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Article

Housing Affordability as Risk Allocation: Household Perceptions and Housing Market Expectations in Slovenia

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Abstract

Housing affordability is commonly analysed through price-to-income ratios and housing cost burdens. However, housing systems also function as mechanisms that distribute financial and stability risks across households through tenure structures and institutional arrangements. This study examines housing affordability as part of a broader process of risk allocation within housing systems. Using survey evidence from Slovenia—a high-homeownership system shaped by post-socialist privatization and a limited rental sector—the analysis investigates how households perceive housing affordability and how these perceptions influence expectations regarding future housing market developments. The results show that lower perceived housing affordability is associated with stronger expectations of future housing price growth. Expectations regarding housing purchase price growth are also strongly linked to expectations of future rent increases, suggesting that households interpret both dynamics as part of broader housing market pressure. Regional differences in perceived housing affordability are marginally significant, indicating spatial variation in housing conditions. Respondents who recently participated in the housing market report significantly different expectations regarding future housing price developments. These findings highlight the importance of understanding housing affordability as a perception-based mechanism embedded within broader housing systems.

Keywords: housing affordability; financial risk; housing markets; household vulnerability; housing expectations; homeownership; rental markets; Slovenia

1. Introduction

1.1. The Paradox of Ownership and Risk

Housing systems are commonly portrayed as engines of wealth accumulation and social stability. Homeownership in particular is often associated with financial security, intergenerational asset building, and long-term resilience. Yet in many high-homeownership countries, housing increasingly operates as a mechanism of risk concentration rather than protection (Cirman and Sendi 2016; Ziemann 2024).

Over the past decade, housing costs have grown faster than incomes across advanced economies (OECD 2024). At the same time, mortgage indebtedness has expanded, rental markets have tightened, and housing markets have become more financially interconnected (Ziemann 2024). These dynamics have transformed housing from a stabilizing asset into a potential amplifier of household vulnerability.

This transformation reveals a central paradox: systems characterized by high ownership rates do not necessarily produce lower risk exposure. On the contrary, when rental alternatives are weak and public housing provision is limited, households may be pushed toward ownership under

conditions of heightened financial exposure. Mortgage debt, cost overburden, tenure insecurity, and dependence on family wealth increasingly shape life trajectories (OECD 2024; SURS 2024).

Importantly, this argument does not imply that homeownership is inherently riskier than renting. Rather, different tenure forms embody distinct configurations of risk. Homeownership may provide long-term residential stability and protection against rent inflation, yet it can also concentrate financial exposure through mortgage indebtedness and asset-price volatility. Rental housing, in contrast, may limit debt exposure while increasing tenure insecurity in weakly regulated markets (OECD 2024). The central question is therefore not which tenure is superior, but how housing systems structure, distribute, and potentially privatize risk across households.

Housing occupies a distinctive position among economic domains. It is simultaneously a basic social necessity, a long-term financial commitment, a vehicle of wealth accumulation, and a spatially fixed asset. Consequently, housing decisions shape not only household balance sheets but also demographic behaviour, labour mobility, and regional development patterns (OECD 2024; SURS 2024). In this sense, housing is not merely a market outcome; it is a risk architecture embedded within institutional and spatial systems.

This paper conceptualizes housing as a **risk regime**: a structured configuration in which institutional design, tenure patterns, and spatial differentiation determine how exposure to economic and social volatility is distributed across households.

1.2. From Housing Affordability to Risk Transmission

Much of the existing literature examines housing affordability as a social problem, typically focusing on price-to-income ratios, cost-overburden indicators, or housing deprivation (Cirman and Sendi 2016; SURS 2025). While this body of research provides important evidence, it often treats affordability as an outcome rather than as a mechanism of risk transmission.

Financial risk literature, by contrast, concentrates primarily on mortgage lending, asset-price cycles, and macro-financial stability (Banka Slovenije 2025; Mian and Sufi 2014; Adelino et al. 2016). These studies analyse credit growth, leverage, and systemic vulnerability, but rarely integrate housing tenure structures or rental market dynamics into risk frameworks.

At the same time, housing studies research addresses affordability pressures, tenure insecurity, and financialization extensively (Ziemann 2024; OECD 2024), yet often stops short of conceptualizing housing systems explicitly as systemic risk regimes.

This fragmentation produces three gaps. First, risk literature predominantly focuses on financial instruments and credit markets rather than on housing tenure structures and everyday exposure to cost overburden or rental instability (Mian and Sufi 2014; Adelino et al. 2016). Second, housing affordability research concentrates on distributional and social outcomes but does not systematically conceptualize housing systems as mechanisms of risk allocation and amplification (Cirman and Sendi 2016; SURS 2025). Third, post-socialist housing systems have been analysed in terms of privatization and institutional transition, yet rarely as coherent risk regimes that redistribute exposure from the state to households (GURS 2024).

As a result, we still lack an integrated framework that connects housing cost pressure to household vulnerability, tenure instability to planning insecurity, family transfers to inequality, and regional divergence to spatially differentiated risk. This paper addresses that gap by positioning housing affordability not merely as a social issue but as a multi-level mechanism of risk allocation.

1.3. Why Slovenia? A Case of Risk Privatization

Slovenia represents an analytically instructive case for examining housing as a risk regime. Following large-scale privatization during the post-socialist transition, Slovenia developed one of the highest homeownership rates in Europe (GURS 2024; Urbanistični inštitut RS 2025). During this transition, a substantial share of socially owned housing was privatized and transferred into private ownership. While this process significantly expanded homeownership, it simultaneously reduced the public rental stock. In the absence of systematic reinvestment at a comparable scale, the institutional

capacity for collective risk pooling in housing diminished. Over time, this transformation produced a tenure structure characterized by ownership dominance and a relatively weak rental sector, within which housing-related financial and stability risks became increasingly concentrated at the household level (GURS 2024).

This structural shift did not eliminate housing risk; it reallocated it from public institutions toward individual households. At the same time, the rental sector remains underdeveloped, public housing provision is limited, and housing prices have risen rapidly in recent years (Cirman and Sendi 2016; Banka Slovenije 2025; Goršak 2025). This configuration produces a housing environment characterized by high ownership concentration, weak rental alternatives, rapid price growth, and pronounced regional disparities.

In such a system, ownership does not automatically imply security. When access to ownership requires substantial upfront capital and often depends on intergenerational transfers, housing becomes a mechanism of inequality reproduction rather than risk pooling (GURS 2024; GURS 2025). Moreover, regional divergence, particularly between the capital region, coastal areas influenced by tourism, and secondary cities, creates spatially differentiated exposure to housing-related risks (Banka Slovenije 2025; Kovač 2025; Goršak 2025).

Taken together, these structural characteristics suggest that Slovenia can be understood as a case of housing-related risk externalization, where high ownership coexists with rising financial vulnerability and constrained rental stability.

1.4. Dimensions of Housing Risk

To analyse housing as a risk regime, this paper conceptualizes four interconnected dimensions of housing-related risk.

First, housing systems generate financial exposure through affordability pressure. When housing expenditures become difficult to sustain, savings capacity weakens and vulnerability to shocks increases (Cirman and Sendi 2016).

Second, they shape tenure security and long-term planning capacity. In weakly regulated rental systems, insecurity does not necessarily arise from debt but from instability, contract uncertainty, and anticipated cost increases (Cirman and Sendi 2016; Numbeo 2025).

Third, housing systems may intensify intergenerational inequality when access to secure housing depends on family-level resources rather than institutional buffering (GURS 2024; GURS 2025).

Fourth, housing-related risk is spatially differentiated. Regional housing shortages, uneven labour markets, and concentrated price growth generate uneven exposure across territory (Cirman and Sendi 2016; Banka Slovenije 2025; Kovač 2025).

These dimensions interact across micro, meso, and macro levels. Household coping strategies may collectively generate broader forms of systemic fragility. Housing affordability is therefore not only a question of price levels, but of how institutional structures distribute and amplify risk across society.

1.5. Research Questions, Contribution, and Structure

Against this background, the paper asks four questions. How do housing market conditions translate into household-level vulnerability? How do perceptions of housing affordability shape expectations of future market developments? How are housing-related risks spatially differentiated across regions? And how does direct market participation affect expectations of future housing dynamics?

The remainder of the paper is structured as follows. Section 2 develops the theoretical framework, reframing housing affordability as a problem of risk allocation and examining the roles of financialization, tenure structures, and institutional design. Section 3 situates Slovenia as a high-homeownership housing system and interprets its structural characteristics as a specific configuration of housing-related risk. Section 4 presents the data, methodological approach, and

empirical results, focusing on household-level exposure. Section 5 discusses the findings in light of the broader institutional framework and examines how micro-level vulnerabilities relate to systemic risk dynamics. Section 6 concludes by summarizing the contribution and outlining implications for housing policy as a domain of risk governance.

This paper contributes to the literature in three ways. First, it conceptualizes housing affordability as part of a broader process of risk allocation within housing systems. Second, it empirically examines how household perceptions of housing affordability shape expectations regarding future housing price and rent developments. Third, using evidence from Slovenia, the study highlights how housing-related risks may become increasingly internalized at the household level in high-homeownership systems with limited rental alternatives.

2. Theoretical Background: Housing Systems and Risk Allocation

Understanding housing affordability through the lens of risk requires moving beyond price indicators and cost ratios. Housing markets are embedded within institutional arrangements that determine how financial exposure, tenure stability, and market volatility are distributed across society. Rather than treating housing affordability as a static outcome, this section conceptualizes housing systems as mechanisms of risk allocation. It argues that financialization, tenure structures, and policy regimes jointly shape whether housing-related risks are collectively buffered or increasingly externalized to households (Cirman and Sendi 2016; Ziemann 2024; OECD 2024).

2.1. Financialization and the Reallocation of Housing Risk

Over recent decades, housing has undergone a profound transformation from a predominantly use-oriented good into a financialized asset class increasingly integrated into global capital markets (Ziemann 2024; OECD 2024; Aalbers 2016). Financialization has linked housing more closely to credit expansion, investment flows, and asset-price dynamics. Mortgage markets have deepened, institutional investors have entered residential sectors, and housing wealth has become a central component of household balance sheets.

This transformation does not merely affect housing prices; it also reshapes the institutional architecture of risk. As housing becomes increasingly dependent on credit markets and investment demand, exposure to interest-rate fluctuations, asset-price cycles, and macroeconomic shocks becomes embedded within household finances. At the same time, in many contexts the retrenchment of public housing provision and the liberalization of rental markets have weakened collective buffering mechanisms (OECD 2024).

Housing affordability pressures may also translate into broader financial vulnerabilities. Empirical research shows that housing affordability and household indebtedness can significantly affect credit risk and financial stability within the banking sector (Canepa 2018).

In this sense, financialization operates as a mechanism of risk reallocation. Risks that were previously partially absorbed by regulated rental systems or public housing institutions become increasingly individualized through mortgage indebtedness, asset-price volatility, and reliance on private wealth.

Post-socialist housing systems represent a particularly instructive configuration of this process. During the transition from socialist to market economies, large segments of socially owned housing were privatized and transferred into private ownership (GURS 2024). This transformation expanded homeownership but simultaneously reduced the scale of public rental provision. In the absence of systematic reinvestment sufficient to sustain a comparable rental infrastructure, the institutional capacity for collective risk pooling diminished. Over time, housing stability became more closely tied to household financial resources and balance sheets.

Importantly, this shift did not eliminate housing risk; rather, it changed its bearer. Housing-related financial and stability risks became increasingly concentrated at the household level, a process that can be described as housing-related risk externalization.

2.2. Housing Tenure as a Configuration of Risk

Housing tenure is often framed as a binary choice between renting and owning. From a risk perspective, however, tenure represents a configuration of trade-offs between different forms of exposure and security. The implications of tenure are not intrinsic to ownership or renting themselves, but depend on the broader institutional environment in which these arrangements operate.

Homeownership is widely associated with residential stability and potential wealth accumulation. It can protect households from rent inflation and provide long-term tenure security. In many advanced economies, housing wealth constitutes the largest component of household assets and plays a central role in wealth inequality dynamics (Piketty 2014). At the same time, homeownership concentrates financial exposure. Mortgage indebtedness links households directly to credit markets, exposing them to interest-rate fluctuations and income shocks (Mian and Sufi 2014). Moreover, housing wealth is illiquid and spatially fixed, which may limit flexibility and labour mobility. In financially volatile environments, ownership can therefore amplify balance-sheet vulnerability.

Rental housing represents a different configuration of risk. Renting can reduce debt exposure and lower entry barriers, providing greater flexibility in contexts of labour mobility or uncertain income. However, in weakly regulated markets rental tenure may involve instability, short-term contracts, and exposure to rent increases (Cirman and Sendi 2016). Such tenure insecurity can undermine long-term planning and delay household formation.

From a systemic perspective, the central issue is therefore not whether ownership or renting is inherently preferable, but how tenure structures distribute housing-related risks. In systems with strong rental regulation and substantial public or non-profit housing sectors, risks may be partially pooled and stabilized institutionally. In contrast, systems dominated by ownership and market-based rental provision tend to shift risk more directly onto households.

Tenure structures thus operate as an important mediator between housing market dynamics and household-level vulnerability.

2.3. Housing Systems and Risk Governance

International comparisons demonstrate that housing systems differ significantly in the ways they allocate and govern risk. In more regulated housing regimes, large professional rental sectors, strong tenant protections, and substantial non-profit or public housing provision function as institutional buffers (OECD 2024). Such arrangements tend to mitigate household exposure to housing market volatility and support life-cycle stability. Housing markets contain multiple layers of risk, including refinancing risk, interest-rate risk, policy risk, and location-specific risk associated with particular housing segments (Wilhelmsson 2018).

In more market-oriented systems, housing is closely tied to wealth accumulation and mortgage finance. Access to ownership depends heavily on financial resources, while rental markets are typically less regulated. In these contexts, housing-related risks are more directly privatized, with households bearing greater responsibility for managing debt exposure, asset volatility, and tenure insecurity.

Housing policy can therefore be understood as a form of risk governance. Institutional design determines who bears housing-related financial risks, how these risks are distributed across income groups and generations, and how resilient households are to economic shocks. This perspective is particularly relevant for high-homeownership systems with limited rental alternatives. Where institutional buffering mechanisms are weak, housing stability becomes increasingly dependent on household-level financial capacity and intergenerational resources.

2.4. From Institutional Allocation to Household Exposure

The theoretical framework developed above distinguishes between two analytical levels. At the institutional level, housing systems determine how risks are allocated among the state, markets, and households. Processes such as financialization and privatization may weaken collective buffering mechanisms and increase the concentration of housing-related risks within households.

At the household level, these structural arrangements manifest as measurable forms of exposure, including affordability pressure, tenure insecurity, expectations of price escalation, and reliance on family transfers. Such exposures influence household decision-making, demographic trajectories, and economic vulnerability.

The empirical analysis that follows therefore focuses on household-level perceptions and expectations, while interpreting these findings within the broader institutional configuration of the housing system.

The multi-level transmission of housing-related risks discussed above is summarized in Figure 1.

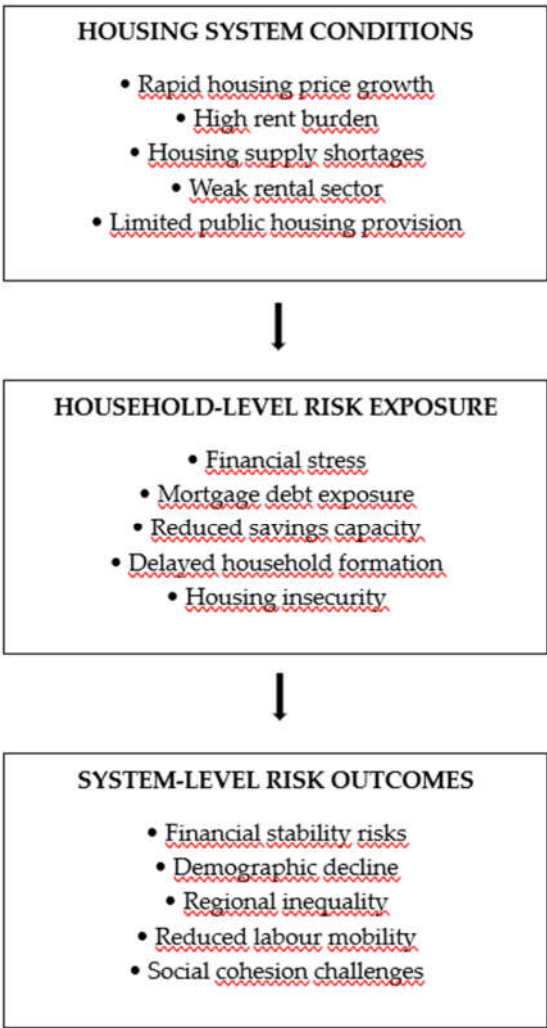


Figure 1. Conceptual framework of housing-related risk transmission across market, household, and system levels.

2.5. Theoretical Implications and Hypotheses

The preceding discussion conceptualizes housing systems as institutional configurations that allocate financial and stability risks across households. Processes such as financialization, tenure structure, and the retrenchment of public housing provision influence whether housing-related risks are collectively buffered or increasingly internalized at the household level. In high-homeownership systems with limited rental alternatives and strong reliance on private resources, these structural

characteristics are expected to be reflected in differentiated patterns of household-level perceptions and expectations regarding housing markets. The empirical analysis therefore tests the following hypotheses.

- H1 – Affordability Expectations Hypothesis**
Lower perceived housing affordability is associated with stronger expectations of future housing price growth.
- H2 – Price–Rent Expectations Hypothesis**
Expectations of housing purchase price growth are positively associated with expectations of future rent increases.
- H3 – Regional Housing Pressure Hypothesis**
Perceived housing affordability differs across regions.
- H4 – Market Participation Hypothesis**
Households that have actively participated in the housing market report stronger expectations of housing price growth.
- The empirical relationships examined in the analysis are summarized in Figure 2.

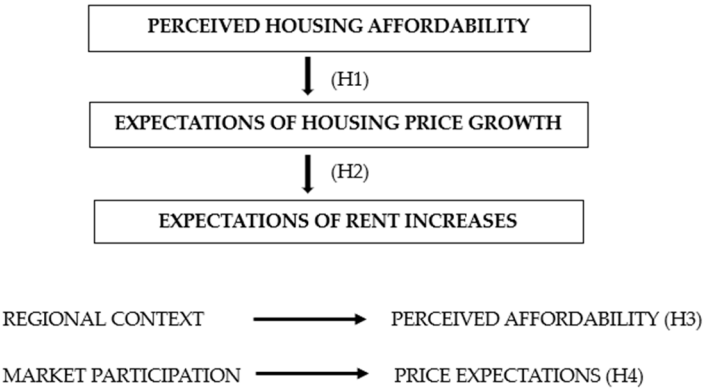


Figure 2. Conceptual model linking housing affordability perceptions and housing market expectations.

3. Institutional Context: The Slovenian Housing Market

The Slovenian housing market represents an analytically instructive case for examining housing as a configuration of risk allocation. Its current structure reflects the combined effects of post-socialist privatization, limited public reinvestment, ownership dominance, and rapid asset-price appreciation. Together, these features have produced a housing system in which risk is not eliminated but redistributed, primarily toward households.

Rather than treating price growth or tenure composition as isolated indicators, this section interprets the Slovenian housing market as an institutional environment that structures household-level exposure to financial, contractual, and spatial risks.

The indicators summarized in Table 1 describe a system characterized by high ownership concentration, limited rental buffering capacity, and rapid price escalation. From a risk perspective, this combination increases the likelihood that housing-related volatility is internalized within household balance sheets rather than absorbed through institutional mechanisms.

Table 1. Key housing indicators in Slovenia.

Indicator	Value	Source
Residential property price growth (2019–2024)	+67%	GURS 2025
Apartment price growth (2019–2024)	+54%	GURS 2025
Building land price growth	+72%	GURS 2025
Median apartment price (Slovenia)	> €3,000/m²	SURS 2025
Median apartment price (Ljubljana)	~ €4,900/m²	SURS 2025

Homeownership rate	85–91%	SURS 2024
Market rental share	~6.8% households	OECD 2024
Average advertised rent (2025)	€870/month	Goršak 2025
Public rental housing stock	~3%	OECD 2024

3.1. Price Growth and Market Rigidity

One of the defining features of the Slovenian housing market in recent years has been rapid price growth. Between 2019 and 2024, housing prices increased sharply, with even stronger growth observed in the prices of building land (Banka Slovenije 2025). Median prices of second-hand apartments reached levels that significantly reduced affordability, particularly in Ljubljana (Goršak 2025). Housing price developments are also confirmed by official price index statistics (SURS 2025).

At the same time, transaction volumes declined (Banka Slovenije 2025). The coexistence of rising prices and declining transactions suggests increasing barriers to market entry rather than a broad expansion of market activity.

From a conventional market perspective, these developments may reflect strong demand pressures. From a risk perspective, however, they signal a tightening environment in which access to ownership requires greater financial leverage and larger upfront capital. As prices rise faster than incomes, dependence on mortgage financing increases and repayment periods lengthen, embedding households more firmly within credit-market dynamics.

Structural supply constraints further reinforce these dynamics. Planning procedures, limited availability of building land, rising construction costs, and lengthy administrative processes reduce the responsiveness of housing supply (Cirman and Sendi 2016; Numbeo 2025). When supply fails to adjust adequately to demand, price pressures persist and market entry becomes increasingly selective.

In this context, price growth does not merely indicate asset appreciation. It also restructures the distribution of financial exposure: households entering the market assume higher debt burdens and become more sensitive to interest-rate fluctuations and macroeconomic shocks. Market rigidity therefore functions as a mechanism of financial risk concentration.

3.2. Weak Rental Sector and Structurally Induced Homeownership

A central structural feature of the Slovenian housing system is its exceptionally high homeownership rate (GURS 2024; Urbanistični inštitut RS 2025). This pattern is largely the result of large-scale privatization during the post-socialist transition, when a substantial share of socially owned housing was transferred into private ownership (GURS 2024).

While high homeownership is often interpreted as evidence of stability, it also reflects the limited scale and institutional capacity of the rental sector. Market-based renting accounts for only a small share of households, while public rental provision remains marginal (Cirman and Sendi 2016).

Rental prices have increased substantially, particularly in urban centres (Numbeo 2025). At the same time, the rental market is characterized by short-term contracts, limited tenant protection, and a significant presence of informal arrangements. In such an environment, renting may entail contractual instability and uncertainty regarding future housing costs. The absence of a strong and regulated rental alternative transforms ownership from a purely voluntary investment choice into a structurally induced tenure pathway.

This dynamic can be described as **structurally induced homeownership**. Households may enter ownership not primarily as a strategy of wealth accumulation, but as a response to limited rental security. In risk terms, this represents a shift from contractual instability toward financial exposure. Instead of pooling risks through stable rental institutions, households increasingly internalize exposure through mortgage debt and asset concentration.

The dominance of ownership in Slovenia therefore does not eliminate housing risk; rather, it reconfigures its bearer.

3.3. Regional Divergence and Spatial Differentiation of Risk

The Slovenian housing market is also characterized by pronounced regional disparities. Housing demand and price pressures are concentrated in the capital region and in coastal areas influenced by tourism and short-term rentals. Peripheral regions and smaller towns typically exhibit lower housing prices but also weaker labour markets and lower income levels (Kovač 2025).

From a risk perspective, such regional variation produces spatially differentiated exposure. In high-demand regions, households face stronger affordability pressures and higher entry thresholds into homeownership. In lower-demand regions, housing may be more affordable, but economic opportunities are more limited, potentially constraining income growth and labour mobility.

These spatial dynamics influence demographic behaviour, internal migration patterns, and long-term development trajectories. Regional divergence therefore operates as a spatial mechanism of risk allocation. Housing-related exposure is not evenly distributed across territory but structured by regional labour markets, investment flows, and tourism dynamics.

3.4. Slovenia as a Case of Housing-Related Risk Externalization

Taken together, rapid price growth, ownership dominance, limited rental buffering capacity, and pronounced regional divergence configure the Slovenian housing market as a system in which housing-related risks are increasingly internalized at the household level.

The post-socialist transition expanded homeownership but simultaneously reduced the institutional infrastructure for collective rental buffering. Subsequent price escalation and supply rigidity have further intensified financial exposure for new entrants to the housing market. Weak rental alternatives constrain tenure choices and increase reliance on mortgage financing.

In this sense, Slovenia can be interpreted as a case of housing-related risk externalization. Risks that might otherwise be absorbed through public housing provision, regulated rental markets, or broader institutional mechanisms are instead managed within household balance sheets and family networks.

The empirical analysis that follows examines how these structural characteristics are reflected in household-level perceptions and expectations regarding housing market developments.

4. Results

This section presents the empirical results of the survey analysis. The results are structured according to the hypotheses developed in the theoretical framework.

Table 2 summarizes the hypotheses tested in the empirical analysis together with the corresponding variables and statistical methods.

Table 2. Hypotheses, variables, and statistical tests.

Hypothesis	Relationship tested	Variables	Statistical method
H1	Perceived affordability → price expectations	Housing affordability; price expectations	Pearson correlation
H2	Price expectations → rent expectations	Price expectations; rent expectations	Spearman correlation
H3	Regional differences in affordability	Region; affordability	Kruskal–Wallis test
H4	Market participation → price expectations	Market participation; price expectations	Mann–Whitney U test

4.1. Descriptive Overview of the Survey Sample

The empirical analysis is based on a structured survey conducted in 2025 examining housing perceptions, market expectations, and recent housing market participation among residents in Slovenia. The questionnaire collected information on housing perceptions, expectations regarding

housing price and rent dynamics, selected socio-demographic characteristics, and respondents' region of residence. Descriptive statistics are used to provide an overview of the sample characteristics and to contextualize the subsequent statistical analyses.

The sample is opportunistic and not statistically representative. Because the questionnaire included conditional questions, the number of valid observations varies across variables. However, several core variables were answered by nearly all respondents and therefore provide the basis for the empirical analysis. These include age, perceived housing affordability within the respondent's region, expectations regarding future rental prices, and expectations regarding future housing purchase prices.

Age information was available for nearly the full sample, and both expectation variables retained broad coverage. By contrast, several variables related to completed purchases, rent burden, and financing sources contained a high share of missing responses due to the conditional structure of the questionnaire and were therefore not suitable for formal statistical testing in several cases.

Overall, the dataset provides insight into how households perceive housing market conditions and how these perceptions translate into expectations regarding future housing market developments.

4.2. *Affordability Perceptions and Price Expectations (H1)*

Hypothesis H1 predicted that lower perceived housing affordability would be associated with stronger expectations of future housing price growth.

Pearson correlation analysis indicates a statistically significant negative relationship between perceived housing affordability and expectations of future housing price growth ($r = -0.274$, $p = .036$). Because lower values on the expectation scale represent stronger anticipated price increases, this negative association implies that respondents who perceive housing in their region as less affordable are more likely to expect further increases in housing purchase prices.

This result suggests that perceptions of housing scarcity are closely linked to expectations of continued price escalation. In other words, households experiencing stronger affordability pressure tend to anticipate further tightening of housing market conditions.

The results therefore support H1.

4.3. *Link Between Rent and Price Expectations (H2)*

Hypothesis H2 predicted that expectations of housing purchase price growth would be positively associated with expectations of future rent increases.

Spearman rank correlation analysis revealed a strong positive association between expectations of future rent increases and expectations of housing purchase price growth ($\rho = 0.580$, $p < .001$). Respondents who expected rising purchase prices also tended to expect rising rents.

This finding indicates that respondents perceive rental and purchase markets as closely interconnected. Rather than viewing these as separate market processes, households appear to interpret both dynamics as components of a broader housing market pressure mechanism.

The results therefore support H2.

4.4. *Regional Variation in Housing Affordability (H3)*

Hypothesis H3 predicted that perceived housing affordability would differ across regions.

Regional differences in perceived housing affordability were examined using the Kruskal-Wallis test. The analysis revealed marginally significant regional variation in perceived housing accessibility ($H(7) = 13.98$, $p = .052$, $N = 59$). Although the result does not reach the conventional 0.05 significance threshold, it suggests meaningful spatial differentiation in perceived housing conditions.

The rank distribution indicates that some regions are perceived as notably less accessible than others. However, uneven regional subsamples require cautious interpretation of these differences.

H3 therefore receives partial empirical support.

4.5. Housing Market Participation and Price Expectations (H4)

Hypothesis H4 predicted that households that had actively participated in the housing market would report stronger expectations of future housing price growth.

A Mann–Whitney U test examined whether respondents who had purchased property differed from those who had only actively searched for housing in their expectations regarding future housing price developments. The analysis revealed a statistically significant difference between the two groups ($U = 0.000$, $Z = -2.618$, $p = .009$; exact $p = .010$). Respondents who had purchased property exhibited substantially higher mean ranks than those who had only searched for housing.

This finding indicates systematically different expectations regarding future housing price developments between the two groups. However, the result should be interpreted cautiously due to the very small number of respondents who reported having purchased property.

The results therefore support H4.

4.6. Exploratory Note on Intergenerational Transfers

The original conceptual framework also considered the role of family financial support in access to homeownership. However, only two respondents in the sample reported having purchased property, and both purchases occurred without reported family financial support. Because of the extremely small number of purchase cases, no statistical inference can be drawn regarding the role of intergenerational transfers in access to ownership.

Nevertheless, the question of intergenerational transfers remains central in housing research and deserves further investigation using larger datasets.

5. Discussion

The results provide empirical insight into how households perceive and interpret housing market pressures in Slovenia. Rather than linking housing vulnerability solely to objective financial indicators, the findings highlight the importance of perception-based mechanisms through which housing-related risk is experienced and interpreted at the household level.

A key result concerns the relationship between perceived housing affordability and expectations of future housing price growth. Respondents who perceive housing as less accessible are more likely to anticipate further increases in housing prices. This suggests that perceptions of scarcity play an important role in shaping expectations about future housing market dynamics. When households interpret current housing conditions as restrictive or inaccessible, they tend to assume that these pressures will persist or intensify.

Closely related to this mechanism is the strong association between expectations of housing purchase price growth and expectations of future rent increases. The results indicate that respondents do not perceive purchase prices and rental prices as independent processes, but rather as interconnected dimensions of housing market pressure. Rising purchase prices are expected to translate into higher rental costs, reinforcing the perception of an increasingly constrained housing environment. This perception-based linkage suggests that households interpret housing markets as a unified system of price escalation rather than as separate tenure-specific markets.

The analysis also indicates that perceived housing affordability varies across regions, although the statistical significance of these differences remains marginal. Nevertheless, the results suggest that spatial variation in housing markets continues to shape how households interpret housing conditions. Regional housing pressures therefore appear to influence not only objective market outcomes but also subjective perceptions of housing accessibility and opportunity within the housing system.

Another important finding concerns the role of direct market participation. Respondents who recently participated in the housing market reported significantly different expectations regarding future housing price developments. This suggests that market participation itself may function as an informational mechanism through which households update their expectations. Individuals who

actively search for housing or who have recently completed a purchase encounter market conditions more directly, which may reinforce perceptions of scarcity and price pressure.

Taken together, these findings suggest a broader mechanism linking structural housing market pressures to household-level expectations. The empirical results can be interpreted as reflecting a perception-driven chain in which regional housing pressures influence perceived affordability, which in turn shapes expectations regarding future housing price developments. These expectations are closely connected to expectations regarding rental price increases and are further influenced by direct exposure to the housing market.

From a risk perspective, these findings support the conceptual framework developed earlier in the paper, which interprets housing systems as institutional configurations that allocate financial and stability risks across households. Housing-related risk does not operate solely through objective financial indicators such as housing costs or mortgage exposure. Instead, risk also emerges through the interpretation of market signals, including perceptions of scarcity and expectations about future price developments.

Households may therefore adjust their behaviour and housing strategies not only in response to current affordability conditions but also in anticipation of future market developments. Expectations of continued price growth and rent increases may themselves reinforce housing insecurity, as households anticipate worsening affordability conditions and adapt their expectations accordingly.

The exploratory analysis of intergenerational transfers further highlights an important limitation of the present dataset. Only a very small number of respondents reported having purchased property, which prevents statistical inference regarding the role of family financial support in access to homeownership. Nevertheless, the importance of intergenerational resources in housing access is widely recognized in the literature and remains an important avenue for future research.

Overall, the findings suggest that housing vulnerability should be understood not only as a financial condition but also as a perception-based process embedded within housing market dynamics. This perspective helps explain why households may experience housing insecurity even in the absence of immediate financial distress, particularly in housing systems characterized by persistent price growth, limited supply responsiveness, and weak rental alternatives.

These findings reinforce the argument that housing systems should be understood not only as markets for shelter and investment, but also as institutional arrangements that shape how economic risks are distributed across households.

6. Materials and Methods

6.1. Data and Sample

The empirical analysis is based on a structured survey conducted in 2025 examining housing perceptions, market expectations, and recent housing market participation among residents in Slovenia. The questionnaire collected information on housing affordability perceptions, expectations regarding housing purchase prices and rental prices, selected socio-demographic characteristics, and respondents' region of residence.

The survey was designed to capture how households perceive housing market conditions and how these perceptions translate into expectations regarding future housing developments. The dataset therefore focuses primarily on perception-based and expectation-based variables rather than objective financial indicators.

The sample is opportunistic and not statistically representative. Because the questionnaire contained several conditional questions, the number of valid responses varies across variables. Nevertheless, several core variables were answered by nearly all respondents and therefore constitute the basis for the empirical analysis. These include respondents' age, perceived housing affordability within their region, expectations regarding future housing purchase prices, and expectations regarding future rental prices.

The analytical focus is limited to observed variables explicitly measured in the survey. No latent constructs or composite indices were constructed for the analysis.

6.2. Operationalization of Variables

The empirical analysis operationalizes housing-related perceptions and expectations at the household level. The main variables used in the analysis include the following.

Perceived housing affordability

Perceived housing affordability was measured using a continuous scale ranging from 0 to 100, where higher values indicate greater perceived accessibility of housing within the respondent's region.

Expectations of housing purchase price growth

Expectations regarding housing purchase prices were measured using a five-point ordinal scale indicating whether respondents expect housing prices to increase strongly, increase moderately, remain unchanged, decrease moderately, or decrease strongly over the next 12 months. Lower values on this scale represent stronger expectations of price growth.

Expectations of rent increases

Expectations regarding rental prices were measured using an analogous five-point ordinal scale capturing expectations about future rental price developments.

Regional location

Regional location identifies the respondent's region of residence and is used to examine spatial differences in perceived housing affordability.

Housing market participation

Housing market participation captures whether respondents reported recent direct engagement with the housing market, such as actively searching for housing or completing a property purchase.

Age

Age was measured in years and included as a basic socio-demographic characteristic.

6.3. Statistical Methods

Given the ordinal nature of several variables and the conditional design of the questionnaire, the empirical analysis relies primarily on correlation analysis and nonparametric statistical tests.

Pearson correlation analysis was used to examine the relationship between perceived housing affordability and expectations regarding future housing purchase price developments.

Spearman rank correlation was applied to analyse the association between expectations regarding housing purchase price growth and expectations regarding future rent increases.

Regional differences in perceived housing affordability were examined using the Kruskal–Wallis test, which allows comparison of distributions across multiple independent groups.

Differences in price expectations between respondents who actively participated in the housing market and those who only searched for housing were analysed using the Mann–Whitney U test.

Exploratory descriptive analysis was additionally used in cases where variables contained sparse responses or limited valid observations.

6.4. Statistical Software

All statistical analyses were conducted using IBM SPSS Statistics 31.

During the exploratory stage of the analysis, linear models were initially examined using Ordinary Least Squares (OLS) regression. OLS estimates coefficients by minimizing the sum of squared residuals between observed and predicted values. However, given the ordinal scaling of several key variables and the final structure of the dataset, the reported results rely primarily on correlation analysis and nonparametric statistical procedures.

6.5. Ethical Considerations

The survey collected anonymous responses and did not include personally identifiable information. Participation in the survey was voluntary, and respondents were informed about the purpose of the research. No sensitive personal data were collected.

6.6. Data Availability

The survey dataset used in this study is available from the corresponding author upon reasonable request. Due to privacy considerations and the exploratory nature of the survey, the dataset is not deposited in a public repository.

6.7. Generative AI Disclosure

No generative artificial intelligence tools were used to generate data, perform statistical analysis, or produce figures in this study. Generative AI tools were used only for minor language editing and formatting assistance.

7. Conclusions

This paper examined how households perceive housing market pressures and how these perceptions translate into expectations regarding future housing market developments. Using survey evidence from Slovenia, the analysis focused on the relationship between perceived housing affordability, expectations of housing purchase price growth, expectations of rent increases, regional variation in perceived housing conditions, and household interaction with the housing market.

The empirical results indicate that perceptions of housing affordability are closely linked to expectations regarding future housing price developments. Respondents who perceive housing in their region as less accessible are more likely to expect further increases in housing prices. At the same time, expectations regarding housing purchase prices and rental prices appear to be strongly interconnected, suggesting that households interpret both dynamics as components of a broader housing market pressure. The analysis further suggests that perceived housing affordability varies across regions, indicating spatial differentiation in housing conditions. In addition, respondents who recently participated in the housing market reported significantly different expectations regarding future housing price developments, highlighting the role of direct market exposure in shaping housing market expectations.

Taken together, these findings suggest that housing vulnerability cannot be understood solely through objective financial indicators such as housing costs or income constraints. Instead, housing-related risk emerges through a broader interaction between market conditions, perceptions of housing accessibility, and expectations about future price developments. In this sense, housing systems may operate as risk regimes in which households interpret market signals and adjust their expectations and behaviour accordingly.

From a policy perspective, the results highlight the importance of addressing not only the financial dimensions of housing affordability but also the structural and perceptual drivers of housing insecurity. Persistent expectations of price and rent increases may reinforce perceptions of housing scarcity and further constrain households' housing decisions. Policies aimed at improving housing supply, strengthening rental market stability, and increasing transparency in housing markets may therefore play an important role in reducing housing-related vulnerability.

Several limitations should be acknowledged. The survey sample is relatively small and not statistically representative, and several variables contain missing responses due to the conditional structure of the questionnaire. Future research should therefore examine these relationships using larger datasets and longitudinal evidence in order to better capture how housing-market perceptions and expectations evolve over time.

Despite these limitations, the findings contribute to a growing body of research emphasizing the role of perceptions and expectations in housing systems. Understanding housing markets as

perception-driven environments provides an important perspective for analysing housing affordability, market dynamics, and the distribution of housing-related risk.

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Appendix A

Appendix A. Survey Questionnaire (English Translation)

Core variables used in the final empirical analysis

- How old are you?
- In which region do you currently live?
- How do you evaluate the accessibility of housing in your region? (0 = very inaccessible, 100 = very accessible)
 - What do you expect will happen to residential rents over the next 12 months?
 - What do you expect will happen to housing purchase prices over the next 12 months?
 - In the last 24 months, have you:
 - o purchased a property,
 - o actively searched for a property (but did not buy or rent),
 - o rented and/or renewed a rental contract,
 - o none of the above.

Additional questionnaire items

- What is your current housing status?
- What is the main reason for purchasing a property?
- What type of property did you purchase?
- What is your net household income (EUR)?
- What was your budget for purchase (EUR)?
- Which financing sources did you use?
 - o savings,
 - o mortgage loan,
 - o family support,
 - o sale of another property,
 - o other.
- What were the main obstacles to purchase?

- o high prices,
- o high interest rates,
- o insufficient supply,
- o bank conditions,
- o poor property condition,
- o other.
- How long did the process from the start of the search to purchase take?
- How would you compare the final price to the asking price?
- How satisfied were you with the property purchase process? (0 = very poor, 100 = very good)
- How likely would you be to recommend property purchase in your region? (0 = never, 100 = always)
- What was the main reason for searching for housing?
- What type of property were you searching for?
- What financing sources did you plan to use?
- What obstacles did you encounter while searching?
- How satisfied were you with the property search process? (0 = very poor, 100 = very good)
- What is the status of your rental arrangement?
- What type of property do you rent?
- What is your monthly rent (EUR, excluding utilities)?
- What share of your net household income does rent represent?
- What is the amount of the deposit/security payment?
- How long is your rental contract?
- Which rental problems have you experienced?
- o rent increases,
- o short contracts,
- o poor regulation,
- o costs,
- o relations with the landlord,
- o difficulty finding a property,
- o other.
- How satisfied are you with your rental housing? (0 = very poor, 100 = very good)
- What are your housing intentions in the next 12 months?
- Why do you continue renting?
- o flexibility,
- o purchase prices are too high,
- o credit is inaccessible,
- o unstable income,
- o short-term plans,
- o other.
- There is too little housing supply in my region.
- Renting is currently more rational than buying.
- Information on the housing market is transparent and accessible.
- Which policy measures would improve housing conditions?
- o more new construction,
- o tax incentives for first-time buyers,
- o non-profit housing,
- o regulation of short-term rentals,
- o more long-term rental contracts,
- o other.

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