

Loan accessibility for social housing in Vietnam's Mekong Delta: An empirical study



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ARTICLE INFO

Article history:

Received 7 October 2023

Received in revised form

10 February 2024

Accepted 9 March 2024

Keywords:

Social housing loans

Low-income workers

Vietnam bank for social policy

Loan accessibility

Binary logistic regression

ABSTRACT

The purpose of this study is to examine how easily low-income workers can get loans for social housing projects under a Vietnamese government policy. This policy, outlined in Decision 388/QĐ-TTg by the Prime Minister on April 3, 2023, aims to build at least 1 million apartments for low-income individuals and industrial park workers from 2021 to 2030. The study focuses on four branches of the Vietnam Bank for Social Policy (VBSP) in the Mekong Delta region: Tra Vinh, Vinh Long, Ben Tre, and Soc Trang provinces. The research involved surveying 280 workers who applied for loans at these banks between May 2003 and September 2023. Half of these applicants met the loan criteria, while the other half did not. Using a Binary logistic regression model, the study identified several factors that influence the likelihood of obtaining a social housing loan from VBSP. These factors include the applicant's age, education level, number of dependents, marital status, total income, equity ratio, and the value of collateral. Among these, the total income, value of collateral, and equity ratio were found to have the most significant effect on loan accessibility. Based on the findings, the authors suggest policy recommendations to make it easier for low-income workers to access loans for social housing in the future, enhancing the effectiveness of the VBSP's lending program in the Mekong Delta.

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1. Introduction

The Vietnamese Government has implemented a significant policy aimed at bolstering social security through the support of social housing for low-income workers. This initiative is particularly directed towards those employed in industrial parks. In line with this objective, the Prime Minister ratified Decision 388/QĐ-TTg on April 3, 2023, which endorses the project to construct at least 1 million apartments for low-income individuals and industrial park workers over the 2021-2030 period (Hoa and Tuyen, 2021).

In April 2020, in response to rising housing demands from workers, the Vietnamese Government and the National Assembly Standing Committee allocated an additional 3,000 billion VND for social housing policies. Of this, the Policy Bank received 1,000 billion VND, and the remaining 2,000 billion

VND was distributed among four state-designated commercial banks. Additionally, the State Bank of Vietnam's Governor issued Decision No. 2196/QĐ-NHNN, setting a 4.8% annual interest rate for loans related to social housing purchases or rentals, and this rate was extended into 2022 under Decision 1956/QĐ-NHNN.

In the Mekong Delta, the development of social housing is challenged by a significant demand that far exceeds the limited supply. This imbalance is largely due to population increases outpacing the available residential space, slower rates of urbanization compared to urban population growth, and the focus of real estate developers on mid to high-end market segments. To address these issues, local policies are being implemented to enhance the provision of social housing for low-income residents, aiming to improve both social security and economic growth in the region.

This policy has been established, yet accessing these funds for social housing remains challenging for many employees who seek to borrow but are unable to secure loans. The question arises: what are the obstacles preventing low-income individuals from obtaining this financial support? In the Mekong Delta, Social Policy Banks have enhanced their efforts to publicize and implement the social housing

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<https://doi.org/10.21833/ijaas.2024.03.021>

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loan program as per Government Decree 100/2015/ND-CP. This initiative, featuring several appealing incentives, aims to facilitate loan acquisition for low-income families to purchase or rent-purchase social housing, as well as to construct, refurbish, or repair their homes, thereby stabilizing their living conditions. Despite these measures, the actual process of securing these funds is fraught with hurdles, with bank disbursement rates lingering at only 23% (VBSP, 2023).

Despite numerous social housing projects in the Mekong Delta provinces, low-income workers still struggle to access loans under Government Decree 100/2015/ND-CP. This raises the question: why is it so difficult for these individuals to obtain loans for social housing as promoted by the government? Consequently, it is imperative to devise effective solutions that enable easier loan access and borrowing from the Vietnam Bank for Social Policies (VBSP) in the Mekong Delta. Such measures would assist low-income residents in establishing stable, permanent housing. Although public interest in the social housing loan program is high, there is a noticeable lack of research on this topic in Vietnam, particularly studies focusing on loan access through the VBSP social housing loan program in the Mekong Delta provinces.

2. Literature review

Factors such as marital status, education, income, the number of dependents, and reliance on informal loans can impact low-income individuals' ability to access bank loans for purchasing social housing (Lin et al., 2019). Consequently, there is a need for policies that can mobilize both domestic and international capital to help these individuals secure long-term financing. These policies should also streamline administrative procedures related to bank loans for building and purchasing community housing. In Can Tho City, for instance, there is significant demand for housing among workers; about 67% of workers intend to buy a house, with 12.5% planning to do so at the start of their careers. Most workers (78%) are looking for homes priced at 200 million VND or less and with an area not exceeding 60 m². Factors affecting housing demand include house prices, income levels, cultural preferences, existing policies, psychological factors, population size, administrative processes, and interest rates on loans.

To access bank loans for housing, customers must demonstrate a sufficient age and a minimum total monthly income of 16 million VND to cover principal and interest payments of about 10 million VND per month. Additional collateral is required for loans covering up to 90% of the property value.

Tran (2011) showed that there are six factors affecting the trend and ability to develop housing credit for middle and low-income people of commercial banks in Ho Chi Minh City. Ho Chi Minh City is sorted by level of impact in descending order as follows: Special preferential policies, capital

sources, collateral, loan value, credit management mechanism, and ability to accumulate and repay debt.

Nguyen et al. (2019) surveyed 1,000 people about homebuyers' access to credit and housing satisfaction of households buying cheap apartments in specific Vietnamese cities: Hanoi, Da Nang, and Ho Chi Minh. Research results show that access to preferential home loans has a strong positive impact on housing satisfaction after controlling for all other factors in the model. Favorable home loan programs play an important role in helping low-income households own affordable apartments and increase their housing satisfaction.

Ho and Kwong (2002) examined the factors influencing the likelihood of owning commercial housing in Guangzhou. Their findings indicated that several variables play a significant role, including the age and gender of the household head, their level of education, occupation, total income, and the number of women in the household. Specifically, age, gender, education, and total household income were found to have a positive impact on owning housing. In contrast, the occupation of the household head and the number of dependents showed a negative correlation with the ability to access capital for purchasing social housing.

Pan (2004) identified several factors that affect the likelihood of securing loans for purchasing houses in social housing projects. These factors include the age of the applicant, whether they are a party member, their healthcare provisions, job grade, length of employment, whether they are regular employees, total household income, and the presence of collateral. Specifically, age, party membership, length of employment, healthcare benefits, job grade, household income, and available collateral positively influence the ability to access housing loans.

Wang et al. (2014) applied the Logit model to analyze the accessibility of housing loans for low-income individuals in urban China, specifically focusing on the city of Dalian in Liaoning province. They collected primary data through direct interviews with 760 households selected using a convenient random sampling method. The study found that factors such as gender, marital status, education level, income, and duration of employment were significantly associated with the likelihood of securing loans from the Savings Fund loan program for purchasing social housing.

Wang et al. (2018) investigated home ownership in urban areas of China, focusing on the characteristics of borrowers and the Kunming Housing Supply Fund program. Their analysis using a binary logistic regression model revealed that factors such as marital status, education level, age, length of employment, and employer significantly impact the likelihood of utilizing Housing Provident Fund (HPF) loans for home ownership.

The existing literature predominantly explores the accessibility of social housing loans within specific regions or cities. However, there appears to

be a gap in research specifically addressing low-income workers in industrial parks and export processing zones in the Mekong Delta, particularly regarding their access to loans for purchasing social housing under government policies and guidelines in Vietnam. Studies have identified several factors influencing loan accessibility for social housing, such as marital status, education level, income, number of dependents, and informal borrowing practices. Furthermore, analytical approaches like multiple and binary logistic regression models are commonly employed to assess these factors. This study aims to employ the binary logistic regression model to identify factors impacting the accessibility of social housing loan programs offered by the VBSP in the Mekong Delta region of Vietnam. This approach will help determine the specific needs and barriers faced by low-income workers in this area, contributing to more targeted and effective policy interventions.

3. Research methodology

Building on the research of other scholars (Wang et al., 2018; 2014), the author summarizes the influence of various factors on the accessibility of social housing loans as identified in prior studies. Additionally, the research model of Greene (2003) is adopted. The summarized results of each factor and their impact on loan accessibility are detailed in Table 1. This approach allows for a comprehensive understanding of the factors that have been previously studied and how they contribute to accessing social housing loans:

$$\ln \frac{p}{1-p} = \beta_0 + \beta_1 \text{Gender} + \beta_2 \text{Age} + \beta_3 \text{Education level} + \beta_4 \text{Number of dependents} + \beta_5 \text{Marital status} + \beta_6 \text{Income} + \beta_7 \text{Equity capital} + \beta_8 \text{Collateral} + \varepsilon$$

where, Y is a dependent variable of binary form (dummy) showing the factors affecting the accessibility to the social housing loan program at VBSP in Mekong Delta. Y=1: If surveyed customers can access loans from the social housing loan program at VBSP in the Mekong Delta. Y=0: If

surveyed customers cannot access loans from the social housing loan program at VBSP in the Mekong Delta. β_0 is intercept. β_1 to β_8 are the coefficients for the predictors.

In Table 1, the research model incorporates eight independent variables derived from prior studies. These variables are the borrower's gender, age, education level, number of dependents, marital status, income, capital, and collateral. Each variable has been chosen based on its relevance and frequency of appearance in related research, highlighting their potential impact on the accessibility of social housing loans.

After compiling data from two groups, a random sampling method was utilized to select a total of 280 customers, divided equally into two groups: 140 individuals who were able to secure loans and 140 who were not, from the housing loan program at four Vietnam Bank for Social Policy branches from May 2003 to September 2023. Each bank, following the convenience sampling method, chose 70 survey participants, split evenly between those who had access to loans and those who did not. Information was gathered using a questionnaire administered directly to 280 borrowers who received funds from the program to buy social housing. The Binary logistic regression model was applied to analyze the factors influencing the accessibility to the social housing loan program at these banks in the Mekong Delta, Vietnam.

4. Research results and discussion

4.1. Research results

The Binary logistic model was employed to analyze factors that influence accessibility to the social housing loan program at the VBSP in the Mekong Delta. Prior to presenting the model's findings, several necessary tests were conducted to verify the model's suitability, using accessibility to the social housing loan program as the dependent variable, along with eight independent variables.

Table 1: Interpretation of variables in the regression model

Variable	Interpretation of variable	Unit	Expected sign	Reference
Gender (X ₁)	Borrower's gender	1: Male 0: Female	+	Ho and Kwong (2002) and Wang et al. (2014)
Age (X ₂)	Borrower's age	Years	+	Ho and Kwong (2002), Pan (2004), Tran (2011), and Pan (2004)
Education level (X ₃)	Borrower's education level	Class	+	Ho and Kwong (2002), Wang et al. (2014), and Tran (2011)
Number of dependents (X ₄)	Number of dependents in the borrower's family	People	-	Wang et al. (2018), Ho and Kwong (2002), Nguyen et al. (2019), and Tran (2011)
Marital status (X ₅)	Borrower's marital status	1: Married 0: Other (divorced, unmarried, etc.)	+	Wang et al. (2014)
Income (X ₆)	Borrower's total income	Million VND	+	Ho and Kwong (2002), Pan (2004), and Wang et al. (2014)
Equity capital (X ₇)	Equity capital ratio	%	+	Ho and Kwong (2002) and Pan (2004)
Collateral (X ₈)	Collateral value of borrower	Million VND	+	Ho and Kwong (2002), Wang et al. (2014), and Tran (2011)

The results, as detailed in Table 2, demonstrate that the independent variables are appropriate for

explaining variability in program accessibility, indicated by a significant Prob>Chi2 value of 0.000.

Additionally, the model's accuracy rate in predicting correct outcomes is 82.86%, suggesting that the

Binary logistic model is highly effective in forecasting loan accessibility within this context.

Table 2: Regression results

Variable	β	Standard error	P	dy/dx
Constant (C)	-10.967	2.194	0.000	
Gender (X ₁)	0.500 ^{ns}	0.031	0.319	0.124
Age (X ₂)	0.074**	0.536	0.016	0.018
Education level (X ₃)	1.179**	0.354	0.028	0.285
Number of dependents (X ₄)	-0.875**	0.491	0.013	-0.219
Marital status (X ₅)	1.196**	0.098	0.015	0.291
Income (X ₆)	0.377***	0.027	0.000	0.094
Equity capital (X ₇)	0.073***	0.001	0.007	0.018
Collateral (X ₈)	-0.003***	0.001	0.010	0.001
Number of Obs	280			
Pseudo R2	0.4453			
LR chi2 (8)	86.37			
Prob > chi2	0.000			
Log-likelihood	-53.796			
Correctly classified	82.86%			

***: With level of significance 99%; **: With level of significance 95%; ns: non statistical

4.2. Discussion

The age of the borrower (X₂) has a positive and significant correlation at the 5% significance level with access to the social housing loan program at the VBSP in the Mekong Delta. The results indicate that as the age of the household head increases, so does the likelihood of accessing these loans. Specifically, survey data suggest that borrowers aged between 34 to 44 years have easier access to loans compared to younger applicants. This finding supports the initial hypotheses of the study and aligns with previous research by [Ho and Kwong \(2002\)](#) and [Pan \(2004\)](#), demonstrating that each additional year in the borrower's age increases the likelihood of accessing the loan program in Tra Vinh province by 1.8%.

The level of education (X₃) is significantly correlated with access to the social housing loan program at the VBSP in the Mekong Delta, as evidenced by the 5% level of significance. The findings indicate that borrowers with at least a college or university education have a higher likelihood of accessing loans compared to those with intermediate or lower levels of education. Survey data reinforce this, showing that customers with higher educational qualifications find it easier to secure loans than those with less education. These results align with the researcher's initial expectations and corroborate findings from previous studies by [Ho and Kwong \(2002\)](#) and [Wang et al. \(2014\)](#), highlighting a distinct advantage in loan accessibility for more educated borrowers in the Mekong Delta region.

The number of dependents (X₄) has a negative and significant relationship with the accessibility to the social housing loan program at the VBSP in the Mekong Delta, demonstrated at the 5% level of significance. The results indicate that households with a greater number of dependents have lower access to these loans. Surveys reveal that customers who successfully secure loans generally have fewer dependents. These findings are consistent with the researcher's initial expectations and align with previous research by [Ho and Kwong \(2002\)](#).

Specifically, an increase of one dependent in a borrower's family is associated with a 21.9% decrease in the likelihood of accessing the social housing loan program at VBSP in the Mekong Delta.

Marital status (X₅) positively and significantly impacts access to the social housing loan program at the VBSP in the Mekong Delta, as evidenced by the 5% level of significance. This finding indicates that married borrowers have a higher likelihood of obtaining loans compared to their unmarried counterparts. Survey results suggest that married customers typically secure loans more frequently because they benefit from a combined income and the presence of a co-payer. These findings align with the author's initial expectations and are consistent with the research conducted by [Wang et al. \(2014\)](#). Specifically, being married increases the probability of accessing the social housing loan program at VBSP by 29.1% compared to unmarried individuals.

The borrower's income variable (X₆) demonstrates a positive and significant correlation at the 1% significance level with the accessibility to the social housing loan program at the VBSP in the Mekong Delta. This relationship indicates that families with higher incomes have better access to these loans. Survey data support this finding, showing that loan recipients typically come from families with relatively high incomes. These results are consistent with prior expectations and corroborate findings from earlier studies by [Ho and Kwong \(2002\)](#), [Pan \(2004\)](#), and [Wang et al. \(2014\)](#). Specifically, a 1 million VND increase in the borrower's income enhances the likelihood of accessing the social housing loan program at VBSP by 9.4%.

Equity capital (X₇) shows a positive and significant relationship at the 1% significance level with access to the social housing loan program at the VBSP in the Mekong Delta. This finding suggests that borrowers with a higher equity ratio have better loan accessibility. Survey data indicate that customers with larger capital sources find it easier to secure loans. Specifically, a 1% increase in a customer's equity ratio enhances their ability to

access the social housing loan program at VBSP by 1.8%.

Collateral (X8) also demonstrates a positive and significant correlation at the 1% significance level. The data reveal that the greater the value of the borrower's collateral, the higher the likelihood of accessing the social housing loan program at VBSP. Customers who possess substantial collateral, particularly those who already own collateral other than the house they intend to purchase, are more likely to obtain a loan. This aligns with previous research by [Tran \(2011\)](#) and [Pan \(2004\)](#). Notably, when the value of the customer's collateral increases by 1 million VND, the accessibility to the loan program at VBSP increases by 0.1%.

In the study, gender (X1) was found to be not significant in the model, indicating that gender equality has advanced to a point where there is no longer a distinction between male and female borrowers in terms of accessing loans for social housing at the VBSP in the Mekong Delta. This suggests that the gender of the borrower does not impact their ability to secure a loan for purchasing social housing, reflecting broader trends toward gender equality in financial services ([Belingheri et al., 2021](#)).

5. Policy implications to improve loan accessibility for social housing in Vietnam

5.1. Borrower's age and education level factor

Research findings indicate that older household heads have a higher likelihood of accessing the social housing loan program offered by the VBSP in the Mekong Delta. Consequently, it is advisable for borrowers to thoroughly familiarize themselves with the VBSP's loan policies and adhere closely to its regulations to align with the bank's requirements. Additionally, it is beneficial for borrowers to designate a loan representative who has the highest educational qualifications available since credit scoring at VBSP takes into account educational background. Borrowers with higher education levels tend to have better access to the bank's housing loan programs.

5.2. The number of dependents and marital status factor

Research findings indicate that households with more dependents tend to have lower access to the social housing loan program offered by VBSP in the Mekong Delta. Consequently, families with many dependents should consider increasing their total income, with capable dependents seeking employment to alleviate the family's financial burden. Additionally, married individuals generally find it easier to access loans for social housing due to the perceived stability and joint financial commitment, which is often viewed as more reliable than that of single applicants. Thus, unmarried

clients might improve their loan access by adding co-borrowers to share the repayment responsibility.

5.3. Borrower's income factor and equity ratio

The results from the Binary logistic model indicate that income is a crucial factor for banks when approving loans. This is because the capability to repay loans is typically assessed based on the borrower's income. Consequently, households with higher incomes are more likely to gain access to social housing credit programs compared to those with lower incomes. To enhance loan approval chances, it is advisable for borrower's families to seek ways to increase their income, such as expanding business activities or family members securing employment to contribute to the household's total income.

Additionally, research indicates that a higher borrower's equity ratio improves access to the social housing loan program at the VBSP in the Mekong Delta. Borrowers should, therefore, strive to meet or exceed the bank's minimum required equity ratio and consider increasing their equity contribution to enhance their likelihood of loan approval.

5.4. Collateral value

Research findings indicate that the greater the value of the borrower's collateral, the easier it is to access the social housing loan program at the VBSP in the Mekong Delta. Therefore, borrowers are advised to possess high-value assets such as residential or agricultural land with road frontage or house ownership, which can be used as collateral to secure loans. Additionally, if borrowers intend to mortgage property that is to be acquired in the future, such as social housing, it is crucial to thoroughly understand related matters. This includes obtaining house ownership certificates and completing mortgage registration to ensure all necessary information is available to determine if the social housing can be mortgaged for a loan at VBSP ([Le and Nguyen, 2019](#)).

6. Conclusion

The current analysis of the social housing loan program by the Bank for Social Policies in the Mekong Delta reveals significant potential demand among low-income populations. However, these individuals often face difficulties accessing home loans. This challenge necessitates attention from local authorities to develop policies and strategies that enhance the availability of social housing and facilitate easier loan access for low-income buyers, addressing their growing housing needs.

This study aims to identify factors influencing the accessibility of social housing loan programs at VBSP in the Mekong Delta. A Binary logistic regression model was utilized to determine the factors that affect loan accessibility in this region of Vietnam.

Based on the findings, the author proposes solutions to improve access to housing loan programs for low-income individuals in the Mekong Delta in the future.

Acknowledgment

This research is funded by Tra Vinh University, Vietnam, and the author sincerely thanks the support and assistance of the survey team of the Faculty of Economics, Tra Vinh University, and 280 employees who came to apply for loans at 4 Vietnam Bank for Social Policy Banks in the Mekong Delta, Vietnam that have enthusiastically helped, provided survey data and information. The author sincerely thanks the enthusiastic support of these research groups.

Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

References

- Belingeri P, Chiarello F, Fronzetti Colladon A, and Rovelli P (2021). Twenty years of gender equality research: A scoping review based on a new semantic indicator. *PLOS ONE*, 16(9): e0256474. <https://doi.org/10.1371/journal.pone.0256474>
PMid:34547029 PMCID:PMC8454943
- Greene WH (2003). *Econometric analysis*. 5th Edition, Prentice Hall, Upper Saddle River, USA.
- Ho MH and Kwong TM (2002). Housing reform and home ownership behaviour in China: A case study in Guangzhou.

- Housing Studies, 17(2): 229-244. <https://doi.org/10.1080/02673030220123207>
- Hoa TQH and Tuyen PD (2021). Social housing for workers in industrial zones in Vietnam-Concepts and practical solutions towards sustainable development. The case studies of Hanoi city. *International Journal of Sustainable Construction Engineering and Technology*, 12(1): 240-258. <https://doi.org/10.30880/ijscet.2021.12.01.024>
- Le CH and Nguyen HL (2019). Collateral quality and loan default risk: The case of Vietnam. *Comparative Economic Studies*, 61: 103-118. <https://doi.org/10.1057/s41294-018-0072-6>
- Lin L, Wang W, Gan C, Cohen DA, and Nguyen QT (2019). Rural credit constraint and informal rural credit accessibility in China. *Sustainability*, 11(7): 1935. <https://doi.org/10.3390/su11071935>
- Nguyen TA, Tran TQ, Van HV, and Luu DQ (2019). Access to homebuyer credit and housing satisfaction among households buying affordable apartments in urban Vietnam. *Cogent Economics and Finance*, 7(1): 1638112. <https://doi.org/10.1080/23322039.2019.1638112>
- Pan Z (2004). Commercial housing ownership predictors in urban China: An analysis of a national survey. *Construction Management and Economics*, 22(1): 85-91. <https://doi.org/10.1080/0144619042000186086>
- Tran HKT (2011). Housing credit development for middle- and low-income people. Ph.D. Dissertation, University of Economics Ho Chi Minh City, Ho Chi Minh City, Vietnam.
- VBSP (2023). Summary report for 2021-2022. Vietnam Bank for Social Policies, Hanoi, Vietnam.
- Wang W, Gan C, Chang Z, Cohen DA, and Li Z (2018). Homeownership in urban China: An empirical study of borrower characteristics and the housing provident fund program in Kunming. *Journal of Asia Business Studies*, 12(3): 318-339. <https://doi.org/10.1108/JABS-03-2016-0041>
- Wang W, Gan C, Li Z, and Tran MMC (2014). Homeownership in urban China: An empirical study of the housing provident fund. Working Paper, Lincoln University, Lincoln, New Zealand.