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### Improving and Developing Personal Mortgages at Commercial Banks in Vietnam

Phạm Thị Hồng Vân<sup>1</sup>, Đỗ Thị Thu Hà<sup>2</sup> and Nguyễn Bích Ngọc<sup>3</sup>

<sup>1-3</sup>Banking Academy of Vietnam, Vietnam. Email: <sup>1</sup>[vanpth@bvn.edu.vn](mailto:vanpth@bvn.edu.vn), <sup>2</sup>[badtt@bvn.edu.vn](mailto:badtt@bvn.edu.vn), <sup>3</sup>[ngocnb@bvn.edu.vn](mailto:ngocnb@bvn.edu.vn)

#### ABSTRACT

To be evaluated as potential market; however, mortgage market in Vietnam has not been exploited and need to be improved to comply with massive demand for housing loans in the future. Therefore, this paper conducts research on mortgage market growth in Vietnam and especially limitations of current personal's mortgage products to suggest solutions for improving mortgages in the future. Based on results from survey of two groups (138 credit officers and 185 customers' answers were collected, authors highlight issues banks should deal with to firstly improve and after that develop personal mortgage loans. Particularly, to improve personal mortgage products, banks should concentrate on simplifying the loan process; diversifying mortgage products; shortening document approval time as well as expanding collateral categories to gain great customer satisfaction. Besides, to develop personal mortgages, well understanding potential customer groups (which are young customers at the age of 18 -35; customers having stable income; government/private officers or people having high income) and major mortgage loans (project housing; house segment for low income customer and loan for house construction and repair) is what banks need to focus on. Finally, this paper also looks at three groups of solution, which are solutions for current products completion, solutions for new mortgage products development and support solutions to fully exploit mortgage market in Vietnam.

**Keywords:** Mortgage market, mortgage products, real estate market in Vietnam.

#### 1. MORTGAGE

The real estate market is an important part of the economy, directly related to a large amount of assets, including scale, nature as well as value in the national economy. According to Michael J. Lea (2006), the proportion of real estate of all social wealth is not equal in different countries; however, it usually accounts

for about 40% of the total amount of material wealth. Activities Related to Real Estate account for 30% of total economic activity. According to a report (2008) of the Ministry of Construction, Vietnam, in developed countries, bank loan via mortgages by real estate making up over 80% of the total amount of loan capital. Michael J. Lea (2006) stated that in developed countries if the investment in the real estate sector increases to USD 1, it will be possible to promote the related sectors increasing from USD 1.5 to USD 2. It is because real estate market is directly related to the construction materials market, the labor market and other markets. Good management of the real estate market will have significant effects on promoting economic growth, making important structural changes in sectors, territories and on a national scale. Developing real estate business and investment plays an important role in transforming assets into an abundant supply of financial capital to meet socio-economic development requirements, especially investment in infrastructure development of the economy.

One of the supplies of capital, directly influencing the real estate market development is bank credit. Through credit granting, banks promote production, business and capital circulation in the real estate market, which helps investors to have cash capital to reinvest and promote economic growth. According to Le Ngoc Dien (2012), up to 89% of business and investment capital in the real estate market originates from credit of commercial banks. Mortgage is an indispensable part that helps investors to be more proactive in terms of capital and actively invest in real estate projects which contributes to accelerated urbanization in industrialization and modernization process of the country. Mortgages' activities help enterprises increase scale and competitive advantage. For individual customers: mortgage loans help improve people's lives. According to Edward Wreed and Edward K. Gill (2005), at commercial banks around the world, mortgages account for approximately a third of loan item and one fifth of commercial banks' assets, which remarkably contributes to revenue in banks' business activities.

The above analysis shows that the real estate market development has great influence on the development of markets in particular and the economy in general. Bank credit plays an important role in the real estate market development, but the credit status of real estate indicates that Vietnam has credit outstanding balance proportion/GDP and outstanding balance growth proportion of loans for house purchase is nearly the lowest in comparison with other Southeast Asian countries and is only higher than the Philippines while Vietnam has youth population structure and high demand for housing. Therefore, three research questions are raised:

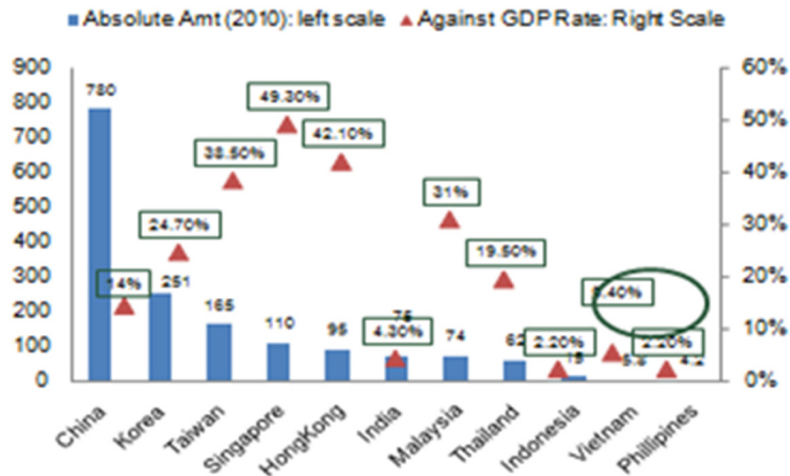
- (i) What is the role of mortgages in development strategy for credit in particular and for banks in Vietnam in general?
- (ii) Mortgage loans that are being deployed at commercial banks in Vietnam have been suitable and have met the demand of Vietnamese real estate market?
- (iii) Which mortgages' products range should commercial banks in Vietnam build and develop to meet and develop the market?

## **2. THE CREDIT ACTIVITY STATUS OF REAL ESTATE AT COMMERCIAL BANKS IN VIETNAM**

The US's subprime mortgage market crisis has caused world financial market to wobble and has had a great impact on stability and development of the banking sector. The crisis showed a close relationship between

the development of the real estate market and stability and growth of the banking sector through credit activities. However, it seems that compared to its potential Vietnam's mortgage has not developed, main characteristics of mortgage activities at commercial banks in Vietnam can be summarized as follows:

Firstly, Vietnam's outstanding balance proportion of real estate loan/GDP is in the lowest group in comparison with Asian countries, but the growth proportion is the highest among comparable countries.



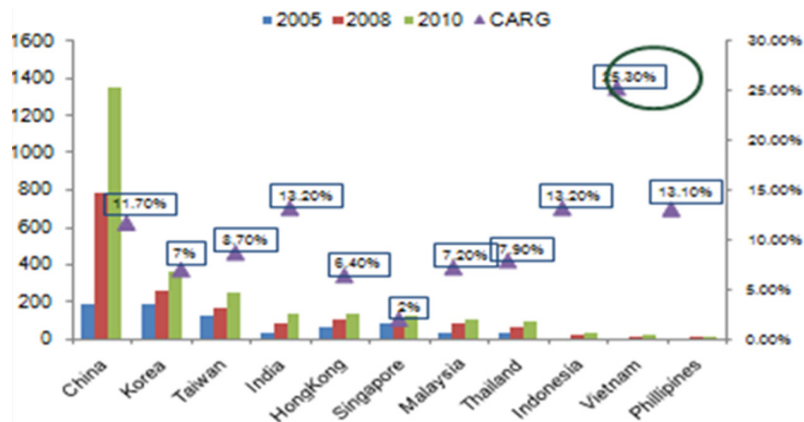
Graph 1: Housing Loan Balance and Penetration Rate (Against GDP rate) in Asia  
Source: Mizuho (2013)

Compared to countries in Asia, Vietnam's outstanding balance proportion of mortgage loans/GDP is in the lowest group. Specifically, China, South Korea and Taiwan are the leading countries in absolute credit outstanding balance in the field of real estate, Singapore accounts for the highest proportion with 49.3 % in terms of outstanding balance proportion of mortgage loans/GDP, followed by Hong Kong and Taiwan with 42.1% and 38.5%, respectively. Mizuho (2013) indicated that these countries have youth population structure, high per capita income and a relatively developed financial background compared to Southeast Asian countries. Favorable factors in terms of both the supply and demand of mortgage have made the countries' outstanding balance proportion of mortgage loans/GDP dominate over other countries in the region.

Vietnam is also a country with a youth population structure and people's huge demand for housing. However, Vietnam is one of the countries with the lowest outstanding balance proportion of real estate in the region, only higher than the Philippines, Vietnam's outstanding balance proportion of real estate/GDP is relatively low, only 2.2%. It shows that mortgage market in Vietnam has still been potential and has not been exploited. Once again, it is affirmed by the growth of mortgage in Vietnam, which reaches the highest level among comparable countries.

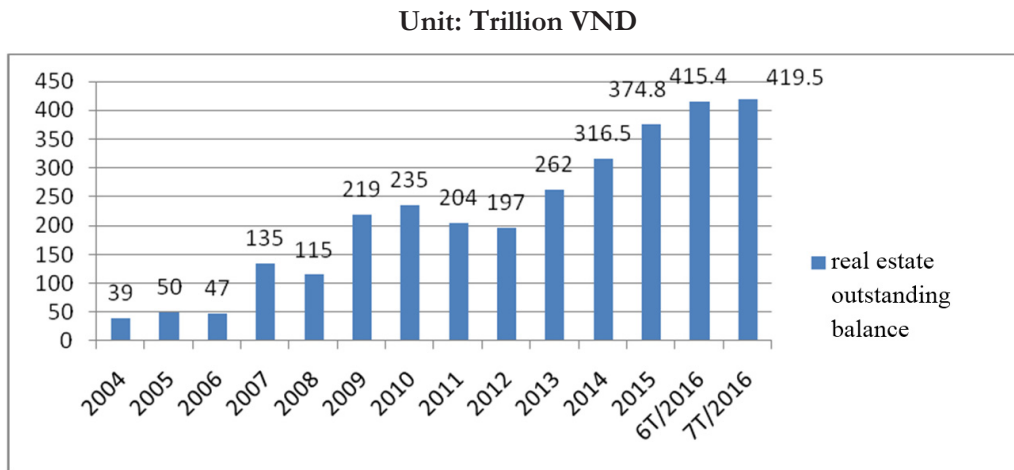
During the 2008 - 2010 period, Vietnam was the leading country in the growth in loans for house purchase with an impressive growth rate over 25% while the rate of regional countries was only from about 2% to over 13%. This shows that after the slow growth period (2005-2008), the mortgage market in Vietnam has recovered in recent 5 years; the government loosens regulations on real estate loan and there are high demand for real estate financing sources, which has made the mortgage growth of commercial banks in Vietnam reach the highest level in the period in comparison with other regional countries. Another factor

pointed out in Stefan Gerlac and Wensheng Peng’s study (2015) is that belief in the economic growth in the future in Vietnamese market is a factor to make changes in investment decisions on real estate, thus promoting the growth in real estate outstanding balance during the period.



Graph 2: Housing Loan Balance and Average Growth Rate in Asia  
Source: Mizuho (2013)

Secondly, flow of credit into the real estate sector has sharply increased and the rate of credit growth in this sector is higher than that of the entire system in recent years.



Graph 3: The growth in real estate outstanding balance in Vietnam from 2004 to July 2016  
Source: National Financial Supervisory Commission of the Socialist Republic of Vietnam

According to National Financial Supervisory Commission’s data on the growth in real estate outstanding balance from 2004 to July 2016, it can be seen that before 2010, bank credit sharply increased according to the sublimation of the stock and real estate markets. According to statistics of the credit bureau of the State Bank of Vietnam, in 2009, credit growth of the entire system reached 37.7%, credits for non-manufacturing sector (including real estate and securities) increased to nearly 42% and accounted for 19% of outstanding balance proportion of the system. In 2010, credit grew 27.6%, outstanding balance of real estate also increased to 23.5%. After real estate bubbles, banks tightened loans to non-manufacturing sector including real estate, so in 2011 lending ratio of the sector was tightened at level 16% of the total outstanding balance, and mortgage loans are applied a 250% risk, which makes outstanding balance sharply decrease.

However, since early 2012, State Bank of Vietnam has taken measures in order to stabilize currency market; to manage flexibly, implement comprehensive currency policies, promote capital flow to serve socio-economic growth. Comparing to the bottom level at the end of 2012, flow of credit into the real estate increased to about 112.9% in July 2016, from 197 thousand billion dong to 419.5 thousand billion dong (the credit bureau of the State Bank of Vietnam). According to the State Bank of Vietnam, as of July 31, 2016, real estate outstanding balance reached over 419,473 billion dong, increased 6.79% in comparison with the period December 31, 2015 and decreased 1.31% in comparison with the period June 30, 2016.

*Thirdly, flow of credit into the side of creating real estate supply is normally higher than flow of credit into the side of creating real estate demand.*

Flow of credit into Vietnam real estate can divide into 2 groups: a group that borrows to create the supply of the real estate market such as real estate companies, investors; another group that borrows to create real estate demand, represented by households. According to statistics report of National financial supervision commission (NFSC) and the State Bank of Vietnam (SBV), in total mortgage capital worth VND235,276 billion dong (as of December 2010), 60.63% (142,650 billion dong) of credit capital flowed into the group of creating real estate supply and the remaining 39.37% (92.626 trillion dong) of credit capital flowed into the group of creating real estate demand. The same proportion was reported in January 2012, 68% of credit capital flowed into the group of creating supply and 32% of credit capital flowed into the group of creating demand. As of December 31, 2013, 179,172 billion dong (68.36%) of credit capital flowed into the group of creating supply and 82,935 billion dong (31.64%) flowed into the group of creating demand.

Credit capital flow injected into the real estate market that tends to create supply more than demand for long periods of time is one of the important reasons to cause imbalance between supply and demand (Le Ha Diem Chi, 2014). Therefore, the Government and State bank of Vietnam has cooperated with the Ministry of Construction to take measures such as providing loans to stimulate real estate demand or convert relatively high-end products into affordable products with low rates (6%/year).

### 3. PERSONAL MORTGAGE LOANS AT COMMERCIAL BANKS IN VIETNAM

In recent years, foreign and domestic commercial banks have made great efforts to increase the range of products and services offered on the market to boost mortgage outstanding balance. The real estate market is warming up, banks have also invested significant resources to research potential markets and potential customers as well as develop new products in order to improve real estate loan efficiency. For individual customers, mortgage products are quite similar; however, there are also some outstanding differences.

**Table 1**  
**Characteristics of housing loan in banks in Vietnam**

	<i>Foreign commercial banks</i>	<i>State – Owned Commercial Banks</i>	<i>Joint – Stock Commercial Banks</i>
Loan term	20 - 25 years	15 - 20 years	15 - 20 years
Loan to value ratio	60% - 70%	70% - 100%	70% - 100%
Collateral	House ownership certification of borrowers (HN/HCM)	House ownership certification of borrowers or third party	House ownership certification of borrowers or third party

	<i>Foreign commercial banks</i>	<i>State – Owned Commercial Banks</i>	<i>Joint – Stock Commercial Banks</i>
Collateral Valuation	Associated company	Associated company	Associated company
Overdue interest	150%	150%	150%
Early repayment charge	1% - 2%	1 - 2%	0,25 - 1%
Decision making	Centralized model	Decentralized model	Centralized, decentralized models
Loan approval time	7-10 days	7-10 days	7-15 days
Loan interest rate	10.19% - 13.99%	11,5% - 14%	12% - 14.5%
Method of debt payment	Monthly/Quarterly	Monthly/Quarterly	Monthly/Quarterly

Source: Generated by group of authors.

At the moment it can be seen that 100% of foreign commercial banks in Vietnam approve individual customers' loans to house purchase according to a centralized model<sup>1</sup>, all foreign commercial banks use valuation firms outside the banks, only loan the government's real estate and approval time is relatively short. Amongst three foreign banks in Vietnam, it can be seen that HSBC's house purchase loan product is a more competitive product with the maximum loan period of up to 25 years. The loan to value (LTV) ratio of a real estate is high (70%) and the current interest rate is about 2% lower than ANZ and Standard Chartered.

Unlike foreign joint stock commercial banks, the group of state-owned joint stock commercial banks approve loans to house purchase in accordance with their authority<sup>2</sup>. Another difference is that state-owned joint stock commercial banks not only accept the government's collateral but also loan with regard to the third party's collateral. Loan approval time is also quite short from 7 to 10 days. Loan interest rate fluctuates from 11.5% to 14%.

Compared with the group of other banks, house purchase loan period of most private joint stock commercial banks is longer, fluctuating from 15 to 20 years. Private joint stock commercial banks approve credit according to centralized and decentralized models. In terms of collateral valuation, most private commercial banks have subsidiary companies or specialized valuation divisions. On average, loan approval time is from 7 to 15 days and interest rate is from 12% to 14.5%, which is less competitive than that of the group of other commercial banks.

#### 4. RESEARCH METHOD AND RESULTS

To answer the questions, the research carried out a survey of two groups through questionnaires. Specifically, group 1 is credit officers of a bank and group 2 was the bank's customers. After completing the questionnaire, the research conducted a pilot survey with regard to three credit officers and three customers and listened to the participants' opinions in the pilot survey. Some questions' terminology were corrected for clarity, some questions were added to get maximum information in the survey. A comprehensive survey began to be conducted on 01/12/2016 and ended on 12/01/2017. 200 questionnaires were sent to credit officers and 200 questionnaires were sent to customers, 138 credit officers' answers were collected, reaching 69% and 185 customers' answers were collected, reaching 92.5%.

<sup>1</sup> Centralized model is a model in which lending decisions are taken up in headquarters of the organization by a team consisted of people having considerable professional experience of evaluation and analysis.

<sup>2</sup> Bank have used decentralized model in which lending decisions are made at the local branch level.

### 4.1. Assessing the Development Status of the Mortgage Market

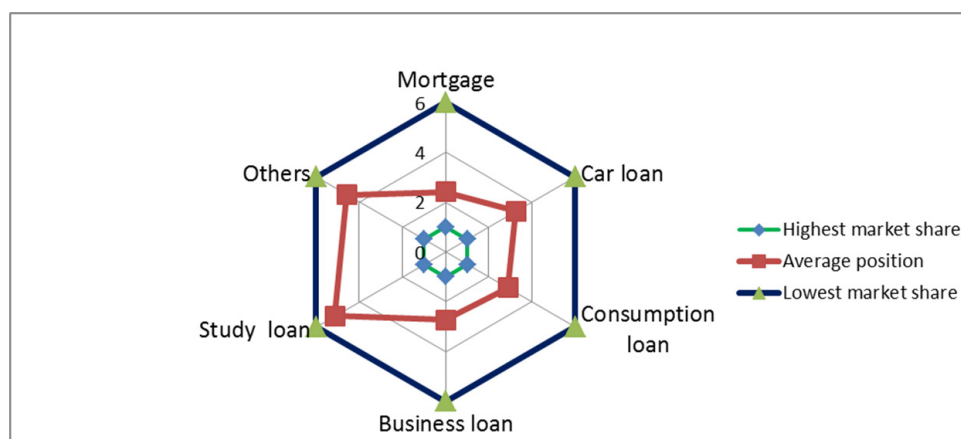
First of all, in order to better understand the development status of the mortgage market as well as market trends, the research analyzes market share of each group of bank credit products as well as development priorities in banks' business strategy. In addition, the research analyzes customer demand for mortgage products to get a more accurate view of the market development.

**Table 2**  
**Market share and development priorities of credit products for individual customers in banks' business strategy**  
 Uniti: %

Credit products	Order of market share						Order of development priorities					
	1	2	3	4	5	6	1	2	3	4	5	6
Mortgage	39,2	23	14,9	8,1	10,8	4	39,2	21,6	12,2	10,8	4	12,2
Car loan	6,7	20,3	32,4	27	8,1	5,5	9,5	24,3	29,7	23	8,1	5,4
Consumption loan	17,6	24,3	24,3	23	6,8	4	16,2	21,6	28,3	28,3	4	1,6
Business loan	24,3	25,7	14,9	27	5,1	3	23	21,6	23	21,6	9,5	1,3
Study loan	1,3	4	2,7	8,1	39,2	44,7	1,3	6,7	1,3	9,5	48,6	32,6
Others	10,9	2,7	10,8	6,8	30	38,8	10,8	4,2	5,5	6,8	25,8	46,9

Source: Results conducted by group of authors

For individual customers, there are five main products offered by most banks, which are mortgage, car loan, consumption loans, business loans, study abroad loans. The research results shows that at position number 1, 39.2% of 138 credit officers' answers confirming that mortgage accounts for the highest market share in the group of personal credit products, followed by business loans and consumer loans. At position number 2, the market share was led by business loans and consumption loans, followed by mortgage. Average positions of market share of personal credit products is calculated and shown in the following graph:



**Graph 4: Average market share of credit products for individual customers**

Source: Results conducted by group of authors

Research results reveal that mortgages make up the highest market share in personal credit products with an average position of 2.4, followed by business loans with an average position of 2.7, and consumption loans, car loans, study abroad loans with average positions of 2.9, 3.3 and 5.1 respectively. Based on the

above data we can find out that mortgage market share account for high position at most banks; it can be said that this is one of the key bank credit products. Research results also point out that mortgage is prioritized to develop at banks, 39.2% of credit officers affirms that it is No.1 priority product, accounting for the highest rate among 6 products provided by banks. In fact, the growth in mortgage outstanding balance has always accounted for a high proportion during the last years. However, compared to other Asian countries, mortgage at commercial banks in Vietnam still make up a modest proportion while the real estate market at Vietnam is always a potential market with a youth population structure and huge demand for housing, especially in big cities like Hanoi.

The research also conducted a customer survey to get a more concrete view of demand for mortgage. The survey results demonstrate that amongst 185 customers' answers, only 16.6% of customers is living in solid storey houses, 24.3% of customers is living with their relatives (parents, siblings, etc.), 31% of customers is renting houses and 23.1% of customers in living in apartments. The data indicates that demand for housing is so high. In fact, when asked about demand for changing and renewing their place of residence, only 18.9% of customers said that they have no demand, while up to 57.4% of customers wants to buy an apartment or house, 8.9% of customers wants to buy land and 4.7% of customers wants to invest in real estate. It can be said that nearly 80% of customers has demand for real estate, which shows great potential of the market.

In the group of personal mortgage, most banks offer five types of products which are project house purchase loan, social housing loans, civil servants home loan<sup>3</sup>, loans to house construction and repair, and loans to buy house and land. Among these products, 58.1% of credit officers evaluates that loans to project house purchase accounts for the highest market share, followed by loans to house construction and repair and loan to buy house and land. The second and the third position of market share are loans to buy house and land and loans to house construction and repair that are evaluated to account for the highest proportion, followed by loans to project house purchase.

**Table 3**  
**Market share and development priorities of mortgage for individual customers in banks' business strategy**  
**Unit: %**

<i>Housing loans</i>	<i>Order of market share</i>						<i>Order of development priorities</i>					
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
Project house purchase loans	58,1	12,2	14,9	5,4	8,1	1,3	58,1	12,1	9,5	10,8	9,5	0
Social housing loan	2,7	1,4	4,1	10,8	12,2	68,8	4,1	10,8	17,6	21,6	37,8	8,1
Civil servants home loan	1,4	5,4	23	31,2	20,3	18,7	1,4	8,1	25,7	39,2	24,3	1,3
Home construction loan	17,6	24,3	25,7	18,9	9,5	4	12,1	31,4	31,4	15,2	8,1	1,8
Loans to buy house and land	17,6	31,1	21,6	2,7	20,3	6,5	24,3	37,6	15,8	5,4	12,2	4,7
Others	2,6	25,6	10,7	31	29,6	0,7	0	0	0	7,8	8,1	84,1

Source: Results conducted by group of authors.

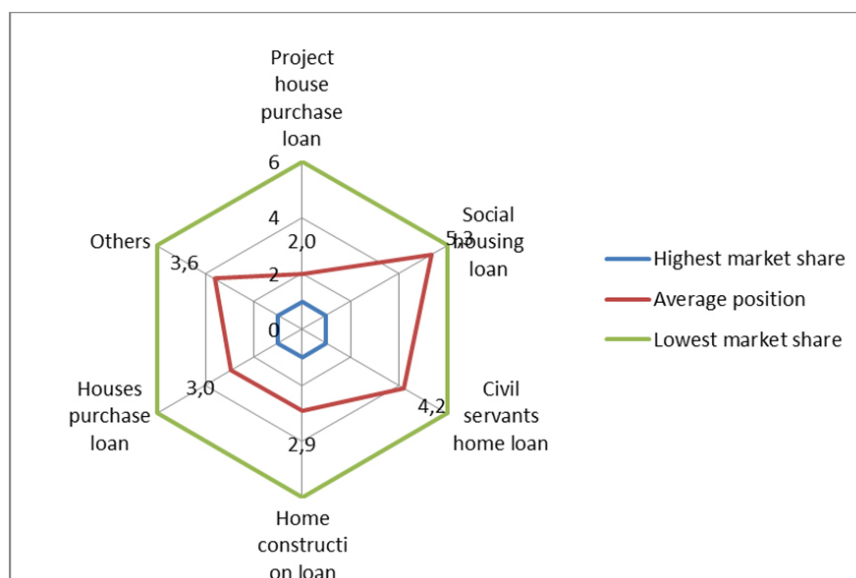
<sup>3</sup> Project house purchase loan is a loan which is designed for customers buy houses in projects.

Social housing loan is a loan which is specially designed for people such as low-income people, urban poor or near poor households...to borrow money from bank to buy social house.

Civil servants home loan is a loan which is specially designed for civil servants to buy house with lower borrowing requirements.



The table above shows that loans to project house purchase making up the highest market share at banks and it is also prioritized to develop by banks compared with other types of mortgage. The specific market share position is shown in the following graph.



**Graph 5: Market share of personal’s mortgage**  
*Source: Results conducted by group of authors*

The results reveal that loans to project house purchase currently make up the highest market share of mortgage with an average position of 2.0, followed by loans to house construction and repair and loans to buy house and land, loans for civil servants to buy houses and social housing loans with average positions of 2.9, 3.0, 4.2 and 5.3 respectively. Once again, this trend is confirmed when carrying out a customer survey, 35% of customers is interested in loans to project house purchase, making up the highest proportion. Next, 27.3% of customers is interested in loans to buy house and land, 15.6% of customers want loans to purchase social houses and 13% of customers want loans to construct and repair house, and 7.8% of customers want civil servants home loan.

In reality, there is huge demand for housing in Hanoi, but product segmentation of real estate companies has not been suitable, they mainly focus on products in the medium-high level segment because these segments bring about higher profit while in the lower segment, there is customers’ high demand but the product is limited. On the other hand, in these segments, finance is still a big question regarding customers because of their limited income; therefore customers’ demand for loans to buy house in this group is still high. When assessing the level of development of private mortgage, 90.5% of credit officers said that personal mortgage will develop or develop sharply, only 8.1% of credit officers said that this product develops slowly and 1.4% of credit officers supposed that this product may decline. 77.3% of total credit officers stated that personal mortgage product is prioritized to develop at their banks.

#### 4.2. Evaluation of Mortgage Product Suitability

To evaluate mortgage’s suitability, the research bases on evaluation of customers and credit officers on two levels: general evaluation of customer satisfaction and then analysis of the suitability of product characteristics.

### *Evaluation of Product Satisfaction According to Customer Demand*

The research considers evaluation of customers and credit officers in terms of customer satisfaction regarding personal mortgage products through criteria: product suitability with customer demand, variety of products, the usefulness of products.

- Evaluation of products' suitability with customer demand, 61% of customers said that bank products meet customer demand, 33.8% of customers supposed that the products only meet a small part of their demand and 5.2% of customers reckoned that the products do not completely meet their demand.

- Evaluation of products' diversity: 72.7% of customers reckoned that banking mortgage loans are multiform and extremely multiform while the remaining 27.3% thought that products are poor. As mentioned above, banking mortgage has focused on 5 products: loan for buying houses under projects, loan for buying social houses, loan for government officials to buy houses, loan for house construction/repair and loan for buying land. Among these five products, three products gaining the most concern from customers are loan for buying projected houses, loan for house construction/repair and loan for buying land. Meanwhile, loan for buying social houses and loan for government officials to buy houses have not attracted customers.

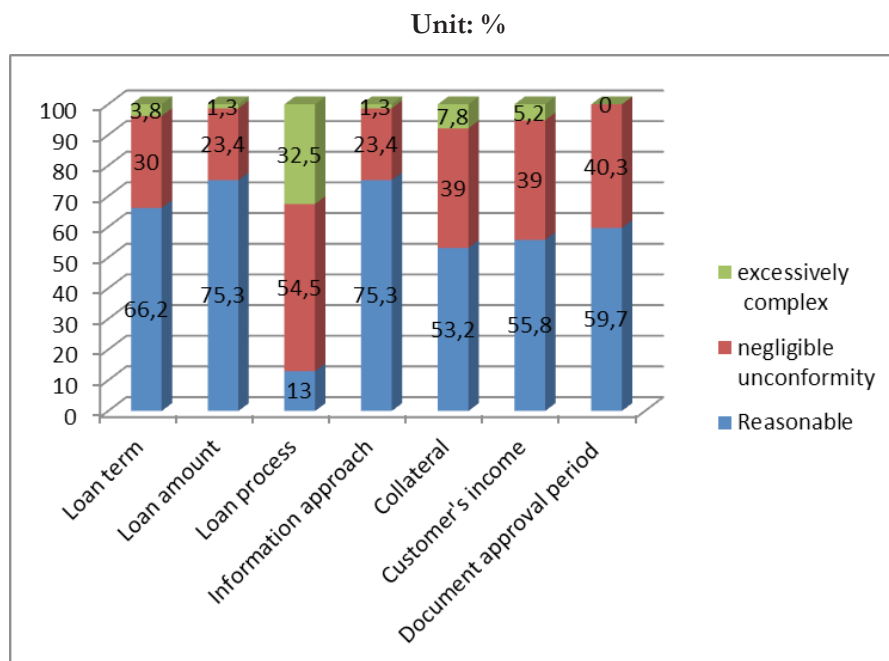
- Evaluation of products' helpfulness: 94.8% of customers in the survey recognized the necessity and helpfulness of this product. They thought that this product was necessary for the society. In a civilized and developing society, with high demand of housing in both quantity and quality, this group of products has obtained consideration of customer and promoted for development. Various customers also emphasized that it is very difficult for young families to buy house. However, thanks to mortgage, they may "dream" of their own house, creating motive to work hard and save money. In developed countries, fluctuation of security market is now a sensitive matter affecting to banking mortgage products which travel with almost families.

Above analysis indicated that major customers participating in the survey has recognized the necessity and helpfulness of mortgage. Products were assessed with high conformity and diversity; however, more than 30% of customers still wanted the products to be improved to meet their demands better. Thus, how customers want to improve these products? The next part will analyze evaluations of customers with regard to characteristics of mortgage

### *Evaluating the Conformity of Products' Characteristics*

To evaluate ability to meet demands of current mortgage, a research was carried out based on evaluations of customers with regard to several outstanding characteristics of credit products. Detailed result is shown in the table below:

According to the findings, more than 50% of customers reckoned that loan terms is appropriate and loan scale is reasonable, meeting demands of customers; requirement of collateral security and minimum income needed of customers is at rational level and not too high; information approach as well as document approval period are reasonable, not too difficult and long. If we only focus on the first paragraph (in navy blue), we can see optimistic signs and positive numbers in characteristic evaluation of banking mortgage products. These evidences indicate that bankers and customers are becoming closer. However, when



**Graph 6: Customer evaluation about the conformity of mortgage' characteristics**

*Source: Results conducted by group of authors*

looking at the second paragraph (in red) which shows the percentage of negligible unconformity between products' characteristics and customers' demands, it is easily seen that this percentage is not low, especially capital loan document. Particularly, there was a low percentage of customers declaring the simplicity of capital loan document. Only 13% of customers evaluated that capital loan document of bankers was simple. Meanwhile, 54.5% of customers said that capital loan document of bankers was still complex and 32.5% affirmed that it was excessively complex. Some customers showed a large number of document submitted to bankers, especially documents related to collateral security and income statement. Taking consideration into document approval period, 40.3% of customers reckoned that this period was longer than their expectation. In connection to collateral security and income statement, 39% of customers thought that these requirements are excessive with their capacity; therefore, it is not easy for customers to approach loans despite of their high demands. In fact, collateral security and income statement are two important and major criteria affecting to credit decision. However, ability of customers to meet these two requirements has been modest. With regard to loan term, 30% of customers desired loans to have longer term. Besides, 23.4% reckoned that loan scale and information approach should be improved. The third paragraph (in green) shows the percentage of significant unconformity between products' characteristics and customers' demands. Generally, this percentage is low; 32.5% of customer, however, realized that capital loan document was extremely complex. Although this matter was mentioned in various reports and seminars between bankers and customers, the innovation was so slow that it becomes a barrier for banking credit approach in general and mortgage approach of customers in particular.

For more exact and detailed evaluation of ability of current mortgage products to meet demands of customers, the study carried out a survey including open-questions to collect evaluation of customers related to pros and cons, as well as desire to improve products. Outstanding advantages of products emphasized by customers include:

- Quick disbursement
- Flexible interest rate and debt payment methods
- Enthusiastic officers providing efficient information
- High loan
- Give customers chance to buy house

Beside, customers also pointed out disadvantages when using products:

- Complex document
- Long approval document period
- High interest rate

Bankers were requested to improve three issues above so that customers could easily approach to products. Additionally, customers also emphasized on expanding list of collateral security, especially in case of purchasing house under projects. If a 3 party agreement is not made, customers cannot borrow money due to lack of collateral security. Besides issues provided by customers, credit officers also stated some matters related to unconformity of mortgage products that Bankers need to improve. Namely:

- Currently, bankers are limited in providing mortgage to individual customers. They have not provided products according to customer segments but projects. However, bankers shall create products appropriate with customer segments and more types of customer. In customer group having low and medium income, approach to mortgage products is extremely low. At present, due to the association between some bankers and projects, mortgage products of such banks are served only for such projects while customers' demands are multifarious.
- Fixing price for collateral securities tightened safety for bankers, but create barrier for customer to approach with mortgage.
- In term of capital loan for house repair, some bankers asked customers to provide evidence of cost and capital use purpose via financial invoice submission. However, this was such a difficulty for customers because it wastes fees, procedures and time.
- Beside limitations directly related to products, credit officers also stressed on communication so that customers could understand utilities, as well as conditions for product approach and enhance the identification of bankers' product brands name.

Above analysis shows evaluations and recognition of customers as well as bankers with regard to current mortgage. Beside advantages admitted by customers, there have been disadvantages needed to improve to meet customers' demand better. Therefore, other than completion, it is very important to establish and develop new products appropriate with characteristic of each customer group. The next part will evaluate current situation of mortgage products development in bankers.

### **4.3. Development of Personal Mortgages**

Product development is one of the most important affairs of bankers, aiming to maintain and extend business operation, especially in current keen competition not only among bankers but also between bankers and other credit establishment because they provide similar products as bankers do. 94.3% of questioned

credit officers reckoned that bankers should develop new products to make conformity with customers' demands. In fact, 91.5 credit officers stated that their bank had researched and launched new products within the last 5 years; however, only 74% credit officers stated that their bank had specialized department for new products research and development while the remaining said that their bank's products had been created mostly based on competition, market trends and reproduction from other bankers. Currently, reproduction of financial products has become more and more popular and affected to development of general products in the market. Thus, bankers should create connection between product development and their own advantage to promote competitiveness and avoid reproduction. Three party agreements are also established based on these reasons.

To develop product, the study evaluated potential customers of bankers based on customers' demand inspection and experiences of credit officers. First of all, let's consider inspection result from customers to understand thoroughly characteristics of potential customers.

**Table 4**  
**Characteristics of potential customers**  
**Unit: %**

		<i>Customers' demand</i>	<i>Buying apartment/ house</i>	<i>Buying land or investing in real estate</i>	<i>Constructing/ renovating home</i>	<i>Others</i>
		<i>Percentage</i>	57,4	13,6	8,9	20,1
<i>STT</i>		<i>Characteristics</i>				
1	Age	18-35	75,3	52,2	46,7	
		36-45	21,6	30,4	33,3	
		46-55	1,	13	13	
		Above 55	2,1	4,4	7	
2	Occupation	Civil servants	25,8	61	46,7	
		Officers outside public sector	52,6	30,4	26,7	
		Employees in other sectors	21,6	8,6	26,6	
3	Income	Under 5 millions	9,3	21,7	-	
		5-10 millions	37,1	17,4	26,7	
		10-20 millions	31,9	43,5	40	
		20-30 millions	7,2	13	26,7	
		Above	4,5	4,4	6,6	

*Source:* Results conducted by group of authors.

The inspection result indicated that percentage of customer having house purchasing demand was high. In specific, 57.4% of customers had demand of buying apartment or available house; while 13.6% wanted to buy land or invest in real estate and the rest 8.9% need to repair or newly construct house. This fact showed that demand of buying apartment or available house made up the highest percentage. It has contributed in affirming that loan for housing purchase under projects is now occupying the highest percentage and developed by almost bankers.

In term of customer age, customers having demand of real estate products under 35 years old made up the highest percentage while 75.3% of customers having demand of purchasing apartment/available

house is under 35 years old. With regard to other groups, this percentage is approximately 60%. Customers at the age of 36 - 45 made up 30%. From above statistics, we can see that most customers having demand are young; among them, a high percentage who live with family (parents, siblings, etc.) or rent house want to own a private house. However, due to limitation in savings, group under the age of 35 are really potential customers of bankers.

In term of occupation, the statistics shows the difference among 3 groups. Most customers having demand of purchasing apartment/available house are officers outside public sector while officials make up 25.8% and employees in other sectors make up 21.6%. Meanwhile, in land purchase and property investment group, officials has the highest percentage equivalent to 61%, officers outside public sector make up 30.4% and the self-employed labors make up a very small percentage. In group having demand of house construction and repair, the percentages are similar. It seems that officials was put lower pressure to purchase new houses in comparison to other groups. Is it true that officials can approach with financial loans more easily; therefore they could buy house previously, leading to lower pressure for this group.

Three groups of customers have different income. In group having demand of purchasing apartment/available house, earnings is majorly in the range from 5 to 20 million dong (about from USD 250 to 1000) while percentage of income above 20 million dong is low. In group having demand of purchasing land and investing in properties, however, income rate is distracted, namely, income from 10-20 million dong has the highest percentage, the followings are under 5 million dong and 5-10 million dong. The group having demand of house construction and repair has higher income with majority at 10-20 million dong and the followings are 10-20 million dong, 20-30 million dong and 5-10 million dong.

This table of statistic showed that most customers have the highest demand of purchasing apartment or available house. They are young, at the age of 18-35 and have medium income from 5 to 20 million dong. These data allow bankers to establish products to exploit this customer segment better.

To evaluate market potentials, as well as potential customer group more exactly, the study also poses open-questions for credit officers who are experienced in this market. Next, the study will gather words and phrases with similar meaning, then find and evaluate the one which has highest frequency of repetition.

- *Firstly*, most credit officers turn towards projected house segment because of the highest percentage of customers having demand of projected house. In their opinion, this trend may reduce risks for bankers in collateral security evaluation via assets created in the future, concurrently help fix price and handle legal document easily. Besides, many bankers also carry out projects with three party association with investors to provide customers loans, creating advantageous conditions for bankers to seek high quality customers.
- *Secondly*, house segment for low income customer is also a potential market paid attention by credit officers. Accordingly, this group involves customers having high demand of housing and low income. However, financial solutions for this group are constrained and their ability to approach bank credit meets obstacles due to limitation in income statement. This segment has not been concerned by bankers due to unstable currency flow leading to high operating expenditure and high risks. Therefore, despite of being potential, this market has not been researched much. Bankers need to design more appropriate products for this customer segment.

- *Thirdly*, loan for house construction and repair is mentioned by many credit officers. Actually, though this product has been exploited by various bankers, its market share made up a low percentage and was not fitted with its potential. Thus, diversification of products in this segment allows bankers to meet demands of more customers and makes approach to banking products become easier.

Beside identifying products that need to be developed, credit officers also pointed out customers groups bankers should pay attention to:

- The first group includes customers having stable income, excepting government officers and officers outside state authorities, because they have labor contract and a stable income for bank debt payment. By expanding this group, bankers may develop their mortgage products for low income customers.
- Government officers always gain the most important concern from credit officers thanks to their stable income, firm work, ensured salary and low risks. On the other hand, approach to information in this group is also easier.
- Another group emphasized by credit officers includes customers having high and very high income. These customers have high prestige and low risk. When using mortgage products, they often invest in prestigious projects and high products segment as well. Furthermore, bankers can promote cross-selling for this group.

Data collected from the study show us product groups and potential customer groups of bankers. To develop these products, the study investigated products' factors that customers care about. The study evaluated 6 factors with different level of concern, from no concern to extreme concern. Obtained result is presented in table below:

**Table 5**  
**Products' factors that customers care about**  
**Unit: %**

	<i>No concern</i>	<i>Little concern</i>	<i>Concern</i>	<i>Extreme concern</i>
Conformity of products	6,5	3,9	67,5	22,1
Interest rate	1,3	3,9	35	59,8
Application conditions	7,8	2,6	50,6	39
Loan amount	3,9	10,4	54,5	31,2
Bank's reputation	6,5	14,3	52	29,2
Relationship with bank	7,8	32,5	44,2	15,5

*Source:* Results conducted by group of authors

One of the most concerned factor is interest rate. 94.8% customers answered that they concern or extremely concern about loan interest rate issued by bankers. Condition for capital loans is also interested by customers, among them 39% extremely concerns and 50.6% concern about this factor. Condition for capital loans is one of prerequisite factors directly affecting to ability of customers to approach credits.

## 5. CONCLUSION AND RECOMMENDATION

Result from the investigation for customers and bank credit officers has shown some needed improvements for current mortgage products, concurrently suggested several orientations for development of these products. Namely:

- With regard to current mortgage products for personal customers, bankers shall consider and innovate some following issues to enhance approach ability of customers, as well as meet demands of customers better. Needed improvements for current mortgage products provided to personal customers may be summarized in following diagram:

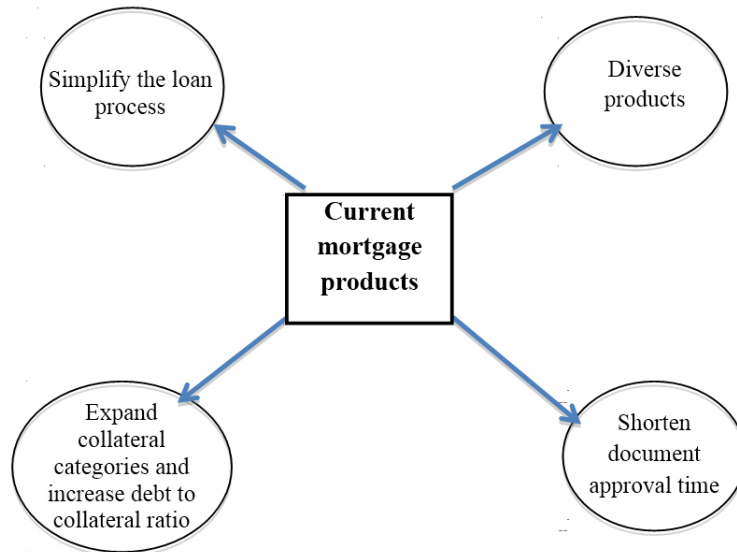
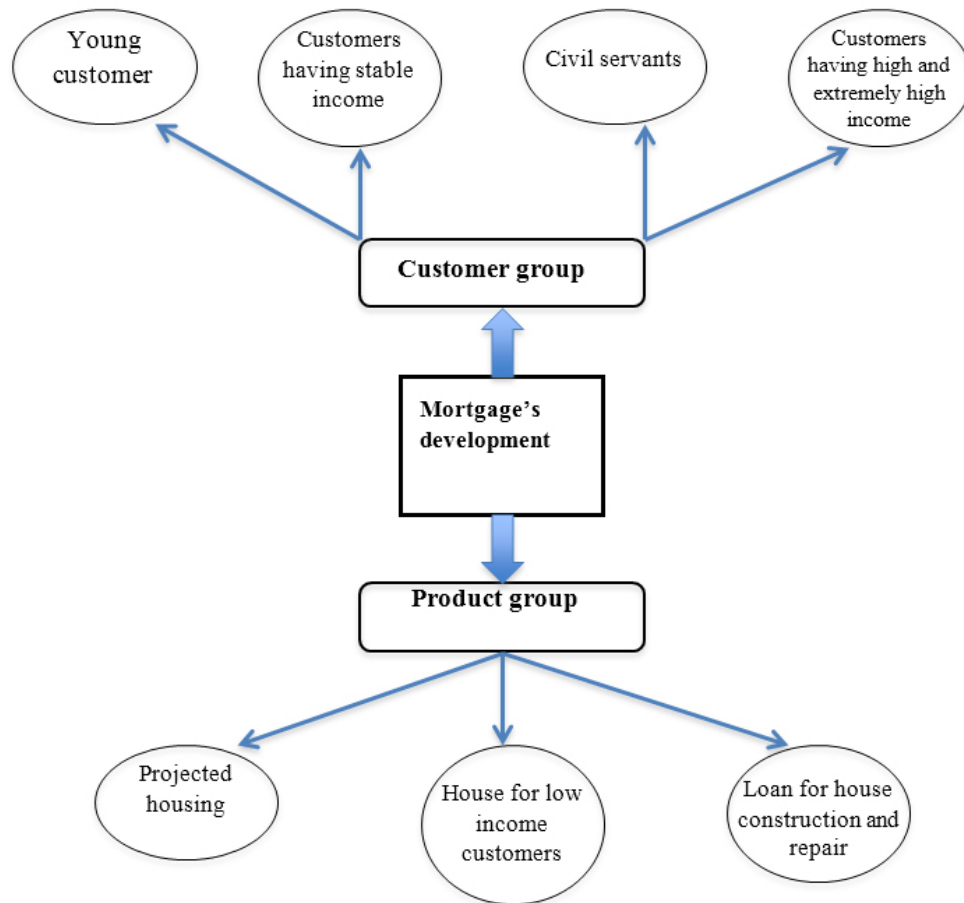


Figure 1: Needed improvements for current mortgage products

- With regard to newly developed products, bankers may base on 2 factors:
  - + In potential customer group, banks should focus on: (1) customers at the age of 18 – 35 because they have the highest demand and are expected to earn money in long term; (2) customers having stable income thanks to their stable job, having long-term labor contract sign with any form of enterprises because they allow bankers to extend customers; (3) government or private officers having stable income and job because they approach information easily and have low risk; (4) VIP customers having high and extremely high income.
  - + In term of products, the study pointed out 3 major product group that bankers should develop: (1) projected housing which makes up the highest share in real estate market and is a new trend of customers; (2) house for low income customers which is a potential market but has not exploited much; (3) loan for house construction and repair. Model for mortgage products development of bankers is summarized in diagram bellows:

Pursuant to result from the investigation, authors proposed some solutions to develop mortgage products of commercial banking system. These solutions are classified into three groups: Solutions for current products completion, Solutions for new mortgage products development and Support solutions.





**Figure 2: Model for mortgage products development**

With regard to completion solutions, bankers shall:

1. Establish a specialized division taking responsibility for development of products in commercial banks.
2. Establish a real estate information system in banks to seek and extend list of real estate products of such banks.

With regard to solutions for new mortgage products development, bankers shall:

1. Design products with long loan term and flexible interest calculation fitting with different potential customers.
2. Develop associated mortgage products to give customers various options.
3. Develop association between loans for housing purchase and insurance packages.

With regard to support solutions, bankers shall:

1. Enhance capital mobilization, especially long-term capital mobilization.
2. Establish an experienced and professional staff with thoroughly knowledge about real estate market.

The study result indicated that mortgage plays a key role in credit operation of bankers in particular and plays an important role in growth of real estate market and development of the economy in general. Mortgage contributed a part in improving people's living conditions, especially young customers. Although Vietnam has the lower ratio between real estate loan outstanding balance and GDP in comparison to Asian countries, growth rate of mortgage in Vietnam market is classified into the highest group in recent years. Against credit growth rate in the whole of banking system, credit capital flowing to the field of real estate also increases significantly. According to investigation result, 138 credit officers and 185 customers stated that mortgage for personal customers is one of key products given priority for development by bankers. This proclaimed the potentials, as well as importance of mortgage in banking operation. To develop the operation of mortgage in this potential market, suitable completion and development of product become necessary foundation for banking operation. Although the study answered research questions and reached research objectives, it remained limitations. Namely, the study has just conducted research on personal mortgage but not analyzed mortgage loans for companies. The authors hope that these limitations can open out new research trends and be solved in next studies.

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## **Appendix 1**

### **Survey Questions for Credit Officers about Mortgages in Bank**

Thank you for taking the time to complete this survey. We truly value the information you have provided. Your responses will be kept confidential and contribute to our analyses of “Improving and developing personal mortgage at commercial banks in Vietnam”. Again, we thank you for participating in this important project.

#### **I. General Information:**

1. What is your gender?  
(a) Male (b) Female
2. Please select your age?  
(a) Less than 30 (b) From 30 to 40  
(c) From 40 to 50 (d) Over 50
3. Please select your total time in the field of banking and finance?  
(a) less than 2 years (b) 2-5 years  
(c) 5-8 years (d) over 8 years
4. Please select the customer group that you are in charge of?  
(b) Corporation (a) Personal
5. Please write down the name of credit products that you are in charge of ?  
.....

## II. Position of Mortgage in the Business of Bank

6.1. Based on market share and development priorities, please rate the following products for individual customers from 1(highest) to 6 (lowest).

(Applied for credit officers who are in charge of individual clients)

<i>Sản phẩm tín dụng</i>	<i>Order of market share</i>	<i>Order of development priorities</i>
Housing loan		
Car loan		
Consumption loan		
Business loan		
Study loan		
Others		

6.2. Do you think that mortgage products will develop in the future?

- (a) Strongly agree (b) Agree  
 (c) Agree but not much (d) Disagree  
 (e) Strongly disagree

7.1. Based on market share and development priorities, please rate the following credit products for corporations from 1(highest) to 6 (lowest).

(Applied for credit officers who are in charge of corporation)

<i>Credit products</i>	<i>Order of market share</i>	<i>Order of development priorities</i>
Real estate investment		
Project finance		
Agricultural loan		
Working capital loan		
Machine and Device Investment Loan		
Others		

7.2. Do you think that mortgage for corporation will develop in the future?

- (a) Strongly agree (b) Agree  
 (c) Agree but not much (d) Disagree  
 (e) Strongly disagree

8. Do your bank have strategy for developing or expanding mortgage loans?

- (a) Yes (b) No

If your answer is a, please answer question 9

9. Between mortgage products for individual customers and mortgage products for corporation, which one do your bank would prefer to develop?

- (a) mortgage products for corporation (b) mortgage products for individual customers

**III. Evaluation of mortgage product suitability:**

10. Please tick mark symbol right next to products provided by your bank.

<i>Mortgage loans for personal</i>	<i>Mortgage loans for corporation</i>
Project house purchase loan	Real estate investment loan
Social housing loan	Associated loan
Civil servants home loan	
Home construction loan	
House purchase loan	
Others (Please write down name of products):	Others (Please write down name of products):

11. Based on market share and development priorities, please rate the following mortgage loans for individual customers from 1(highest) to 6 (lowest) .

(Applied for credit officers who are in charge of individual customers)

<i>Mortgage</i>	<i>Order of market share</i>	<i>Order of development priorities</i>
Project house purchase loan		
Social house purchase loan		
Civil servants home loan		
Home construction loan		
House purchase loan		
Others		

12. Based on market share and development priorities, please rate the following mortgage products for corporation from 1(highest) to 4 (lowest)

(Applied for credit officers who are in charge of corporation)

<i>Products</i>	<i>Order of market share</i>	<i>Order of development priorities</i>
Real estate investment loan		
Associated loan		
Others		

13. How about your bank's loan term to customers?

- (a) Reasonable
- (b) Shorter than demand
- (c) Too short

14. How about your bank's loan amount to customers?

- (a) Reasonable
- (b) Smaller than demand
- (c) Too small

15. How about your bank's loan process to customers?

- (a) Simple
- (b) Relatively complex
- (c) Complex
- (d) Extremely complex

16. How about customers' ability to access your bank's information?
  - (a) Very easy
  - (b) Fairly easy
  - (c) Difficult
  - (d) Very difficult
17. How about your bank's collateral requirement for mortgage loans?
  - (a) Very strict
  - (b) Strict
  - (c) Reasonable
  - (d) Basic
  - (e) Minimum
18. How about your bank's income requirement for mortgage products ?
  - (a) Very strict
  - (b) Strict
  - (c) Reasonable
  - (d) Basic
  - (e) Minimum
19. Please write down points you think that need to be amended?  
.....
20. Please write down points you think that they are highlight of your bank's mortgage loans ?  
.....
21. Please write down difficulties you have to face when providing mortgage loans to customers?  
.....
22. Please write down advantages of providing mortgage loans to your customers?  
.....
23. Do mortgage loans provided by your bank satisfy the customer demand?
  - (a) Strongly disagree
  - (b) Neither agree or disagree
  - (c) Agree
  - (d) Strongly agree
24. What do you think about variety of mortgage loans provided by your bank?
  - (a) Poor products
  - (b) Variety
  - (c) Wide variety
25. Do your customer satisfy with mortgage loans provided by your bank?
  - (a) Extrimely satisfied
  - (b) Satisfied
  - (c) Slightly satisfied
  - (d) Not at all satisfied

26. Please evaluate customer's level of concern for factors listed below

---

	<i>Not at all concerned</i>	<i>Slightly concerned</i>	<i>Somewhat concerned</i>	<i>Extremely concerned</i>
Conformity of products				
Interest rate				
Application conditions				
Collateral				
Loan amount				
Bank's reputation				
Having relationship with bank				

---

27. Please write down points you think that need to be improved to have better mortgage loans in the future?

.....

**IV. Improving and developing mortgage loans:**

28. Do you think that your bank should develop new products?

- (a) Yes (b) No

29. In the last 5 years, had your bank launch any new products?

- (a) Yes (b) No

30. Do your bank have mortgage loans are specifically designed for different groups of customer or customers?

- (a) Yes (b) No

If your answer is no, do you think your bank should do that in the future?

- (a) Yes (b) No

31. Do your bank have departments which are in charge of improving and developing new mortgage loans?

- (a) Yes (b) No

If yes, what do you think about cooperation between departments?

- (a) Strongly support (b) Some what support  
(c) Neutral (d) Not good

32. What is the important steps do you think that bank should focus on when developing new mortgage?

.....

33. Bases on your experience in providing mortgage for customers, which line of this products banks should focus on?

.....

34. Which customer group do you think that will be potential customers for banks in the future?  
What are they looking for?

**THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY!**

## Appendix 2

### Survey Questions for Customers about Mortgage in Bank

Thank you for taking the time to complete this survey. We truly value the information you have provided. Your responses will be kept confidential and contribute to our analyses of “Improving and developing personal mortgage at commercial banks in Vietnam”. Again, we thank you for participating in this important project.

#### I. General information

1. What is your gender?
  - (a) Male
  - (b) Female
2. Please select your age?
  - (a) 18 - 35
  - (b) 36 - 45
  - (c) 46 - 55
  - (d) Over 55
3. Please select your occupation?
  - (a) Civil servants
  - (b) officers outside public sector
  - (c) Self employment
  - (d) others
4. Please select your monthly average income?
  - (a) Under VND 5 millions
  - (b) VND 5 - 10 millions
  - (c) VND 10 – 20 millions
  - (d) VND 20 – 30 millions
  - (e) VND 30 - 50 millions
  - (f) VND over 50 millions

#### II. Demand for mortgage:

5. What is your place of residence?
  - (a) Living with family
  - (b) Renting house
  - (c) apartment
  - (d) Solid storey house
  - (e) building
  - (f) others
6. Do you need to change or renew your place of residence in the future?
  - (a) No
  - (b) Yes, redecorate
  - (c) Yes, buy a new apartment
  - (d) Yes, buy a new land
  - (e) Yes, invest in real estate
  - (f) Others
- 6.1. If your answer in question 6 is a, please select reason why you do not need to change or renew your place of residence ?
  - (a) Really do not need
  - (b) Shortgace of fund
  - (c) Others



If your answer in question 6.1 is a, your survey is finished, Thank you for taking the time to complete this survey

- 6.2. Do you borrow money from bank to fulfil the needs of changing your place of residence in the future?
- (a) Yes (b) No
7. Please select sources of finance you think that you will use to satisfy your need?
- (a) Savings (b) Borrowing from relatives  
(c) borrowing from bank (d) Others
- 7.1. If you do not choose c for your answer in question 7, please give reason why?
- (a) High interest rate  
(b) Complex loan process  
(c) Lacking of information about products  
(d) Inappropriate product  
(e) Others
- 7.2. Have you ever applied for mortgage in bank?
- (a) Never (b) Yes but to be rejected  
(c) Yes

If your answer is (b), please answer question 7.3 otherwise please answer question 8.

- 7.3. Please select reason why you are rejected?
- (a) Collateral (b) Source of payment  
(c) Others

### **III. Evaluation of mortgage's suitability:**

8. Which mortgage do you care about?
- (a) Project house purchase loan (b) Social housing loan  
(c) Civil servants home loan (d) Home construction loan  
(e) House purchase loan (f) others:.....
9. How about bank's loan term to your demand?
- (a) Reasonable  
(b) Shorter than demand  
(c) Too short (please write down loan term you want...)

10. How about bank's loan amount to your demand?
  - (a) Reasonable
  - (b) Smaller than demand
  - (c) Too small
11. What do you think about bank's loan process?
  - (a) Simple
  - (b) Relatively complex
  - (b) Complex
  - (d) Extremely complex
12. Can you access bank's information about mortgage?
  - (a) Yes, Very easy
  - (b) Yes, Fairly easy
  - (c) Difficult
  - (d) Very difficult
13. Do you satisfy with bank's document approval time?
  - (a) Yes
  - (b) No
14. What do you think about bank's collateral requirement for mortgage?
  - (a) very strict
  - (b) Strict
  - (c) Reasonable
  - (d) Basic
  - (e) Minimum
15. What do you think about bank's income requirement for mortgage ?
  - (a) Very strict
  - (b) Strict
  - (c) Reasonable
  - (d) Basic
  - (e) Minimum
16. Please write down advantages of mortgage you have used or will use?
17. Please write down disadvantages of mortgage you have used or will use?
18. Do mortgage loans provided by bank meet your demand?
  - (a) Strongly disagree
  - (b) Some what disagree
  - (c) Agree
  - (d) Strongly agree
19. What do you think about variety of mortgage provided by bank?
  - (a) Poor products
  - (b) Variety
  - (c) Wide variety
20. Is mortgage provided by bank helpful to you?
  - (a) Strongly agree
  - (b) Agree
  - (c) Disagree
  - (d) Strongly disagree



