



Threshold Effects of Bank Credits and Facilities on the Housing Price Index in Iranian Provinces

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Type of Article: **Research**

10.22126/pse.2024.11195.1157

Received: 06 October 2024; Accepted: 30 November 2024

P.P: 113-146

Abstract

Assets are crucial economic capital. Housing, part of the real estate market, is vital for families as it represents one of the basic needs for human settlement and development. In recent years, the increasing trend of the housing price index has become one of the most significant economic challenges. The housing market significantly impacts the financial cycle of the economy and is interconnected with surrounding markets. This research aims to investigate the threshold and non-linear effects of bank loans, facilities, and other economic indicators on housing prices across various provinces in Iran. Provincial data from the years 2010 to 2022 has been utilized for this purpose. In this study, a threshold panel model with fixed effects was employed to explore the non-linear effects of bank facilities on housing prices. The results indicate that when considering total inflation and urban population as threshold variables, the facilities provided by banks—both those with high regimes and those with low regimes—positively and significantly impact inflation in the housing sector across various provinces in Iran. Additionally, these effects become even more pronounced when values exceed the threshold level. Recent results indicate that, after validating the nonlinear effects in the model, the housing sector supply has a negative impact on the housing price index. Conversely, increases in household expenses and the exchange rate significantly and positively affect the housing price index in various provinces of Iran. Therefore, it is recommended to policymakers to identify the factors affecting housing prices in the Iranian economy and consider serious solutions to deal with them.

Keywords: Housing Prices, Bank Facilities, The Provinces of Iran, Threshold Regression.

JEL Classification: C01, O18, E50.

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Citations: Mahmoudinia, D.; Mohseni, S. (2025). "Threshold Effects of Bank Credits and Facilities on the Housing Price Index in Iranian Provinces". *Public Sector Economics Studies*, 4 (11), 113-146.

Homepage of this Article: https://pse.razi.ac.ir/article_3354.html?lang=en

1. Introduction

Housing prices can be likened to a double-edged sword. On one hand, rising housing prices are beneficial for homeowners as they lead to wealth creation and improved economic conditions. On the other hand, higher housing prices contribute to increased rental rates, which can negatively impact economic and social well-being. The connection between financial markets and the housing sector has increasingly drawn the attention of policymakers and economic analysts. They are now focusing more on housing market trends and their potential impact on economic activity and financial markets. In recent times, financial crises across the globe have significantly affected housing prices. As a result, central banks worldwide are monitoring developments in financial markets more closely and integrating macroprudential measures into their monetary policy strategies to address these issues. The rapid increase in the supply of credit is a key factor driving the rise in housing prices, referred to as “credit expansion.” This process is often linked to asset price booms, which can lead to a concentration of credit in low-productivity sectors, such as real estate and construction. Additionally, the strong influence of credit on housing prices is tied to the common belief that housing serves as a long-term investment for savings. The Statistical Yearbook of the Iranian Economy indicates that, despite the provision of support in various economic sectors, including housing, we have observed not only a decline in housing prices but also an overall increase in them. According to reports from the Statistical Center of Iran, inflation in the housing sector was approximately 33 percent in 2022 compared to 2021, while the growth rate of bank loans exceeded 40 percent during the same period. Additionally, the overall inflation index increased by about 45 percent.

2. Theoretical framework

Housing is regarded as a significant asset and typically represents the largest portion of household wealth, despite being illiquid. In numerous countries, most households prefer to invest their wealth in housing instead of other financial assets. As a result, the housing market plays a crucial role in conveying monetary policy and influencing socio-economic factors. These characteristics make housing an area of great interest for policymakers. However, studies show that other factors determining housing prices can be observed in variables such as overall inflation, economic growth, housing supply, exchange rate, urbanization, etc

3. Methodology

Research indicates that, in addition to bank credit, various other factors influence housing prices. These factors include the consumer price index, the supply of residential units, the level of urbanization, household expenditure, and exchange rates. The interaction between the housing market and its macroeconomic factors

may vary with changes in economic conditions. Therefore, understanding housing market cycles and their asymmetric relationships is essential when analyzing the market's response to macroeconomic influences. In this study, we aim to investigate the threshold effects of bank facilities and credit on the housing sector. We seek to answer the question: Is there a nonlinear relationship between these variables? Additionally, how does bank credit impact housing prices at various threshold levels of total inflation and urbanization? While bank facilities significantly influence the housing price index, no studies have examined the effects of credit on housing inflation while considering the threshold variables of the total price index and urbanization at a provincial level.

4. Discussion

Evidence from the Iranian economy indicates that the housing price index constitutes over 36 percent of the total household consumption price index. Additionally, more than 15 provinces have experienced inflation in the housing sector that exceeds the national average in recent years. There is also a positive correlation between bank credits and inflation in the housing sector across Iranian provinces. Several studies have confirmed the nonlinear relationship between macroeconomic variables and the housing price index. In this study, we utilized a threshold nonlinear regression model with fixed effects based on Hansen's 1999 research. We examined the impact of variables such as bank facilities and credit in relation to the threshold variables of urbanization growth and the overall inflation index on the housing sector's inflation index. This analysis focused on 31 provinces in the country from 2010 to 2022. To assess the accuracy of the estimated results from the threshold regression, we employed the dynamic panel method for validation. By analyzing several scenarios across four distinct models, the results of this study confirmed a nonlinear relationship between the independent and dependent variables, identifying the presence of at least one threshold. The findings indicate that in many of the models analyzed, an increase in bank facilities has a positive and nonlinear relationship with housing prices. Specifically, an increase in bank credit leads to a higher demand for housing, which in turn results in an increase in housing prices.

5. Conclusion and Suggestion

The study's findings indicate a positive relationship between various explanatory variables, such as the previous year's housing prices, inflation, GDP, exchange rates, and household spending on housing inflation. Additionally, the results highlight that increasing the housing supply is crucial for reducing housing prices in the provinces of Iran. It is essential for policymakers to identify the factors influencing housing prices in the Iranian economy and to develop effective solutions to address these factors. As urbanization continues to grow, accurately identifying housing

loan applicants and providing targeted assistance to these individuals through well-defined mechanisms can significantly help eliminate speculative activities and unproductive investments. This, in turn, can lead to a reduction in inflation within the housing sector.

6. Ethical Considerations

6.1. Compliance with ethical guidelines

The present study has followed the scientific principles of research.

6.2. Funding

This paper it does not have the financial support of any organization.

6.3. Author's Contribution

The authors, while observing the ethics of publication, declare that they participated equally in this research.

6.4. Conflict of Interest

The authors declare that there is no conflict of interest in this research.

6.5. Acknowledgments

In the end, the authors would like to express their gratitude to the editor, editorial board, and referees for their valuable comments and suggestions that enriched this article.