the speculation problem at this time. It is expressed by the readiness to invest in houses of some consumers and wait for a higher price in the future. Speculation always exists in Vietnamese market (Mr. Nguyen - interview).

However, the research still has some limitations. The survey's answers mainly come from people who are living in Hanoi. The interviewee is also a person who has worked many years in the Hanoi market. Therefore, his perspective and experience can be true just for the Hanoi market.

6. CONCLUSION

6.1. Conclusion of the thesis

The thesis aims at indicating the relationship between the housing bubble and consumer buying behavior in the Vietnamese residential market. It was mentioned as the main question to answer. There are four main theory types which are analyzed in this thesis: PESTLE analysis, Porter's 5 forces analysis, housing bubble knowledge and Kotler's consumer buying behavior theory. Of these theories, Kotler's consumer buying behavior was applied to the questionnaire's content. The other theories, in addition, play a role as a premise for explaining the relationship between consumer buying behaviors and a housing bubble. The results of the questionnaire and interview also correspond with knowledge in the theoretical study. It indicates that consumer buying behavior is influenced strongly by consumer's psychology and consumer's psychology is also the cause of the housing bubble.

The PESTLE analysis and Porter's 5 forces analysis draw an overall picture of the Vietnamese real estate market. Of these, PESTLE analysis provides the general perspective of the real estate market and Porter's 5 forces analyze the competitive factors inside this field. In addition, the information about the current situation of the Vietnamese residential market in the face-to-face interview also provides the corresponding results with PESTLE and competitive analysis. Based on this, the author answered two questions that appeared in the introduction as *"what are the main characteristics of the Vietnamese real estate market?"* and *"who are the main players in this game?"*. The Vietnamese real estate market is influenced by political, economic, social, technological, legal and environmental problems as well as competitive factors from suppliers, consumers, substitutes, new entrants and rivalry inside. A causal relationship between the development of the general economy as well as the real estate field in Vietnam and the increase of consumers' demand was found.

The housing bubble chapter provided the basic knowledge about this problem. Based on this, the questions *"what are the causes of housing bubble?"* and *"what is the role of consumer in creating housing bubble?"* could be answered. The causes which are focused in this thesis belong to demand problems

and the consumers' psychology plays an important role in creating a housing bubble. This theory gathered with the study in consumer buying decision (from question 6 to 15) indicates a correlation with the Vietnamese consumer buying behavior and the housing bubble in Vietnam. Vietnamese consumers often believe in the information from relatives or friends besides other sources. After the self-evaluation, they will decide to buy a house or not. The main aims of the consumers are not only for living but also for investing that leads to speculation in the real estate sector. The situational question was a psychological test for the consumer. It can be realized that Vietnamese consumers buying motivations are influenced by the surrounding impacts. In the interview, the interviewee also provides his own ideas about the reasons pushing the housing prices up and he mentioned that the reasons of consumer behavior play an important role.

Finally, the analysis of Vietnamese consumer buying behavior in the residential market helps to approach more close in the rest of the thesis "*what are the typical characteristics of Vietnamese buyers?*" and "*why are these characteristics the causes of a housing bubble?*". The research is based on Kotler's theory with questions of age, gender, living location, income, members in family, buying determination, loan, information sources, etc. The results in this questionnaire and interview show the corresponding answer with Kotler's theory as well as the previous theory about a housing bubble. It helps to confirm that the Vietnamese buying behavior is one of the main causes of a housing bubble in Vietnam.

As the conclusion of this thesis, there are many reasons for a housing bubble. They are the problems in urbanization, land law, financial policies, the development of stock market, foreign investment, speculation, etc. The housing bubble is difficult to predict because people cannot distinguish it from the normal fluctuation in prices. Therefore, the role of government is very important in stabilizing the real estate market. If the housing bubble bursts, the consequences for the whole economy will be very serious.

6.2. Suggestions for further research

The limitations of this research should be noted in further researches. The scope of this research is the Vietnamese market. It is a large topic to develop. Therefore, it is better in the future that the researchers limit the scope of the topic, such as the Hanoi housing market or the Ho Chi Minh City housing market.

In addition, the sample of survey was just 103 people. It is hoped that in the future number of respondents can reach 300 to 500 people in order to yield a broader analysis. An interview should be conducted with more than one professional in order to gain on many points of view.

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APPENDIX

Khảo sát: Xu hướng mua nhà của người tiêu dùng Việt Nam - A survey of Vietnamese consumer behavior in residential market

Khảo sát bao gồm 16 câu hỏi và không mất đến 3 phút để trả lời. Xin chân thành cảm ơn! - The survey includes 16 questions and it takes not so much time to answer. Thank you for cooperation!

* Required

1. Giới tính (Gender) *

[▼]

2. Độ tuổi (Age) *

[▼]

3. Khu vực sinh sống (Where is your living area?) *

○ Hà Nội

○ Thành phố Hồ Chí Minh

○ Đà Nẵng

○ Nha Trang

○ Other: [   ]

4. Thu nhập trung bình hàng tháng (What is your average income per month?) *

○ <5 triệu VND (<5 millions VND)

○ 5-10 triệu VND (5-10 millions VND)

○ 10-20 triệu VND (10-20 millions VND)

○ >20 triệu VND (>20 millions VND)

5. Thời gian đi làm của anh/chị là bao lâu? (How many years have you been working?) *

○ <5 năm (5 years)

○ 5-10 năm (5-10 years)

○ 10-15 năm (10-15 years)

○ >15 năm (>15 years)

6. Số người trong gia đình phụ thuộc trực tiếp vào anh/chị hiện nay? (How many people are there who depend on your income in your family?) *

○ tôi sống một mình (I live alone)

○ 1-2 thành viên (1-2 people)

○ 3-4 thành viên (3-4 people)

○ 5-6 thành viên (5-6 people)

○ > 6 thành viên (>6 people)

7. Anh/chị có ý định mua nhà không ? (Are you planning to buy a house/an apartment?) *

○ Có (Yes)

○ Không (No)

8. Anh/chị có quyết định vay vốn để mua nhà/đất không? (Do you plan to loan from bank to buy a house?) *

○ Có (Yes)

○ Không (No)

9. Nếu có ý định mua nhà/đất, anh/chị sẽ chọn mua nhà/đất ở khu vực nào? (If you decide to buy a house/piece of land, which area do you choose?) *

Có thể chọn nhiều hơn một đáp án

☐ Thành phố, khu vực trung tâm (The areas are in city center)

☐ Thành phố, khu vực mở rộng (The areas are around city center)

☐ Đất vùng ven (The suburban area)

☐ Đất nông thôn (The rural area)

☐ Other: _____

10. Yếu tố quyết định việc lựa chọn khu vực mua nhà/đất của anh/chị là (What factor(s) do/does influence on your buying decision?) *

Có thể chọn nhiều hơn một đáp án (more than one choice is accepted)

☐ Gần trung tâm (Near the center)

☐ Thuận lợi buôn bán (Good position for trade)

☐ Gần các dịch vụ công cộng (Near the public services)

☐ Gần cơ quan, trường học (Near working places, schools)

☐ Other: _____

11. Khung giá nào cho mỗi mét vuông nhà ở nằm trong khả năng cho phép của anh/chị? (How much per square meter of a house is affordable to you?) *

○ < 20 triệu/m2 (<20 millions VND/m2)

○ 20-30 triệu/m2 (20-30 millions VND/m2)

○ 30-40 triệu/m2 (30-40 millions VND/m2)

○ 40-50 triệu/m2 (40-50 millions VND/m2)

○ > 50 triệu/m2 (>50 millions VND/m2)

12. Tổng giá trị cho tài sản nhà/đất mà anh/chị sẵn sàng trả là (How much for total price of a residential property are you willing to pay?) *

○ < 1 tỷ đồng (< 1 billions VND)

○ 1-4 tỷ đồng (1-4 billions VND)

○ 4-7 tỷ đồng (4-7 billions VND)

○ 7-10 tỷ đồng (7-10 billions VND)

○ > 10 tỷ đồng (>10 billions VND)

13. Nếu anh/chị có ý định sở hữu một hay nhiều tài sản nhà ở, mục đích sử dụng được xác định là (If you want to own one or more residential property, what is your purpose?) *

Có thể chọn nhiều hơn một đáp án (more than one choice is acceptable)

☐ Để ở (Living purpose)

☐ Để tặng lại (Giving purpose)

☐ Để đầu tư (Investing purpose)

☐ Other: _____

14. Anh/chị biết đến thông tin mua nhà/đất qua nguồn nào? (Which sources do you know that residential property information from?) *

Có thể chọn nhiều hơn một đáp án (more than one choice is acceptable)

☐ Thông tin chính phủ (Government information)

☐ Môi giới nhà đất (housing agents)

☐ Người thân, bạn bè (relatives, friends)

☐ Quảng cáo trên báo, internet (ads from newspaper, internet)

☐ Other: _____

15. Khi quyết định mua một căn nhà/đất, anh/chị sẽ lựa chọn (If you decide to buy a residential property, you will choose) *

○ Tự tìm thông tin và mua trực tiếp từ chủ đất (Find the information by yourself and contact to landlords directly)

○ Thông qua môi giới (Use housing agencies)

Vui lòng giải thích lựa chọn của anh chị cho câu hỏi trên (Please explain)

[ ]

16. Tình huống: Nhà nước quyết định sát nhập Hà Tây vào Hà Nội, anh/chị có nghe được thông tin từ bạn bè, đồng nghiệp rằng giá đất tại những khu vực sắp được sát nhập sẽ tăng gấp 3 lần so với giá cũ. Anh/chị có chấp nhận đầu tư? (Situational question: You heard from your friend that government is merging Ha Tay province into Capital Hanoi. The price of each piece of land in Ha Tay will increase 300% compared to the previous time price. Do you decide to invest?) *

○ Có (Yes)

○ Không (No)

Vui lòng giải thích lựa chọn của anh/chị cho câu hỏi trên (Please explain)

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