



Journal of International Economics and Management

Journal homepage: <http://jiem.ftu.edu.vn>

Access to credit for real estate transactions in emerging markets - Empirical evidence from Vietnam

Khuc The Anh¹

National Economics University, Hanoi, Vietnam

Nguyen Manh Cuong

National Economics University, Hanoi, Vietnam

Nguyen Ha Anh

National Economics University, Hanoi, Vietnam

Vu Hoang Anh

National Economics University, Hanoi, Vietnam

Nguyen Quoc Tien

National Economics University, Hanoi, Vietnam

Received: 18 January 2023; **Revised:** 22 August 2023; **Accepted:** 25 August 2023

<https://doi.org/10.38203/jiem.024.1.0081>

Abstract

The growing disparity between the wealthy and the poor has become more evident than ever, as reflected in residents' housing conditions. Meanwhile, real estate credit is mainly directed towards the high-end segment, but mortgage cash flow for social and commercial housing in the low-mid range segment is still insufficient. Consequently, there is an asymmetry between the requirements for meeting housing needs and household income. This study investigates the impact of attitudes, credit accessibility, and policies on individuals' borrowing intentions in real estate transactions. Structural equation modeling was employed to analyze the data obtained from 889 Vietnamese respondents. The results show that policies and attitudes directly impact people's intentions to access credit. Meanwhile, credit accessibility indirectly affects this intention. These findings can serve as the basis for financial institutions to devise secure, accessible, and efficient loan policies for individuals with legitimate needs. Specifically, lending institutions should improve the quality of their services and increase their assistance to borrowers. The government should enact a stronger legal framework to address public housing demand and efficiently regulate the real estate market.

Keywords: Attitude, Credit accessibility, Real estate, Vietnam

¹ Corresponding author: anhkt@neu.edu.vn

1. Introduction

Real estate is becoming increasingly popular as a means of investment because of its exceptional returns, rapid expansion, and substantial economic impacts (Yunus *et al.*, 2012). In many emerging markets, the real estate market is a vital component of the economy and a crucial part of the financial system (Liu and Xiong, 2018). The revival of the economy, the development of business and manufacturing, and the resumption of operations following the COVID-19 pandemic have increased the demand for real estate, causing prices to rise steadily. Del Giudice *et al.* (2020) conclude that housing costs in metropolitan areas have skyrocketed, exceeding income growth and raising concerns about the harmful effects of income disparity, as it is challenging for most individuals to afford a house given their present wage levels. Consequently, there are two substantial issues for Vietnamese citizens and the government: the challenge of homeownership for low- and middle-income individuals and the formation of a real estate bubble, especially in densely populated areas. Therefore, real estate credit and people's attitudes towards real estate transactions in a market facing challenges and fluctuations must be studied carefully and thoroughly.

Credit accessibility for individuals and businesses has become an increasingly important topic worldwide. However, previous research has revealed some gaps. First, many studies provide superficial analyses of credit access issues, failing to explore credit concerns specific to the real estate sector. Second, most works that examine "credit accessibility" focus solely on capital borrowing and loan amounts, neglecting other factors that could influence personal investment decisions, particularly those related to real estate investment. Third, earlier investigations into the factors affecting access to credit and real estate transactions have primarily focused on developing countries, where financial intermediaries are the primary means of accessing capital for real estate purchases. However, in specific or emerging markets, many borrowers still prefer non-bank credit sources, such as borrowing from acquaintances. This study addresses these gaps by examining unique aspects of the research context in Vietnam.

Residential access to credit for house purchases has become incredibly challenging because of rising housing costs, legal issues in the real estate market, and the government's policy of limiting real estate credit. This study aims to assess the influence of attitudes and credit accessibility on individuals' borrowing intentions in real estate transactions. This research was conducted using both quantitative and qualitative methods. A total of 889 valid responses were collected using the quantitative method from respondents between the ages of 24 and 60 who resided in both urban and rural parts of Vietnam and had access to credit in real estate transactions. Ten experts were contacted for in-depth interviews using the qualitative method. The main results indicate that "Policies" and "Attitude" directly influence people's "Intention to access credit," and the indirect factor is "Credit accessibility". The proposed implications advocate the necessity for credit institutions to raise the caliber of their services and increase their support for borrowers.

Simultaneously, the government can establish a stronger legal framework to address public housing demand and efficiently regulate the real estate market. Theoretically, this study plays a pioneering role in exploring the relationship between individual credit accessibility and real

estate transaction intentions, as most prior studies have focused on the impact of access to credit on the intention to borrow or the impact of attitude on people's behavior intention, but these studies have not addressed issues related to the real estate sector (Rehman and Ahmed, 2008; Kisaka, 2014). The findings of this study also contribute to the theoretical model of real estate transaction intention that considers credit accessibility. Practically, this study's large sample size and diverse demographics represent the reality of credit accessibility for real estate transactions in Vietnam. Policy recommendations are suggested for policymakers and lending organizations to raise service standards, increase real estate credit effectiveness, and promote the stability and long-term growth of the real estate market in Vietnam.

The remainder of this study is organized as follows. Section 2 presents the literature review and develops hypotheses. Section 3 describes the methods and models. Section 4 discusses the results and policy implications to formulate appropriate recommendations for policymakers and financial institutions to promote credit accessibility in real estate transactions for transparent and sustainable development. Finally, section 5 concludes the study.

2. Literature review and hypothesis development

2.1 Intention to access credit in real estate transactions

Accommodation plays an essential function in the well-being of individuals in a country. Simultaneously, it poses the challenge of setting affordable housing standards for all people, especially the lower-middle-income class (Baqtaya *et al.*, 2016). The desire to use credit for personal housing purchases has grown in popularity as the economy and society have progressed. Utilizing borrowed money as a source of finance to enhance the asset base, invest in fixed assets, or change a company's business model leads to the intention to access credit, which is the goal of making money off the cash obtained from borrowing. The borrowers are responsible for repaying the loan and accrued interest within the stipulated timeframe at agreed-upon intervals (Enekwe *et al.*, 2014). Financial borrowers are increasingly more likely to use loans other than their own to finance investments or acquisitions of high-value assets, such as real estate or housing investments, and this tendency will likely continue in the future (Mirza *et al.*, 2016).

2.2 Hypothesis development

2.2.1 Government policies

Eberly and Krishnamurthy (2014) confirm that the government's real estate credit policies play a significant role in fostering and reviving the real estate market. The borrower's capacity to access credit sources and the loan interest rate are two critical aspects directly influenced by these regulations. Riyadi (2016) demonstrates a negative correlation between borrowing interest rates and borrowers' access to credit. In other words, if interest rates are high, borrowers will carefully weigh the risk of interest payments, negatively impacting the demand for loans to buy real estate. On the other hand, real estate credit rules can also encourage borrowers if they provide benefits in the form of interest rates, periods, and loan amounts (Devlin, 2002; Gupta and Sinha, 2015). Along with real estate financing rules, the government's investments

in infrastructure also support real estate market potential in particular regions. Therefore, the following hypothesis is proposed:

H1: Government policies have a positive impact on credit accessibility in real estate transactions.

Dale and McLaughlin (2000) showed that government policies regulating the real estate market provide sustainability and transparency, helping to boost investors' trust when participating in this market. Monitoring credit risks in the real estate industry and fulfilling tax regulations, lending procedures, and associated costs are necessary to establish market sustainability. Ajzen (1991) stated that these could positively affect the attitudes of individuals as they perceive the usefulness and convenience of making investments in the real estate market. For financial intermediaries such as banks, streamlined regulations on loan procedures, loan costs, and customer care services also help increase borrowers' positive attitudes (Wu *et al.*, 2016). Therefore, the following hypothesis is suggested:

H2: Government policies have a positive impact on the attitude of borrowers in real estate transactions.

Ajzen (1991) concluded that behavioral intention indicates an individual's willingness to perform a specific behavior, which is considered the premise of performing an actual behavior. Andersson *et al.* (2007) stated that if government policies are initiated to create considerable benefits for investors and individuals in the real estate market, it will encourage them to be willing to access credit in real estate transactions. These policies include real estate credit and loan activities such as taxes, interest rates, and credit limits. In addition, policies on infrastructure investment and stabilizing market regulations also encourage investors to access credit when participating in the real estate market. These regulations include credit and lending operations related to real estate, such as taxes, interest rates, and credit restrictions. In addition, policies on infrastructure investment and market regulations that stabilize prices attract investors to participate in the real estate market using borrowed capital. Therefore, the following hypothesis is developed:

H3: Government policies have a positive impact on the intention to access credit in real estate transactions.

2.2.2 The accessibility to real estate credit

Black (2020) concluded that the factors influencing accessibility to real estate credit can be divided into two main groups: borrower side and borrowing resource side. In terms of borrowers, Sayani and Miniaoui (2013) and Riyadi (2016) indicated that "interest" is one of the elements influencing people's intention to borrow money because it works as a fee that borrowers must pay to access the lender's capital. In the same way, Breeden (2016) added two more criteria, namely "financial capability" and "risk appetite", that similarly favor the borrower's ability to employ access to credit. While "risk appetite" displays the borrower's willingness to incur risks in exchange for their loan, "financial capacity" refers to a borrower's ability to repay, as

demonstrated by their income and demographic characteristics. “Collateral” is a requirement that credit-granting organizations and lenders impose on borrowers. Peshkov (2019) showed that the quantity of money granted to the borrower would grow with collateral value if the borrower offered it at a higher guaranteed level. Shilling and Wurtzebach (2012) and Islam *et al.* (2015) added another objective component to the supply and demand viewpoint of loanable funds by stating that “market opportunity” is also one of the most significant factors representing investors’ capacity to employ access to credit. Investors frequently pay particular attention to the future additional value and profit potential of investment assets, especially in the real estate market, or it may be inferred that they consider real estate market potential possibilities. Based on the above results, factors such as interest rate, financial capacity, the risk appetite of borrowers, collateral, and market opportunities are suggested to be indicative of real estate credit accessibility.

Marx and Turner (2019) indicated that loans can assist people with immediate financial demands such as shopping, investing, or meeting daily living expenditures. The more funding sources, the more lucrative the investment options for investors. It needs to be more flexible for borrowers to select a loan source according to their demands and ability to repay their obligations because of the wide range of credit sources from commercial banks, non-banking financial intermediaries, and investment funds. Ajzen (1991) stated that an individual’s attitude is positively influenced by perceived usefulness, perceived convenience, and social influence. Therefore, the following hypothesis is proposed:

H4: Credit accessibility has a positive impact on the attitude of borrowers in real estate transactions.

2.2.3 The attitude of borrowers

Ajzen (1991) stated that attitude directly affects an individual’s behavioral intention. Attitude towards a behavior is defined as an individual’s positive or negative judgment. These assessments were based on three reflective factors: “perception of usefulness,” “perception of convenience”, and “social influence”. Almosawi (2001), Sayani and Miniaoui (2013) found that factors influencing customers’ perceptions of the “usefulness” of official loans include “diversity of loan packages”, “loan programs with preferential interest rates”, “loan consulting services”, and “customers’ information security”. Meanwhile, borrowers are aware of the “convenience” of borrowing money if they easily acquire “access to loan information” and a quick approach to “borrowing procedures”. For borrowers’ attitudes towards the real estate, they intend to purchase, in addition to their “perception of usefulness and convenience” for that property, “social influence” is also a factor that reflects their attitudes and behaviors. Buying a house may be influenced by consumers’ perceptions of the social pressures others place on them, such as friends or family members, through advice and suggestions (Sangkakoon *et al.*, 2014).

Therefore, when applying the theory of planned behavior (TPB) of Ajzen (1991) to analyze the behavior of borrowers in real estate transactions, the research is based on three reflection factors: “perception of usefulness”, “perception of convenience” and “social influence”. Ajzen

(1991) stated that an individual will intend to take action if they evaluate it as positive. This view is consistent with Hayhoe *et al.* (1999) and Kisaka (2014), who came to the same conclusion that the “attitude” factor of borrowers has a positive influence on their intention to borrow. Gibler and Nelson (2003) and Summers *et al.* (2006) also showed that attitude toward the characteristics of real estate is one of the decisive factors affecting the behavior of individuals and their need for real estate transactions. Therefore, the following hypothesis is proposed:

H5: The attitude of borrowers has a positive impact on their intention to access credit in real estate transactions.

3. Research methods and research model

3.1 Methods

Qualitative and quantitative methods are employed simultaneously to accurately analyze and study the issue surrounding the factors influencing the intention to access credit in real estate transactions in Vietnam from the perspective of attitude and accessibility to real estate credit. The survey was conducted in several provinces in Vietnam from 02 October 2022 to 01 January 2023.

For qualitative research, we surveyed and collected data directly from experts in two ways: face-to-face at the café and online via Zoom. Ten experts were interviewed in-depth, and six answered questions concerning the practical application of real estate credit accessibility, while the other four offered insight into the field of research theory related to credit accessibility and real estate transactions. The experts were typically at ease sharing their experiences throughout the 20-40 minute interviews on credit accessibility and attitude, and most respondents knew the importance of accessibility to credit in real estate transactions. The interview data were recorded for up to one hour to determine the influencing elements. The results showed that interviewees supported the proposed hypotheses.

For quantitative research, we first constructed a preliminary questionnaire to consult the survey question ideas from previous research papers and received expert comments. The initial questionnaire was subsequently refined into an official version, and data were collected through two direct methods: online surveys distributed electronically, and paper forms completed in face-to-face interviews.

The observed variables were measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A total of 1,002 responses were collected using online forms and offline paper surveys, of which 113 were misinformed and dishonest, and 889 were valid after the initial data filtering process. Thus, the sample of 889 observations yielded a rate of 88.72%, guaranteeing appropriate sampling conditions. The survey sample structure was consistent, trustworthy, and wide-ranging; therefore, the study sample was qualified for further analysis (Hair *et al.*, 2017). Cronbach’s Alpha, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modeling (SEM) were employed to analyze the data using SPSS 26 and AMOS 24.

3.2 Research model

All factors in the model were built based on previous studies and adjusted after conducting qualitative research and obtaining expert advice. The team decided on the following proposed model.

This model measures the influence of attitudes, credit accessibility, and policies on borrowers' intentions in real estate transactions. The second-order factor "Credit accessibility" (AC) is represented by five reflecting latent variables: collateral (CL) has four items, interest rate (IR) has four items, financial capability (FC), risk appetite (RA) has four items, and market opportunity (MO) has three items. The second-order factor "Attitude" (AT) is represented by three reflecting latent variables: perception of usefulness (PU) has four items, perception of convenience (PC) has five items, and social influence (SI) has four items. The first-order factors: "Policies" (PL) has seven items and "Intention to access credit" (IU) has four items.

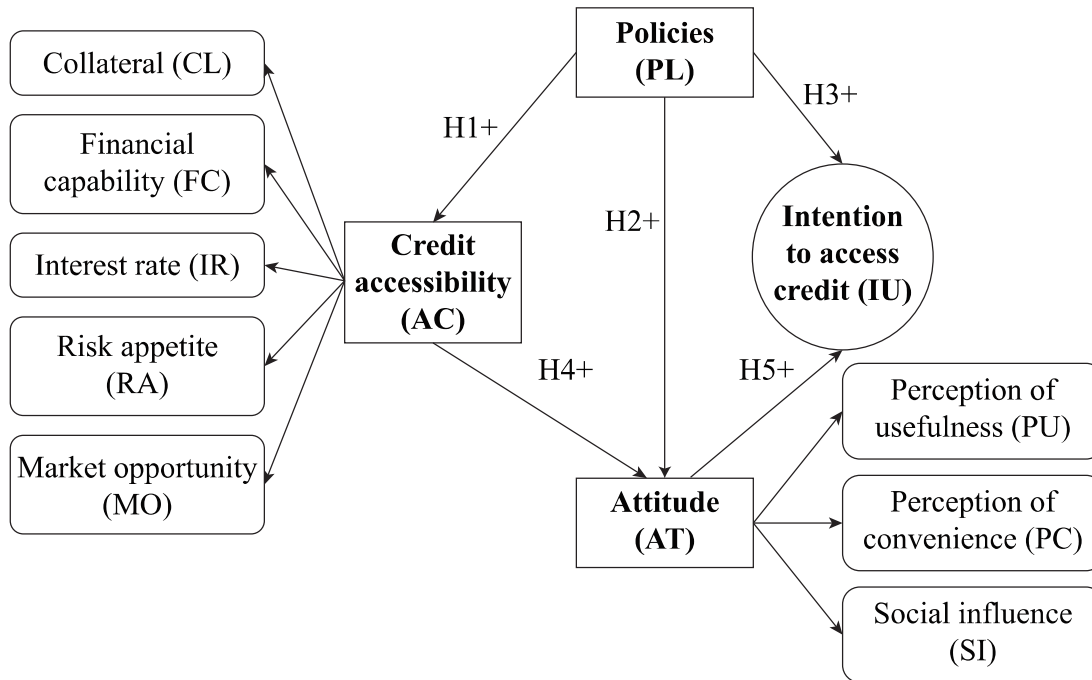


Figure 1. Preliminary research model

Source: Authors' suggestion

4. Results and discussion

4.1 Descriptive statistics of the study sample

The statistical results show that the proportion of men and women is relatively equal in the number of survey participants. The number of people aged 30-45, with the most significant number of survey participants, reached 353 (39.7%). The number of survey participants from urban areas accounted for most observations. Most survey respondents had an average income of less than 1,000 USD/month, which shows the difference between the high real estate price, the large population's low income, and the need for credit for real estate transactions. The

control variables in the descriptive statistics were evaluated to have results very close to the reality of the intention to access credit in real estate transactions in Vietnam.

Table 1. Descriptive statistics of the sample

Characteristics		Frequency	Ratio (%)
Gender	Male	383	43.1
	Female	506	56.9
Age (year)	24 - 30	289	32.5
	30 - 45	353	39.7
	45 - 60	209	23.5
	Above 60	38	4.3
Average monthly income (1 USD = 23,450 VND)	Below 1,000 USD	566	63.7
	1,000 - 2,000 USD	252	28.3
	Above 2,000 USD	71	8.0
Living area	Urban	665	74.8
	Countryside	224	25.2

Source: Authors' compilation

4.2 The results

The reliability of the scale was assessed using the internal consistency method with Cronbach's Alpha coefficient. Cronbach's Alpha was used before applying EFA to eliminate inappropriate variables.

Table 2. The results of Cronbach's Alpha

Construct	Eliminated observed variables	Cronbach's Alpha	Conclusion
CL	No	0.682	Accept
IR	No	0.857	Accept
FC	No	0.823	Accept
RA	No	0.774	Accept
MO	No	0.846	Accept
PU	No	0.829	Accept
PC	No	0.875	Accept
SI	No	0.796	Accept
PL	No	0.936	Accept
IU	No	0.827	Accept

Source: Authors' calculation

Table 2 shows that most of the scales used have Cronbach's Alpha coefficients greater than 0.7, so these scales ensure reliability. Only CL has a Cronbach's Alpha coefficient of 0.682

and less than 0.7 but is still within the acceptable threshold (Hair *et al.*, 2017). The correlation coefficient of the total variable of the observed variables greater than 0.3 is considered good.

The result of the KMO coefficient in Table 3 is 0.932, which is greater than 0.5, showing that the factor analysis is consistent with the research data. Bartlett’s test is 19,819.907 which is statistically significant, showing that the observed variables are correlated with the same factor.

Table 3. KMO and Bartlett’s test

KMO and Bartlett’s test		
Kaiser-Meyer-Olkin measure of sampling adequacy		0.932
Bartlett’s test of sphericity	Approx. Chi-Square	19819.907
	df	703
	Sig.	0.000

Source: Authors’ calculation

For the total variance extracted test, the total value of the variance extracted for the 9th factor is 68.985% (greater than 50%), and the eigenvalues for this factor are 1.007, showing that the observed variables begin to converge in nine factors, explaining 68.985% of the variation in the survey data. Therefore, after removing unsatisfactory factors, the remaining elements could represent the original survey data. This study uses a factor loading of the observed variables greater than 0.4 because the sample size was large enough. Moreover, the results show that the “perception of usefulness” and the “perception of convenience” combined into a new variable, named the “perception of convenience”, because it has more contributing factors. This is explained by the fact that, when accessing credit in real estate transactions, the boundary between usefulness and convenience is relatively thin, so the decision to combine is acceptable. Furthermore, the seller’s credibility factor and the future value increment factor are combined into a new variable named “credibility”. Because credibility includes future value increments, it seems that reputable sellers hardly lose value and have a steady increment in price.

Table 4. Summarize the reflective factors of the second-order construct

Second-order construct	First-order construct	Standardized regression weights	p-value	Conclusion
Credit accessibility (AC)	CL	0.587	***	Accept
	IR	0.572	***	Accept
	FC	0.835	***	Accept
	RA	0.545	***	Accept
	MO	0.779	***	Accept
Attitude (AT)	PC	0.777	***	Accept
	SI	0.742	***	Accept

Source: Authors’ calculation

The results in Table 4 show that all factors reflect well in second-order constructs with statistical significance. In order of contribution, the second-order construct AC includes FC, MO, CL, IR, and RA; the second-order construct AT includes PC and SI.

The CFA results show that all observed variables perform well, with a standardized regression coefficient greater than 0.5 and a p-value of 0.000 (less than 0.01). The criteria for measuring the model fit show that the Chi-square/df of 3.871 and less than 5 is acceptable. The goodness-of-fit index (GFI) coefficient of 0.871 ranges from 0.8 to 0.9, but it is still acceptable (Homburg and Baumgartner, 1995). Other model fit criteria meet the testing standard with a comparative fit index (CFI) value of 0.908 (greater than 0.9), Tucker-Lewis index (TLI) of 0.900, and root mean square error of approximation (RMSEA) of 0.057 (less than 0.06).

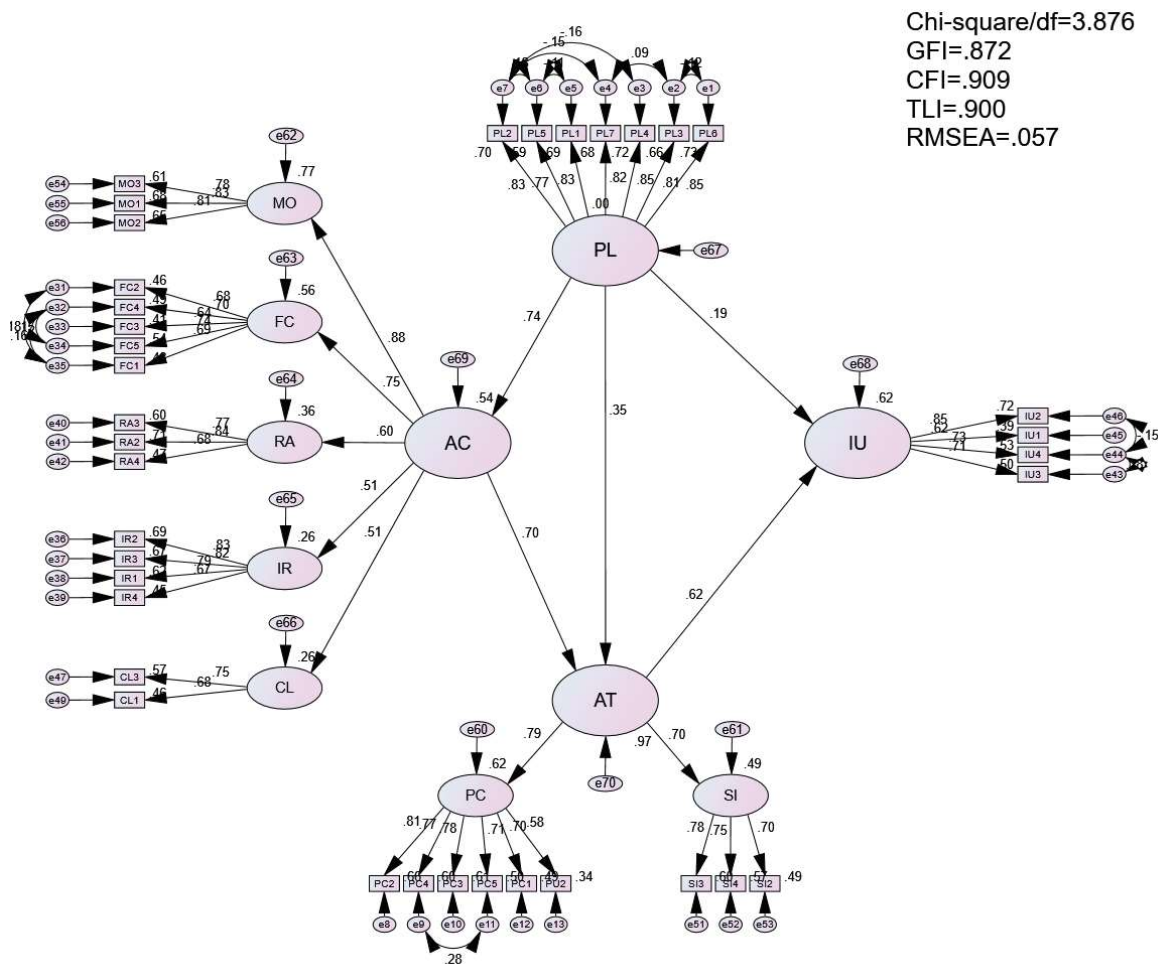


Figure 2. SEM results

Source: Authors' calculation

The SEM results show that the Chi-square/df of 3.876, less than 5, should be considered acceptable. The GFI coefficient of 0.872 falls within the range from 0.8 to 0.9, which is still acceptable (Hair *et al.*, 2014). Other model fit criteria meet the testing standard with a CFI value of 0.909, TLI of 0.900, and RMSEA of 0.057 (less than 0.06).

Table 5. Hypothesis testing results

Hypothesis	Relationship			Standardized regression weights	p-value	Conclusion
H1	AC	←	PL	0.737	***	Accept
H2	AT	←	PL	0.348	***	Accept
H3	IU	←	PL	0.192	0.011	Accept
H4	AT	←	AC	0.701	***	Accept
H5	IU	←	AT	0.618	***	Accept

Source: Authors' calculation

The results in Table 5 show that most of the hypotheses are accepted at the 1% level (99% confidence level), especially H3, which is significant at the 5% level (95% confidence level). The regression coefficient shows that the impact of H1 is 0.737, which is the largest among all factors. The factors strongly influenced by H4, H5, and H2 have standardized regression coefficients of 0.701, 0.618, and 0.348, respectively. The level of impact of H3 is the lowest, with a standardized regression coefficient of 0.192.

Table 6. Overall indirect impact assessment

Relationship			Standardized regression weights	p-value	Conclusion
AT	←	PL	0.517	0.007	Accept
IU	←	PL	0.535	0.007	Accept
IU	←	AC	0.433	0.009	Accept

Source: Authors' calculation

Based on the results in Table 6, the indirect effects among most of the variables have a p-value of less than 0.01, and the standardized regression coefficient of the indirect impacts shows that the effect of PL on IU is the strongest at 0.535, followed by the effect of PL on AT at 0.517. The indirect impact of AC on IU was minimal, with a standardized coefficient of 0.433.

4.3 Discussion

The results indicate that the first hypothesis (H1) is consistent with Devlin (2002) and Gupta and Sinha (2015). The results of this study indicate that those surveyed agree that policies enacted by the government and credit intermediaries positively impact access to credit. The policies of the government and intermediary credit institutions, along with the diversity of banks' loan products, especially the provision of preferential interest rates and loan package limits, have created favorable conditions for borrowers in many target segments. Residents with low incomes and individuals with difficulty obtaining loans due to limited financial capabilities have increased their credit accessibility due to these policies. The implication is that the government and financial intermediaries need to continue expanding the policy on

diversifying loan packages for more subjects and preferential policies on interest rates for suitable customers. Regulations on loan conditions, including interest rates, mortgages, and other factors, have been reviewed and revised to be more favorable to different groups under different circumstances. This increased the possibility of people accessing credit to invest in real estate and other assets.

This result shows that the second hypothesis (H2) is in line with Dale and McLaughlin (2000) and Wu *et al.* (2016), who showed that policies significantly impact how people feel about participating in real estate transactions. Government regulations on real estate transaction processes and tax regulations have helped the real estate market to become more sustainable and transparent. Along with streamlining and simplifying loan procedures, customer care has positively impacted individuals who find investing in real estate with borrowed capital convenient and helpful. The revised regulations have facilitated borrowers' access to and understanding of relevant policies, enabling them to make loan decisions aligned with their needs and capabilities. Credit institutions have adjusted their loan procedures and customer care practices, resulting in a more convenient and useful investment experience for individuals interested in real estate. The proposed policy government should deliver precise and timely information about the real estate market to individuals, and financial intermediaries should be aware of loan terms and procedures.

The third hypothesis (H3) is consistent with that of Andersson *et al.* (2007). When the government maintains policies to guarantee sustainable real estate market growth, promotes the role of bank credit capital, and diversifies real estate credit programs, investors tend to be more willing to access real estate credit. Therefore, strict regulations should be established to secure real estate market development and diversify the attainable credit policies. Real estate credit should be managed with flexibility and with the support of synchronous monetary policy tools to free up credit capital for socioeconomic development. State management agencies must closely monitor and effectively manage real estate credit flows, stay up to date with the credit-granting situation in the real estate sector, and implement timely solutions to ensure safe, effective, and sustainable credit growth.

The fourth hypothesis (H4) is aligned with Marx and Turner (2019). Individuals find that accessing real estate credit is the best alternative to deal with the capital burden of real estate transactions. In addition, various credit programs from commercial banks and other credit institutions or loans from relatives can help individuals easily determine loan packages that fit their needs. It is suggested that the government and financial intermediaries should strengthen policies and regulations to broaden individuals' access to credit, which includes identifying recipients for special loan programs, offering favorable interest rates, and easing collateral requirements, especially for social housing and residences targeted at low-income individuals. Such measures would encourage individuals to purchase homes for personal use and discourage speculative behavior. Credit institutions should simplify loan processes and diversify their credit programs based on borrowers' financial capabilities. These measures positively impact borrowers' attitudes towards credit.

The fifth hypothesis (H5) is consistent with Ajzen (1991), Almossawi (2001), and Sayani and Miniaoui (2013). People can better actualize their desire to obtain real estate credit when they perceive it to be beneficial, including a range of loan options, credit programs with advantageous interest rates, customer service, and the convenience of capital borrowing processes from commercial banks. Therefore, financial intermediaries are advised to create policies to strengthen borrowers' favorable attitudes towards obtaining real estate credit, such as appropriate loan programs for many borrowers, shorter loan approval times, and advisory services to help borrowers choose the best loan option based on their needs.

Moreover, credit accessibility has a positive indirect effect on the intention to access credit in real estate transactions. Although the ability to access real estate credit has no direct influence on the intention to access it, there are positive indirect effects on the intention to access real estate credit. This can be explained by the wide range of borrowers' financial capacities. Determining the direct influence on respondents' intention to use credit in real estate purchases is challenging because of their varied income levels and personal characteristics. Commercial banks and other financial intermediaries should broaden their conventional and preferred loan packages with interest rates that depend on various demographic criteria to provide individuals with more options. This encourages access to real estate credits.

5. Conclusion

This study aims to expand the theoretical framework and provide empirical evidence of the factors influencing the intention to access credit in real estate transactions based on the attitudes and credit accessibility of people in Vietnam. The remarkable findings show that the factors "Policies" and "Attitude" that directly influence the "Intention to access credit", and "Credit accessibility" is the indirect factor. In particular, "Credit accessibility" plays an intermediary role in the correlation between the factors "Policies," "Attitude," and "Intention to access credit". The results also provide insights into the interwoven relationship between these factors, thereby creating a basis for directing real estate credit capital flows to the right segments and making appropriate policies. Therefore, it contributes to solving the problem of satisfying residents' housing needs and limiting the possibility of forming a real estate bubble. These outcomes also serve as a foundation for financial institutions to develop policies suitable for offering loans in a secure, open, and efficient manner to individuals with genuine needs.

This study has some limitations. First, there is yet to be a comparison of the intention to access credit in real estate transactions between the group with knowledge and experience in finance and real estate, and the group with little knowledge and experience. The study will be more complete if the factor "Financial literacy" is added to analyze the influence of financial knowledge on "Intention to access credit". Second, there is no comparison of the intention to access credit in different real estate segments, which suggests including "real estate features" in future studies. Finally, the recommendations have not been examined in practice; therefore, their effectiveness has not been evaluated. Future research should be conducted from the perspective of credit institutions and policymakers.

References

- Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179 - 211.
- Almossawi, M. (2001), "Bank selection criteria employed by college students in Bahrain: an empirical analysis", *International Journal of Bank Marketing*, Vol. 19 No. 3, pp. 115 - 125.
- Andersson, E., Naumanen, P., Ruonavaara, H. and Turner, B. (2007), "Housing, socio-economic security and risks. A qualitative comparison of household attitudes in Finland and Sweden", *European Journal of Housing Policy*, Vol. 7 No. 2, pp. 151 - 172.
- Baqutaya, S., Ariffin, A.S. and Raji, F. (2016), "Affordable housing policy: issues and challenges among middle-income groups", *International Journal of Social Science and Humanity*, Vol. 6 No. 6, pp. 433 - 436.
- Black, L.K., Krainer, J.R. and Nichols, J.B. (2020), "Safe collateral, arm's-length credit: evidence from the commercial real estate market", *The Review of Financial Studies*, Vol. 33 No. 11, pp. 5173 - 5211.
- Breeden, J.L. (2016), "Incorporating lifecycle and environment in loan-level forecasts and stress tests", *European Journal of Operational Research*, Vol. 255 No. 2, pp. 649 - 658.
- Dale, P. and McLaughlin, J. (2000), *Land administration*, Oxford University Press, Oxford.
- Del Giudice, V., De Paola, P. and Del Giudice, F.P. (2020), "Covid-19 infects real estate markets: short and mid-run effects on housing prices in Campania region (Italy)", *Social Sciences*, Vol. 9 No. 7, pp. 1 - 18.
- Devlin, J.F. (2002), "An analysis of choice criteria in the home loans market", *International Journal of Bank Marketing*, Vol. 20 No. 5, pp. 212 - 226.
- Eberly, J. and Krishnamurthy, A. (2014), "Efficient credit policies in a housing debt crisis", *Brookings Papers on Economic Activity*, Vol. 2014 No. 2, pp. 73 - 136.
- Enekwe, C.I., Ikechukwu, A.C. and Nnagbogu, E.K. (2014), "The effect of financial leverage on financial performance: evidence of quoted pharmaceutical companies in Nigeria", *IOSR Journal of Economics and Finance*, Vol. 5 No. 3, pp. 17 - 25.
- Gibler, K. and Nelson, S. (2003), "Consumer behavior applications to real estate education", *Journal of Real Estate Practice and Education*, Vol. 6 No. 1, pp. 63 - 83.
- Gupta, U. and Sinha, R. (2015), "A comparative study on factors affecting consumer's buying behavior towards home loans (with special reference to State Bank of India and life insurance corporation, Allahabad)", *IOSR Journal of Business and Management*, Vol. 2 No. 17, pp. 13 - 17.
- Hair, J.F., Sarstedt, M., Hopkins, L. and Kuppelwieser, V.G. (2014), "Partial least squares structural equation modeling (PLS-SEM)", *European Business Review*, Vol. 26 No. 2, pp. 106 - 121.
- Hair, J.F., Sarstedt, M., Ringle, C.M. and Gudergan, S. (2017), *Advanced issues in partial least squares structural equation modeling*, SAGE Publications Inc., Los Angeles.
- Hayhoe, C.R., Leach, L. and Turner, P.R. (1999), "Discriminating the number of credit cards held by college students using credit and money attitudes", *Journal of Economic Psychology*, Vol. 20 No. 6, pp. 643 - 656.

- Homburg, C. and Baumgartner, H. (1995), "Beurteilung von kausalmodellen. Bestandsaufnahme und anwendungsempfehlungen", *Marketing ZFP*, Vol. 17 No. 3, pp. 162 - 176.
- Islam, A., Nguyen, C. and Smyth, R. (2015), "Does microfinance change informal lending in village economies? Evidence from Bangladesh", *Journal of Banking & Finance*, Vol. 50, pp. 141 - 156.
- Kisaka, S.E. (2014), "The impact of attitudes towards saving, borrowing and investment on the capital accumulation process in Kenya: an application of the theory of planned behavior", *Research Journal of Finance and Accounting*, Vol. 9 No. 5, pp. 140 - 152.
- Liu, C. and Xiong, W. (2018), *China's real estate market*, National Bureau of Economic Research, Cambridge, Massachusetts.
- Marx, B.M. and Turner, L.J. (2019), "The benefits of borrowing: evidence on student loan debt and community college attainment", *Education Next*, Vol. 1 No. 9, pp. 70 - 77.
- Mirza, N., Rahat, B. and Reddy, K. (2016), "Financial leverage and stock returns: evidence from an emerging economy", *Economic Research-Ekonomiska Istraživanja*, Vol. 29 No. 1, pp. 85 - 100.
- Peshkov, A.V. (2019), "Remote mortgage lending as a resource for housing development", *IOP Conference Series: Materials Science and Engineering*, Vol. 667 No. 1, 012073.
- Rehman, H.U. and Ahmed, S. (2008), "An empirical analysis of the determinants of bank selection in Pakistan: a customer view", *Pakistan Economic and Social Review*, Vol. 46 No. 2, pp. 147 - 160.
- Riyadi, S. (2016), "The influence of capital structure, growth, company size to profitability and company value of manufacture firms listed in Indonesia Stock Exchange", *International Journal of Business and Finance Management Research*, Vol. 4 No. 6, pp. 80 - 101.
- Sangkakoon, P., Ngarmyarn, A. and Panichpathom, S. (2014), "The influence of group references in home purchase intention in Thailand", in *21st Annual European Real Estate Society Conference (ERES: Conference)*, The European Real Estate Society, Bucharest.
- Sayani, H. and Miniaoui, H. (2013), "Determinants of bank selection in the United Arab Emirates", *International Journal of Bank Marketing*, Vol. 31 No. 3, pp. 206 - 228.
- Shilling, J. and Wurtzebach, C. (2012), "Is value-added and opportunistic real estate investing beneficial? If so, why?", *Journal of Real Estate Research*, Vol. 34 No. 4, pp. 429 - 462.
- Summers, T.A., Belleau, B.D. and Xu, Y. (2006), "Predicting purchase intention of a controversial luxury apparel product", *Journal of Fashion Marketing and Management: An International Journal*, Vol. 10 No. 4, pp. 405 - 419.
- Wu, J., Si, S. and Wu, X. (2016), "Entrepreneurial finance and innovation: informal debt as an empirical case", *Strategic Entrepreneurship Journal*, Vol. 10 No. 3, pp. 257 - 273.
- Yunus, N., Hansz, J.A. and Kennedy, P.J. (2012), "Dynamic interactions between private and public real estate markets: some international evidence", *The Journal of Real Estate Finance and Economics*, Vol. 45 No. 4, pp. 1021 - 1040.