Impact of factors that influence the satisfaction of real estate mortgage registrants: A Case Study in Yen Khanh District, Ninh Binh Province, Vietnam

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Abstract: **The purpose of the study is to determine the factors and their impact on the satisfaction of real estate mortgage registrants. The study investigated 95 real estate mortgage registrants and proposed a research model with 5 latent variables (5 groups of factors) and 19 observed variables. The model was tested using SPSS 20.0 software. 17 observed variables met the requirements and 2 variables that do not meet the requirements and are eliminated. The findings also indicated that credit factors have the strongest impact on satisfaction, followed by groups of factors of credit procedures; finance; personnel; equipment for mortgage registration with the corresponding impact level of 40.14%; 22.22%; 15.90%; 11.76%; 9.97%. The study prosed: raising loan levels, lowering interest rates, simplifying loan procedures, and reducing collateral appraisal fees. Applying the proposals will increase the satisfaction of mortgage registrants, reduce possible disputes, and at the same time ensure security and order and increase state budget revenue.**

Keywords: **Influential Factors, Real Estate Mortgage, Registrants' Satisfaction, Vietnam, Yen Khanh District.**

I. INTRODUCTION

Real estate mortgage registration has the full name of the registration of mortgage of land and properties attached to the land. In Vietnam, the land belongs to the entire people, with the State acting as the representative of the owner and unified management of the land. People do not have the right to own land, they only have the right to use land and perform transactions for land use rights by the law, including mortgaging land use rights and attached assets with the land [7]. As a result, in Vietnam, mortgages of real estate are registered in the form of land use rights and properties attached to the land, commonly referred to as mortgages for short [22].

Real estate mortgage registration is the recording of information about the mortgagor, mortgagee, and real estate in the cadastral book or real estate mortgage register at the Land Registry Office. Land mortgage registration is a mandatory procedure when mortgaging real estate to borrow money at credit institutions to protect the legitimate rights and interests of the parties in the mortgage contract [7], [15], [17]. The mortgagor is a party that borrows money and uses its real estate to secure the repayment of a debt to a mortgagee who is a money lender including banks and other credit institutions. The relationships between the mortgagor and the mortgagee are civil relations governed by civil law based on voluntary agreement and equality as prescribed. Real estate mortgage registration is a matter of research by scientists from different perspectives and levels. Anderson & Kurzer (2020) [1] study the policy of expanding residential mortgage loans in Denmark, Sweden, and the Netherlands to create conditions for people to have accommodation suitable to their financial ability. Anna (2020) [2] focuses on researching legal issues of real estate databases related to mortgage registration to ensure interoperability and multipurpose use between agencies and between administrative units in Poland. Wardhana et al. (2018) [16] evaluates the role of public servants in making and maintaining the legality of mortgage contracts between the mortgagor and the mortgagee. Some other authors study the factors affecting mortgage insurance or the factors affecting mortgage performance of residential land use rights [9], [17]. Some authors focus on assessing the status of mortgage registration of households [13], [18], [21], [24] or mortgage registration of economic organizations [22]. Studies have shown the advantages and limitations in the mortgage registration process, such as lack of human resources, high work pressure; facilities that do not meet job requirements; mortgage registrants in some areas have limited mortgage registration regulations, etc. However, there has been no in-depth research on the factors affecting the satisfaction of real estate mortgage registrants. Therefore, it is not clear what factors influence and to what extent affect the psychology of mortgage registrants and prevent them from registering. So, this study aims to answer the following questions: *What factors influence the satisfaction of real estate mortgage registrants? What is their level of influence? What policies are needed to accommodate more mortgage registrants in the future?*

The study selected Yen Khanh district, Ninh Binh province, Vietnam as the research location because, in the past 5 years, the number of people registered for investment real estate was very large (4,746 people) [26]. However, there has been no research to assess their satisfaction when registering

mortgages to make appropriate policies. The study focuses on assessing the impact of factors on the satisfaction of registrants for mortgages with residential land and properties attached to residential land.

II. OVERVIEW

In Vietnam, real estate mortgage registration is an administrative procedure related to the process of borrowing money at credit institutions and mortgaging real estate. Borrowers have to perform many different tasks to get loans at credit institutions. These tasks include preparing loan applications, assessing documents, approving documents, registering mortgages, and disbursing loans. Each task may have a direct impact on the satisfaction of mortgage borrowers. People's satisfaction in general has many different interpretations. According to Aziri (2011) [3]; Hoppock (1935) [11], satisfaction is the feeling people get when they achieve their material or spiritual expectations. According to Kotle & Armstrong (2005) [12]; Hansemark & Albinsson (2004) [9], Satisfaction appears after comparing and finding that the results received are not less than the expected results. The greater the results received, the higher the satisfaction. In essence, satisfaction is a psychological state of a person towards a particular event, at a definite time and positively. People's satisfaction in a particular field is affected by different factors. People's job satisfaction is often affected by factors including the nature of the job, promotion opportunities, income, leadership, colleagues, etc. People's satisfaction with services is affected by service quality and after-sales care [5], [6], [19].

From the above concepts, it would be understood that the satisfaction of real estate mortgage registrants is the result of a comparison between what is expected and what is received when performing tasks in the real estate mortgage loan process. Mortgage satisfaction also includes satisfaction with each specific task starting from preparing the mortgage loan application to receiving the loan. Satisfaction can be high or low depending on specific influencing factors. Impact factors are factors that change the difference between actual and expected results. Factors that affect the satisfaction of mortgage registrants include loan interest rates; loan term; disbursement period; requests for loan documents; how to submit and receive results of mortgage registration; financial obligations to be fulfilled; personnel and facilities for registration, etc. Factors affecting satisfaction are classified according to the characteristics of factors (Table 1). The study proposes 5 groups of hypothetical factors that probably affect the satisfaction of mortgage registrants. Each factor group has 3 to 5 hypothetical factors that presumably impact mortgage applicant satisfaction. The groups of factors are called *latent variables*, the factors are called *observed variables*, and are independent variables. Mortgage registrants' satisfaction is the *dependent variable*. The proposed research model is shown in Fig. 1

Table 1. Hypothetical Groups of Factors Affecting Real Estate Mortgage Registrants' Satisfaction

Independent Variables	Independent Variables
HI. Group of Credit Factors (CF)	10. Hygiene (FE2)
1. Loan amount (CF1)	11. Queuing ticket machine (FE3)
2. Interest rate (CF2)	12. Furniture at the place where the application is received (FE4)
3. Loan term Disbursement time (CF3)	13. Means of publicizing the procedure (FE5)
4. Loan application approval deadline (CF4)	*Mean rating*
5. Disbursement time (CF5)	HIV. Group of Personnel Factors (PE)
Mean rating	14. Communication skills (PE1)
HII. Group of Loan Procedure Factors (LF)	15. Instructional skills (PE2)
6. Number of documents attached to the application (LF1)	16. Question-answering skills (PE3)
7. Requesting text content (LF2)	*Mean rating*
8. Submitting mortgage application and getting the result (LF3)	HV. Group of Financial Factors (FF)
Mean rating	17. Contract notarization fee (FF1)
HIII. Group of Facilities and Equipment Factors (FE)	18. Mortgage appraisal fee (FF2)
9. Working space (FE1)	19. Mortgage Registration Fee (FF3)

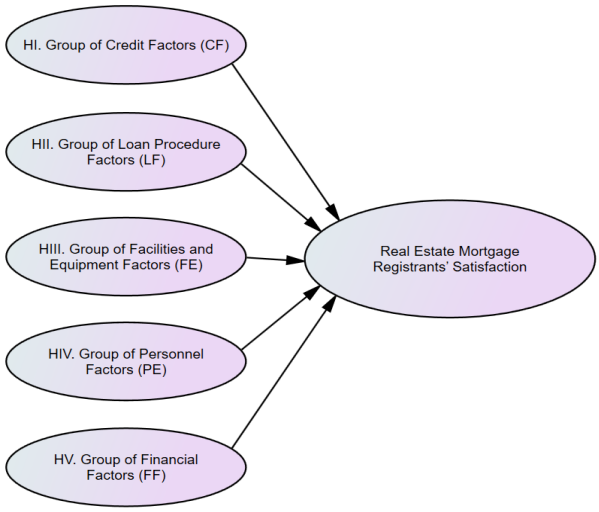

Figure 1. Hypothetical Model of Factors Affecting Real Estate Mortgage Registrants' Satisfaction

The multivariable regression model showing the impact of factor groups on the real estate mortgage registrants' satisfaction has the following form (1):

$$Y = \beta o + \beta_1 * CF + \beta_2 * LF + \beta_3 * FE + \beta_4 * PE + \beta_5 * FF + \varepsilon \quad (1)$$

Where: Y is the dependent variable that represents the impact of factor groups on the real estate mortgage registrants' satisfaction; βo: constant; β_1; β_2; β_3; β_4; β_5: regression coefficients of the corresponding variables are the following groups of credit factors; loan procedure factors; facilities and equipment factors; personnel factors; financial factors: CF; LE; FE; PE; FF: independent variables are the following

groups of credit factors; loan procedure factors; facilities and equipment factors; personnel factors; financial factors. Ɛ: impact value of the factors that have not been determined.

III. METHODOLOGY

Data collection

Data on natural, socio-economic, and land management conditions are collected at the People's Committee of Yen Khanh district. The study carried out a direct and random survey using pre-printed questionnaires of people who registered for mortgages with real estate in the period 2017-2021 in Yen Khanh district. The main content of the survey form includes key information about registrants and their opinions on the level of impact of the hypothetical factors on satisfaction. The impact of factors is classified into 5 levels according to the Likert scale (*Very influential – 5 points; quite influential – 4 points; medium satisfied influential – 3 points; little influential – 2 points; not influential – 1 point*) [16].

The number of questionnaires is determined based on the minimum number of questionnaires required to verify the research model. Specifically, at least 5 questionnaires are needed for each observed variable (hypothetical factor) to perform the exploratory factor analysis test [8]. With 19 observed variables (Table 1), there must be therefore 95 questionnaires. The minimum sample size for multivariate regression analysis is 50 + 8*p (p is the number of factor groups - p = 5 (Table 1)) [10], [23]. To guarantee both requirements for the minimum number of questionnaires at the same time, the study investigated 95 people who had registered for real estate mortgages.

Statistical Analysis

Collected data are processed, synthesized, analyzed, and presented by using SPSS20.0 software. The impact of each factor on people's satisfaction is measured according to the Likert scale (*very influential - the impact index ≥ 4,20; quite influential - the impact index 3,40 ÷ 4,19; medium influential - the impact index 2,60 - 3,39; little influential - the impact index 1,80 ÷ 2,59; not influential - the impact index < 1,80*) [16].

The value of the impact index is determined according to formula 2.

$$G_i = \frac{1}{n} * \sum_{i=1}^{q} \quad \sum_{j=1}^{n} \quad x_{ij} \quad (2)$$

Where G_i is impact index of the i factor; n: number of respondents; q: number of impact factors; x_{ij}: the j^{th} respondent's score for factor i. The impact index of k^{th} factor group is determined according to formula 3.

$$G_k = \frac{1}{p} * \sum_{k=1}^{m} \quad \sum_{z=1}^{p} \quad G_{kz} \quad (3)$$

Where G_k is the average impact index of the k^{th} factor group; m: number of factor groups; p: the number of factors of group k; G_{kz}: the impact index of the z^{th} factor in the k^{th} group. The general impact level of all the factor groups on the real estate mortgage registrants' satisfaction is determined by formula 4.

$$G \quad = \frac{1}{m} * \sum_{k}^{m} \quad G_k \quad (4)$$

Where G is the general impact level of all the factor groups; m: the number of factor groups; G_k: the average impact index of the k^{th} factor group. The multi-variable regression model has been tested through Cronbach Alpha coefficients; KMO coefficient, Bartlett test, eigenvalues coefficients, etc. The reliability of the scale is tested through Cronbach Alpha coefficients. The data ensure reliability when the Cronbach Alpha coefficient is in the range from 0.60 to 0.95 [8], and the total variable correlation coefficient is bigger than 0.3 [8]. The exploratory factor analysis is used to reduce many metrological variables into a set of variables (factors) so that they are more meaningful but still contain most of the information of the original set of variables [8]. The exploratory factor analysis is assessed through the appropriate coefficient KMO, Bartlett test, Eigenvalues coefficients, total explanatory variance, and load coefficients. Variables are only accepted when KMO is in the range from 0.5 to 1.0, and its load weights are less than 0.35 [8], [14] or the distance between two loads (factor loading). The same variable in 2 different factors is greater than 0.3. According to Hair et al. (1998) [8], with a sample size of about 100, it was recommended to choose a load weight greater than 0.55, so for the sample size of 95, in this study, the load weight chosen is greater than 0.55. Besides, the scale is only accepted when the total variance explained is more than 50%; Barlett's coefficients with Sig.'s significance level less than 0.05 to ensure that the factors are correlated; Eigenvalue coefficients are valid from 1 to ensure the differences between the groups of factors.

IV. RESULTS AND DISCUSSIONS

Status of Real Estate Mortgage Registrations

During the 2017-2021period, the number of mortgage applications decreased from 2017 to 2019 and then gradually increased until 2021. The number of mortgage applications decreased the most from 1,549 in 2017 to 864 in 2019 (down 31.57%). The number of households registering mortgages also decreased from 2017 to 2019, then gradually increased until 2021. Even so, the decrease in the number of households registering a mortgage was smaller than the decrease in the number of applications. Mortgages from 2017 to 2021 (from 960 to 942 – down 1.88%) (Figure 2) [26]. On average, each household has applied for a mortgage many times, so there is a clear difference in the reduction rate. The purpose of mortgage loans is mainly to expand production, business, services, commerce, and real estate development needs. These

needs also change from year to year, so the number of mortgage applications also varies and often increases for several years and then declines. The mortgage rate with land use rights accounted for 87.95%, and the mortgage rate with both land use rights and assets attached to the land accounted for a smaller proportion (12.05%) [26]. The main reason is that many land plots have no assets attached to the land or have assets attached to the land but have not yet been added to the land use right certificate. This is a common phenomenon in Vietnam today [13], [18], [22].

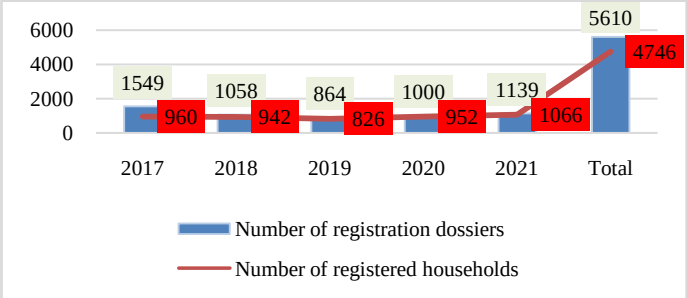

Figure 2. Status of Real Estate Mortgage Registrations from 2017 to 2021 [4]

Impact Levels of Factors on Real Estate Mortgage Registrants' Satisfaction

According to Table 2, all the factors have an impact on the satisfaction of mortgage registrants with an impact index from 2.53 to 4.45 (from very high impact to low impact). The average impact index of factor groups is also different. The group of credit factors has the strongest impact on satisfaction with an impact index of 4.11 (Quite influential). In this group, the factor of bank interest rate has the strongest impact with an impact index of 4.45, followed by the following factors: disbursement period, total loan amount, loan term, loan appraisal period with impact indexes of 4.37, 4.13, 4.04, and 3.56 respectively. The group of financial factors including factors such as notary fees, mortgage appraisal fees, and mortgage registration fees has the smallest impact (impact index 2.60 - Little influential). The second group of factors affecting customer satisfaction is the administrative procedure factor group, including the content of the application, and the submission and receipt of the results of the application. Its impact index is 3.31.

The group of financial factors including the notarization fee of the mortgage contract, the fee for assessing the mortgage application, and the mortgage registration fee occupies the 3rd most influential position (the impact index is 3.41). The notarization fee factor has the strongest impact on satisfaction because mortgage registrants consider the amount to be larger than their expectations. The group of human factors, including the skills of civil servants dealing with mortgage applications, has the fourth place of impact (general impact index 3.29). The level of the general impact of factors on the satisfaction of real estate mortgage registrants is level 2 (Quite influential - impact index of 3.46). This problem requires determining the level of each group of factors to have priority recommendations according to the impact level of the factor group to further satisfy the expectations of real estate mortgages.

Table 2. Impact Levels of Factors on Real Estate Mortgage Registrants' Satisfaction

Group of Factors	Impact Index	Impact Level	Group of Factors	Impact Index	Impact Level
I. Group of Credit Factors (CF)			11. Queuing ticket machine (FE3)	3.01	MI
1. Loan amount (CF1)	4.13	QI	12. Interior equipment at the receiving place (FE4)	3.56	QI
2. Interest rate (CF2)	4.45	VI	13. Means of publicizing the procedure (FE5)	3.77	QI
3. Loan term Disbursement time (CF3)	4.04	QI	Mean rating	3.21	MI
4. Loan application approval deadline (CF4)	3.56	QI	IV. Group of Personnel Factors (PE)		
5. Disbursement time (CF5)	4.37	VI	14. Communication skills (PE1)	3.48	MI
Mean rating	4.11	QI	15. Instructional skills (PE2)	3.27	MI
II. Group of Loan Procedure Factors (LF)			16. Question-answering skills (PE3)	3.12	MI
6. Number of documents attached to the application (LF1)	3.46	QI	Mean rating	3.29	MI
7. Requesting text content (LF2)	3.12	MI	V. Group of Financial Factors (FF)		
8. Submitting mortgage application and getting the result (LF3)	3.34	MI	17. Contract notarization fee (FF1)	4.55	VI
Mean rating	3.31	MI	18. Mortgage appraisal fee (FF2)	3.66	MI
III. Group of Facilities and Equipment Factors (FE)			19. Mortgage Registration Fee (FF3)	2.02	LI
9. Working space (FE1)	2.78	MI	Mean rating	3.41	QI
10. Hygiene (FE2)	2.93	MI	Common mean rating of all the factor groups	3.46	QI
11. Device registers to get a serial number (FE3)	3.01	MI			

VI – Very influential; QI – Quite influential; MI – Medium influential; LI – Little influential.

The results of evaluating the reliability of the scale through the Cronbach alpha coefficient for 5-factor groups showed that the Cronbach Alpha coefficient ranged from 0.794 to 0.893 and meet the requirements (greater than 0.55). But the correlation coefficient of the sum of the hygiene factor and the mortgage registration fee did not meet the requirements (less than 0.30) (Table 3). Therefore, these two factors were excluded and the study carried out a second test. The results of the test are shown in Table 4. The Cronbach alpha coefficient of the group of factors and the correlation coefficient of the total variable both meet the requirements (greater than 0.55 and 0.30 respectively). Thus, the scale used for assessing the impact of factors affecting the real estate mortgage registrants' satisfaction is reliable and suitable for the next analysis. The results of multivariate regression analysis in Table 5 also show that the coefficient Sig. 0.000 is smaller than the significance level ($\alpha = 0.01$), so the proposed regression model is significant, the independent variables have an impact on the dependent variable Y.

Table 3. Results of Analyzing the Reliability of the Scale (*the first time*)

Independent Variables	Corrected Item - Total Correlation	Cronbach's Alpha if Item Deleted	Independent Variables	Corrected Item - Total Correlation	Cronbach's Alpha if Item Deleted
HI. Group of Credit Factors (CF - Alpha = 0.847)			10. Hygiene (FE2)	0.249	0.764
1. Loan amount (CF1)	0.547	0.768	11. Queuing ticket machine (FE3)	0.644	0.767
2. Interest rate (CF2)	0.649	0.791	12. Interior equipment at the receiving place (FE4)	0.625	0.741
3. Loan term Disbursement time (CF3)	0.503	0.776	13. Means of publicizing the procedure (FE5)	0.527	0.694
4. Loan application approval deadline (CF4)	0.536	0.801	HIV. Group of Personnel Factors (PE - Alpha = 0.873)		
5. Disbursement time (CF5)	0.461	0.816	14. Communication skills (PE1)	0.603	0.769
HII. Group of Loan Procedure Factors (LF - Alpha = 0.794)			15. Instructional skills (PE2)	0.611	0.742
6. Number of documents attached to the application (LF1)	0.617	0.814	16. Question-answering skills (PE3)	0.442	0.816
7. Requesting text content (LF2)	0.472	0.774	HV. Group of Financial Factors (FF - Alpha = 0.861)		
8. Submitting mortgage application and getting the result (LF3)	0.511	0.817	17. Contract notarization fee (FF1)	0.637	0.775
HIII. Group of Facilities and Equipment Factors (FE - Alpha = 0.893)		0.893	18. Mortgage appraisal fee (FF2)	0.554	0.678
9. Working space (FE1)	0.478	0.776	19. Mortgage Registration Fee (FF3)	0.172	0.734

Table 4. Results of Analyzing the Reliability of the Scale (*the second time*)

Independent Variables	Corrected Item - Total Correlation	Cronbach's Alpha if Item Deleted	Independent Variables	Corrected Item - Total Correlation	Cronbach's Alpha if Item Deleted
HI. Group of Credit Factors (CF - Alpha = 0.847)			9. Working space (FE1)	0.541	0.793
1. Loan amount (CF1)	0.547	0.768	11. Queuing ticket machine (FE3)	0.702	0.807
2. Interest rate (CF2)	0.649	0.791	12. Interior equipment at the receiving place (FE4)	0.778	0.883
3. Loan term Disbursement time (CF3)	0.503	0.776	13. Means of publicizing the procedure (FE5)	0.635	0.760
4. Loan application approval deadline (CF4)	0.536	0.801	HIV. Group of Personnel Factors (PE - Alpha = 0.873)		
5. Disbursement time (CF5)	0.461	0.816	14. Communication skills (PE1)	0.603	0.769
HII. Group of Loan Procedure Factors (LF - Alpha = 0.794)			15. Instructional skills (PE2)	0.611	0.742
6. Number of documents attached to the application (LF1)	0.617	0.814	16. Question-answering skills (PE3)	0.442	0.816
7. Requesting text content (LF2)	0.472	0.774	HV. Group of Financial Factors (FF - Alpha = 0.882)		
8. Submitting mortgage application and getting the result (LF3)	0.511	0.817	17. Contract notarization fee (FF1)	0.695	0.845
HIII. Group of Facilities and Equipment Factors (FE - Alpha = 0.907)		0.893	18. Mortgage appraisal fee (FF2)	0.671	0.796

The suitability test is performed through the KMO relevance coefficient. The research results have determined that KMO = 0.815 and satisfying the condition 0.5 <KMO <1.0, so the exploratory factor analysis is appropriate for actual data.

Table 5. Test results of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.815
Bartlett's Test of Sphericity	approx. chi-square	745.319
	df	197
	Sig.	0.000

Besides, Barlett test results give a Sig value equal to 0.000 and less than 0.050 (Table 5). This proves that the measurement variables are linearly correlated with the representative factors.

The Weight of independent variables is greater than 0.6 (Table 6), so the EFA analysis has practical significance, the independent variables ensure accuracy in the regression analysis model to determine the impact level of the factors on the real estate mortgage registrants' satisfaction.

Table 6. Rotated Component Matrix

Observed Variables	Independent Variables					Observed Variables	Independent Variables				
	1	2	3	4	5		1	2	3	4	5
CF1	0.884					FE3			0.697		
CF2	0.745					FE4			0.776		
CF3	0.817					FE5			0.873		
CF4	0.783					PE1				0.807	
CF5	0.841					PE2				0.784	
LF1		**0.764**				PE3				0.843	
LF2		**0.873**				FF1					0.881
LF3		**0.782**				FF2					0.749
FE1			0.806								

The adjusted R^2 value equal to 0.809 (Table 7) shows that the independent variables put into the regression have an impact on the real estate mortgage registrants' satisfaction with 80.9%. The remaining 19.1% is due to the impact of other factors not included in the model or random error. Besides, the Durbin Watson coefficient is 1.738 and in the range from 1.0 to 2.0, so there is no autocorrelation detected in the sample (Table 7). The variance inflating factor (VIF) of all variables included in the model is less than 2, so the research model does not have a multicollinearity phenomenon. In addition, the variables included in the study are statistically significant (Sig. is equal to 0.000 and less than 0.050). From the standardized regression coefficient, the study has determined the regression equation that has the following form (5):

$$Y = 2.395 + 0.737*CF + 0.408*LF + 0.183*FE + 0.216*PE + 0.292*FF \quad (5)$$

Table 7. Results of linear regression analysis

Factor Groups	Standardized Regression Coefficient	t	Multi-Collinear Statistics		Order of Influential Levels
			Error (Sig.)	VIF	
Constant	2.395				
CF	0.737	6.429	0.000	1.761	1
LF	0.408	4.803	0.000	1.557	2
FE	0.183	5.322	0.000	1.839	5
PE	0.216	6.538	0.000	1.743	4
FF	0.292	5.490	0.000	1.672	3
R^2 = 0.875; Sig. F = 0.000; Adjusted Coefficient R^2 = 0.809; Durbin-Watson = 1.738					

Figure 3 shows that the impact ratio of the groups of factors on the satisfaction of real estate mortgage registrants is different. The credit factor group has the largest impact rate (40.14%) and is 1.8 times larger than the administrative procedure factor group with the 2nd place and 4 times larger than the facilities and equipment group. Similar to the results in Table 2, the impact level and impact ratio of the factor groups from the highest to the lowest correspond to the group of credit factors; a factor group of loan procedures; a group of financial factors; a personnel factor group; a factor group of facilities and equipment.

Therefore, it is necessary to make recommendations to increase the satisfaction of mortgage registrants according to the impact level of each group of factors. Solutions related to credit factors should be implemented first, followed by solutions related to loan procedures, finance, human resources, facilities, and equipment. When the satisfaction level of real estate mortgage registrants increases, they will take out more loans to develop production and business, and improve their lives. This would lead to the socio-economic development of the locality in particular and the country in general. In addition, they also contribute to improving the efficiency of land management because the State has accurate information on credit loans mortgaged with land and properties attached to the land, and also receives finance from land, contributing to increasing state budget revenue.

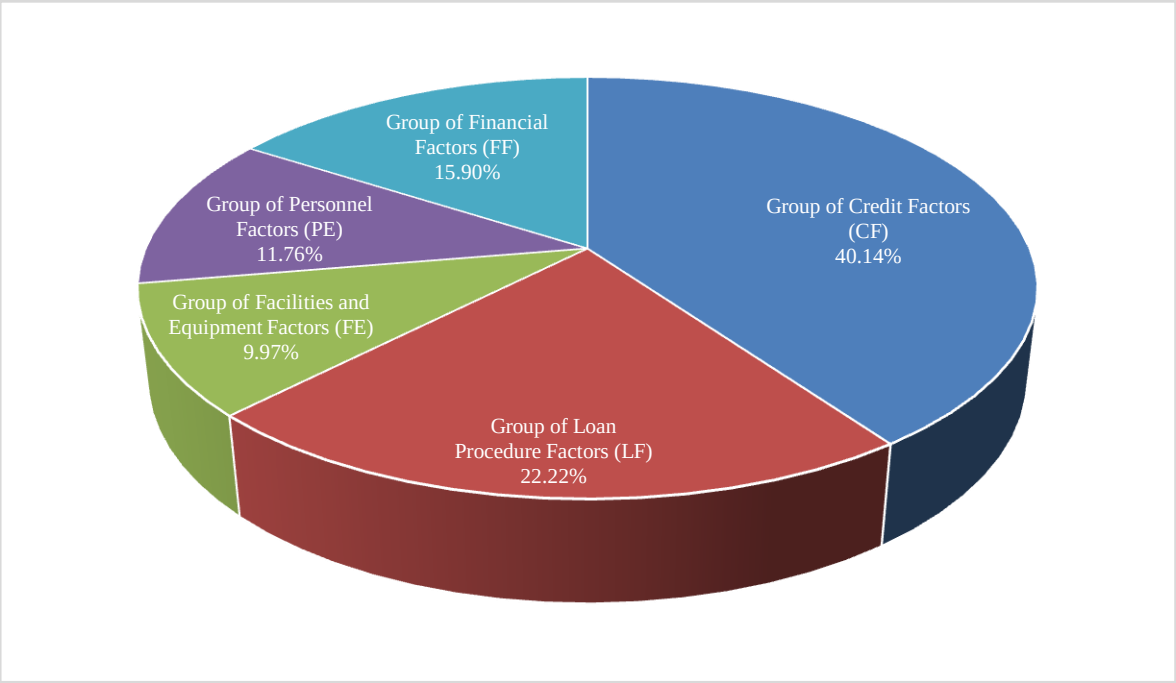

Figure 3. Impact Rates of Factor Groups on Real Estate Mortgage Registrants' Satisfaction

V. CONCLUSIONS

The satisfaction of real estate mortgage registrants is influenced by 17 factors belonging to 5 groups. The impact level of each factor group ranges from level I to level 4 (from very influential to little influential). Their impact rates ranged from 9.97% to 40.14%. Credit factors have the strongest impact, followed by groups of factors such as mortgage loan procedures, finance, human resources, facilities, and equipment. To increase people's satisfaction and encourage them to borrow more, contribute to socio-economic development, and implement mortgage registration, priority should be given to implementing solutions related to factors affecting their impact. It is necessary to have an appropriate policy on bank interest rates, time limit for application, loan disbursement, loan application; civil servant fees, mortgage registration; human resources, and facilities for mortgage registration. The study only focuses on assessing the impact of factors on the satisfaction of those registering a real estate mortgage, so it is necessary to further study the issues of real estate mortgage registration to only out the advantages, limitations, and causes to have a basis to come up with more specific solutions, suitable to the research area. The research method to determine the impact of factors on satisfaction can also be referred to when studying issues related to real estate mortgages in other localities in Vietnam and other countries.

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