



HOUSING AFFORDABILITY AS RISK ALLOCATION: HOUSEHOLD PERCEPTIONS AND HOUSING MARKET EXPECTATIONS IN SLOVENIA

LA ACCESIBILIDAD DE LA VIVIENDA COMO ASIGNACIÓN DE RIESGOS: PERCEPCIONES DE LOS HOGARES Y EXPECTATIVAS DEL MERCADO INMOBILIARIO EN ESLOVENIA

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ABSTRACT:

This paper reframes housing affordability as part of a broader system of risk allocation within contemporary housing markets. While existing literature has mainly focused on price-to-income ratios and cost-burden indicators, less attention has been given to how housing systems distribute financial and stability risks across households through tenure structures and market conditions. Using survey evidence from Slovenia, a high-homeownership country shaped by post-socialist privatization and limited rental provision, the study examines how housing-related risks and expectations emerge at the household level. The empirical analysis combines correlation analysis with multivariate linear regression models incorporating key socio-demographic controls. The results show that perceived housing affordability is negatively associated with expectations of future housing price growth. In addition, expectations of rent increases emerge as a strong predictor of housing price expectations, highlighting a close relationship between rental and ownership market's perceptions. The findings support the argument that housing systems operate as perception-driven risk regimes in which expectations and perceived market pressure shape household vulnerability. The study suggests that housing-related risk

is influenced not only by objective financial conditions but also by mechanisms of expectation formation linked to affordability perceptions. The paper contributes to the literature by integrating affordability, expectations, and risk allocation into a unified analytical framework for understanding housing market dynamics and household exposure to financial and residential vulnerability.

Keywords: Housing affordability, Financial risk, Housing markets, Household vulnerability, Housing expectations, Homeownership, Rental markets.

RESUMEN:

Este artículo replantea la asequibilidad de la vivienda como parte de un sistema más amplio de asignación de riesgos dentro de los mercados habitacionales contemporáneos. Aunque la literatura existente se ha centrado principalmente en las relaciones precio-ingreso y los indicadores de sobrecarga de costos, se ha prestado menor atención a la forma en que los sistemas de vivienda distribuyen riesgos financieros y de estabilidad entre los hogares mediante las estructuras de tenencia y los contextos de mercado donde se forman las percepciones y expectativas. Con el uso de evidencia obtenida



mediante encuestas en Eslovenia, un país con altas tasas de propiedad residencial caracterizado por la privatización postsocialista y una limitada provisión de alquiler, el estudio analiza cómo los riesgos y expectativas relacionados con la vivienda se manifiestan a nivel de los hogares. El análisis empírico combina análisis de correlación y modelos de regresión lineal multivariada con controles sociodemográficos clave. Los resultados muestran que la percepción de asequibilidad de la vivienda se asocia negativamente con las expectativas de crecimiento futuro de los precios. Asimismo, las expectativas de incremento en los alquileres emergen como un predictor sólido de las expectativas sobre los precios de la vivienda, ello evidenciaría una estrecha relación entre las percepciones de los mercados de alquiler y propiedad. Los hallazgos respaldan la idea de que los sistemas habitacionales funcionan como regímenes de riesgo impulsados por percepciones y expectativas. El estudio contribuye a la literatura al integrar asequibilidad, expectativas y asignación de riesgos dentro de un marco analítico unificado.

Palabras clave: Asequibilidad de la vivienda, Riesgo financiero, Mercados de vivienda, Vulnerabilidad de los hogares, Expectativas de vivienda, Propiedad residencial, Mercados de alquiler.

INTRODUCTION

Housing constitutes one of the fundamental pillars of social, economic, and territorial stability in contemporary societies. Traditionally, housing systems have been understood as mechanisms for wealth accumulation, patrimonial protection, and residential security, particularly through the expansion of homeownership as the dominant tenure model. However, over recent decades, global economic transformations, housing market financialization, and the sustained increase in housing costs have profoundly altered this logic, turning housing into a growing source of economic vulnerability and risk exposure for large sectors of the population.

In this context, housing no longer functions exclusively as a stabilizing asset, but also as a mechanism of financial pressure, indebtedness, and social inequality (Cirman & Sendi, 2016; Ziemann, 2024). Fernandez & Aalbers (2016) argue that the financialization of housing has strengthened the integration of residential markets into global financial circuits, increasing speculative dynamics and reinforcing inequalities associated with access to housing. Similarly, Piketty (2014) emphasizes that the concentration of capital and the unequal accumulation of wealth have intensified social disparities in access to property ownership, contributing to the reproduction of intergenerational inequality. Fields and Uffer (2016) further demonstrate that the financialization of rental housing has transformed housing from a social necessity into an investment asset,

increasing rental pressures and reducing affordability for middle- and low-income households.

The accelerated growth of housing prices and housing-related expenditures has surpassed household income growth in many countries, progressively deteriorating housing affordability and intensifying access difficulties for both potential homeowners and renters. At the same time, the expansion of mortgage indebtedness, the reduction of affordable rental alternatives, and the increasing interconnection between financial and real estate markets have amplified forms of household economic exposure (Organisation for Economic Co-operation and Development, 2026; Ziemann, 2024). Under these conditions, housing systems no longer operate solely as instruments of social protection, but also as structures capable of intensifying economic vulnerability, residential instability, and dependence on family and intergenerational resources.

Canepa & Khaled (2018) indicate that housing finance systems are increasingly associated with higher levels of household credit risk, particularly in contexts characterized by volatile real estate markets and elevated debt burdens. Likewise, Wilhelmsson & Zhao (2018) highlight that risk exposure varies significantly across housing market segments, affecting both lenders and households through increased uncertainty and financial instability. In the Slovenian context, Lenarčič et al. (2017) identify persistent fluctuations and forecasting challenges in housing prices, illustrating the sensitivity of residential markets to macro-economic and financial dynamics. Complementarily, recent international cost-of-living indicators reveal that housing expenditures continue to represent one of the most significant financial burdens for households, particularly in urban areas with rising rental and ownership costs (Numbeo, 2025).

Within this framework, a central paradox emerges: countries characterized by high levels of homeownership do not necessarily experience lower levels of housing vulnerability. On the contrary, when rental markets are weak and public housing provision is limited, many households are pushed toward ownership under conditions of elevated financial exposure, long-term indebtedness, and reliance on family wealth transfers (Organisation for Economic Co-operation and Development, 2026; Statistical Office of the Republic of Slovenia, 2026). Consequently, the contemporary debate should not focus exclusively on determining whether ownership or renting represents the superior tenure form, but rather on understanding how housing systems distribute, transfer, and privatize risk across social groups and territories.

Housing also occupies a distinctive position within economic and social dynamics because of its dual nature as both a basic social necessity and a long-term financial asset. Residential decisions influence not only household

economic stability, but also demographic processes, labor mobility patterns, spatial segregation, and regional development dynamics (Organisation for Economic Co-operation and Development, 2026; Statistical Office of the Republic of Slovenia, 2026). From this perspective, housing may be interpreted as an institutional architecture of risk in which public policies, tenure regimes, and territorial structures shape the forms of exposure experienced by households in relation to economic and social volatility.

Although a significant portion of the academic literature has addressed housing affordability through traditional indicators such as price-to-income ratios, cost-overburden measures, and housing deprivation indexes, many studies continue to examine these phenomena primarily as social outcomes rather than as mechanisms of economic and structural risk transmission (Cirman & Sendi, 2016; Statistical Office of the Republic of Slovenia, 2026). In contrast, financial risk literature has focused mainly on mortgage expansion, housing price volatility, and macro-financial stability, while paying comparatively limited attention to housing tenure structures and everyday household vulnerability (Banka Slovenije, 2025; Mian & Sufi, 2014). This theoretical fragmentation has restricted the development of integrated analytical frameworks capable of explaining how housing systems redistribute financial, spatial, and intergenerational risks within contemporary societies.

In this regard, Slovenia represents a particularly relevant case for examining housing as a risk regime. Following the large-scale privatization process associated with the post-socialist transition, the country consolidated one of the highest homeownership rates in Europe while simultaneously reducing the public housing stock and limiting institutional mechanisms for collective housing risk absorption (Geodetska uprava Republike Slovenije, 2024). As a result, Slovenia developed a housing system characterized by strong ownership concentration, a relatively weak rental sector, rapid housing price increases, and growing territorial inequalities. Under these conditions, access to secure housing increasingly depends on family wealth, intergenerational transfers, and individual borrowing capacity, thereby reproducing structural forms of inequality and social vulnerability (Banka Slovenije, 2025; Topolovec et al., 2026).

Based on these considerations, the present study conceptualizes housing as a structured regime of risk allocation and transmission in which housing affordability represents not only an economic issue, but also a mechanism of social vulnerability, territorial inequality, and financial exposure. To address this objective, the study examines dimensions related to financial pressure derived from housing costs, tenure security, intergenerational inequalities, and spatial disparities in the distribution of housing-related risks. In doing so, the research seeks to contribute

to contemporary debates on housing, social stability, and risk governance by offering an integrated interpretation of how housing systems may transform individual economic insecurity into broader forms of collective structural fragility.

MATERIALS AND METHODS

This study adopted a quantitative, cross-sectional, and exploratory research design aimed at examining the relationships between housing affordability perceptions, housing-related expectations, and market participation within a high-homeownership housing system. The research was grounded in the theoretical assumption that housing systems operate not only through objective financial conditions but also through perception-based mechanisms capable of shaping household vulnerability, residential decision-making, and expectations regarding future market developments. The analytical approach focused on identifying statistical associations between perceived housing affordability, expectations concerning future housing purchase prices and rental prices, regional differences, and direct housing market participation. Given the exploratory nature of the study, the analysis emphasized relational and interpretive patterns rather than causal inference.

The empirical analysis was based on a structured survey conducted in Slovenia during 2025. The questionnaire was specifically designed to collect information regarding household perceptions of housing affordability, expectations related to future housing price and rental price developments, recent participation in the housing market, and selected socio-demographic characteristics. Emphasis was placed on capturing perception-driven dimensions of housing-related risk rather than relying exclusively on objective economic indicators. The survey included variables related to perceived affordability within respondents' regions, expectations regarding future housing purchase prices and rental prices, age categories, household composition, and regional location. Since several questions were conditional, the number of valid observations varied across analyses. Nevertheless, the principal variables used in the empirical models were answered by most respondents and therefore provided sufficient consistency for statistical testing. The sample was opportunistic and non-probabilistic rather than nationally representative, meaning that the findings should be interpreted primarily as exploratory evidence concerning housing-related perceptions and expectations within the Slovenian housing context.

The study operationalized housing-related perceptions and expectations using both continuous and ordinal variables. Perceived housing affordability was measured on a continuous scale ranging from 0 to 100, where higher values represented greater perceived accessibility of housing within the respondent's region. Expectations

regarding future housing purchase prices and rental prices were measured using five-point ordinal scales ranging from strong expected increases to strong expected decreases during the following twelve months. Lower values on these scales indicated stronger expectations of future price growth. Regional location was included to examine spatial differences in perceived housing affordability, while housing market participation identified whether respondents had recently engaged directly with the housing market through activities such as searching for housing or completing a property purchase. Age category and household size were incorporated as complementary socio-demographic control variables. While age reflected life-cycle positioning, household size provided a more direct indicator of housing demand, family-related housing needs, and residential pressure.

The empirical analysis combined parametric and nonparametric statistical techniques according to the measurement level and distributional characteristics of the variables. Pearson and Spearman correlation coefficients were calculated to examine the relationships between perceived housing affordability and expectations regarding future housing price growth. Spearman correlation was treated as the principal measure due to the ordinal structure of the expectation variables, whereas Pearson correlation was additionally reported because the affordability variable exhibited quasi-continuous properties. Associations between expectations concerning housing purchase prices and rental price increases were also analyzed using Spearman rank correlation as the primary analytical method. Regional differences in perceived housing affordability were examined using the Kruskal–Walli’s test, an appropriate nonparametric procedure for comparing multiple independent groups under conditions of unequal sample distributions and potential deviations from normality. Differences between respondents who had recently participated in the housing market and those who had not were analyzed using the Mann–Whitney U test. To strengthen analytical robustness, multivariate linear regression models were estimated for the principal hypotheses involving affordability perceptions and housing price expectations. These models incorporated a limited number of theoretically relevant socio-demographic controls, including age category and household size. Due to sample limitations and subgroup imbalances, the regression analyses were interpreted as robustness checks rather than definitive causal estimations.

All statistical analyses were conducted using IBM SPSS Statistics 31. Missing values were handled using complete case pairwise procedures within each statistical analysis, resulting in variation in the number of valid observations across tests. This approach allowed the inclusion of all available information while maintaining methodological consistency with the assumptions underlying each statistical procedure. The research complied with fundamental ethical principles applicable to social science research involving human participants. The survey collected anonymous responses and did not include personally identifiable information. Participation was voluntary, and respondents were informed about the academic purpose of the study prior to completing the questionnaire. No sensitive personal data were collected during the research process. The 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 was not deposited in a public repository. Furthermore, no generative artificial intelligence tools were used to generate empirical data, perform statistical analyses, or produce the research findings. Generative AI tools were employed exclusively for minor language editing and formatting assistance.

RESULTS-DISCUSSION

This section presents the empirical results of the survey analysis. The results are structured according to the hypotheses developed in the theoretical framework. Table 1 summarizes the hypotheses tested in the empirical analysis together with the corresponding variables and statistical methods (Appendix 1).

Table 1. Hypotheses, variables, and statistical tests.

Hypothesis	Relationship tested	Variables	Statistical method
H1	Perceived affordability → price expectations	Housing affordability; price expectations	Pearson and Spearman 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

Descriptive statistics are used to provide an overview of the sample characteristics and to contextualize the subsequent statistical analyses. The characteristics of the survey sample are presented in Table 2. The table provides descriptive statistics for key demographic and housing-related variables and allows readers to assess the structure and composition of the sample.



Table 2. Sample characteristics.

Variable	Category / Statistic	Value
Age category	Median	3
Gender	Female (%)	62%
	Male (%)	38%
Household size	Mean (SD)	3.3 (1.2)
Children in household	Yes (%)	52%
	No (%)	48%
Education	Secondary (%)	31%
	Tertiary (%)	69%
Employment status	Employed (%)	43%
	Self-employed (%)	6%
	Student (%)	46%
	Unemployed (%)	1%
	Retired (%)	4%
Region	Štajerska (%)	62%
	Other regions (%)	38%
Housing market participation	Purchased property (%)	3%
	Actively searched (%)	25%
	Rented or renewed rental (%)	11%
	None of the above (%)	59%

N = 78 respondents (valid cases vary by variable)

Note: Percentages are based on available responses. Missing values vary across variables due to the conditional survey design. Age is measured as an ordinal category.

The sample is opportunistic and not statistically representative. Because the questionnaire included conditional questions, the number of valid observations varies across variables. Age was recorded in ordinal categories; the median category was 3, corresponding to the 30–39 age group. However, several core variables were answered by nearly all respondents and therefore provide the basis for the empirical analysis.

These include age category, perceived housing affordability within the respondent's region, expectations regarding future rental prices, and expectations regarding future housing purchase prices.

Age category 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 are associated with expectations regarding future housing market developments (Table 3).

Table 3. Relationship between perceived housing affordability and price expectations (H1).

Method	Coefficient	p-value	N
Pearson (r)	-0.274	0.036	59
Spearman (ρ)	-0.263	0.044	59

Note: Pearson and Spearman correlation coefficients are reported. The Spearman coefficient is considered the primary estimate due to the ordinal nature of the expectation variable.

The full survey sample consisted of 71 respondents. However, due to item non-response, the number of valid observations for the variables used in H1 is reduced to N = 59.

Given the ordinal nature of the expectation variable, Spearman rank correlation was also estimated and is reported as the primary measure. The Spearman coefficient confirms the observed relationship ($\rho = -0.263$, $p = 0.044$), indicating that respondents who perceive housing as less affordable tend to expect stronger increases in housing prices. The

similarity in magnitude and statistical significance across both measures suggests that the result is robust to the choice of correlation method.

To further assess the robustness of the observed relationship, a multivariate linear regression model was estimated with expectations of housing price growth as the dependent variable. Perceived housing affordability was included as the main independent variable, while age category and household size were introduced as control variables. Age category was selected as a baseline life-cycle control commonly used in empirical research, while household size was included to capture variation in household composition and housing-related demand. The inclusion of these covariates allows for evaluating whether the observed association persists after accounting for basic socio-demographic differences across respondents.

The results confirm that perceived housing affordability remains a statistically significant predictor of price expectations ($B = -0.013$, $p = .005$; 95% CI $[-0.021, -0.004]$). This indicates that the negative association between affordability and price expectations is robust to the inclusion of basic socio-demographic controls. Higher age categories are positively associated with price expectations ($B = 0.184$, $p = .015$), suggesting that respondents in higher age categories tend to expect stronger price growth, while household size does not exhibit a statistically significant effect (Table 4).

Table 4. Multivariate regression results for housing price expectations (H1).

Variable	B	Std. Error	Beta	t	p-value	95% CI
Constant	2.118	0.484	—	4.373	<0.001	[1.146, 3.090]
Perceived affordability	-0.013	0.004	-0.362	-2.949	0.005	[-0.021, -0.004]
Age category	0.184	0.073	0.328	2.524	0.015	[0.038, 0.330]
Household size	-0.049	0.095	-0.068	-0.523	0.603	[-0.239, 0.140]

The magnitude of the correlation suggests a modest but meaningful relationship, consistent with perception-based mechanisms linking current affordability conditions to expectations of future market developments (Armona et al. 2019).

These findings support H1.

This finding is consistent with previous research suggesting that perceptions of housing scarcity and affordability constraints are closely linked to expectations of continued price growth (Organisation for Economic Co-operation and Development, 2026; Ziemann, 2024). It also aligns with broader literature on expectation formation, where current constraints are interpreted as signals of persistent market pressure (Table 5).

Table 5. Relationship between price expectations and rent expectations (H2).

Method	Coefficient	p-value	N
Pearson (r)	0.509	<0.001	75
Spearman (ρ)	0.580	<0.001	75

The full survey sample consisted of 75 valid observations for the variables used in H2.

Spearman rank correlation analysis revealed a strong and statistically significant positive association between expectations of future housing purchase price growth and expectations of future rent increases ($\rho = 0.580$, $p < 0.001$, $N = 75$). This indicates that respondents who expect stronger increases in housing purchase prices also tend to expect stronger increases in rental prices. The magnitude of the coefficient suggests a substantively meaningful relationship, indicating that respondents perceive price and rental dynamics as closely interconnected components of overall housing market pressure.

For completeness, Pearson correlation was also calculated and yields a consistent result ($r = 0.509$, $p < 0.001$), further supporting the robustness of the observed association.

To further assess the relationship while accounting for additional factors, a multivariate linear regression model was estimated with expectations of housing price growth as the dependent variable. Expectations of rent increases were included as the main independent variable, while perceived housing affordability and age category were introduced as control variables.

The regression results indicate that expectations of rent increases remain a strong and statistically significant predictor of price expectations ($B = 0.655$, $p < .001$; 95% CI $[0.400, 0.911]$). The magnitude of the standardized coefficient ($\beta = 0.516$) indicates a substantial effect size, suggesting that rent expectations represent the dominant explanatory factor in

the model. Perceived housing affordability retains a negative and statistically significant association with price expectations ($B = -0.010$, $p = .008$), while higher age categories are positively associated with price expectations ($B = 0.160$, $p = .009$). The overall model explains a considerable share of variance in price expectations ($R^2 = 0.461$), indicating strong explanatory power.

These findings are consistent with H2 and suggest that expectations in rental and ownership markets are closely linked components of a broader perception of housing market conditions (Table 6).

Table 6. OLS regression results for housing price expectations (H2).

Variable	B	Std. Error	Beta	t	p-value	95% CI
Constant	0.542	0.351	—	1.542	0.129	[-0.162, 1.246]
Rent expectations	0.655	0.127	0.516	5.141	<0.001	[0.400, 0.911]
Perceived affordability	-0.010	0.004	-0.273	-2.751	0.008	[-0.017, -0.003]
Age category	0.160	0.059	0.273	2.714	0.009	[0.042, 0.279]

Model statistics:

$R^2 = 0.461$, Adjusted $R^2 = 0.431$, $F(3,55) = 15.673$, $p < 0.001$

The magnitude of the correlation suggests a strong and substantively meaningful relationship, indicating that respondents perceive price and rental dynamics as closely interconnected components of overall housing market pressure.

These findings support H2.

This finding is consistent with previous research emphasizing the interconnectedness of housing submarkets, where price and rent dynamics are jointly driven by underlying supply constraints and demand pressures (Organisation for Economic Co-operation and Development, 2026; Ziemann, 2024). The strong association also suggests that households interpret housing markets as a unified system of price formation rather than as segmented tenure-specific markets, reinforcing the role of perception-based mechanisms in shaping housing expectations (Table 7).

Table 7. Regional differences in perceived housing affordability (H3).

Variable	Grouping Variable	N	H (Kruskal–Wallis)	df	p-value
Housing affordability	Region	59	13.980	7	0.052

The full sample for this analysis consists of $N = 59$ valid observations.

The Kruskal–Wallis test indicates marginally significant differences in perceived housing affordability across regions ($H(7) = 13.980$, $p = 0.052$). Although the result does not reach the conventional 0.05 significance threshold, it suggests the presence of spatial variation in perceived housing accessibility.

Inspection of mean ranks indicates notable differences between regions, with some regions consistently reporting lower perceived affordability. However, these differences should be interpreted with caution due to uneven group sizes across regions, particularly the concentration of observations in a single region.

H3 therefore receives partial empirical support.

The observed regional variation, although only marginally significant, is consistent with existing evidence on spatial disparities in housing markets. Differences in housing demand, price dynamics, and local economic conditions are likely to contribute to heterogeneous perceptions of housing affordability across regions. At the same time, the uneven distribution of respondents across regions limits the strength of statistical inference, suggesting that future research should examine regional effects using more balanced samples (Table 8).

Table 8. Differences in price expectations by housing market participation (H4).

Variable	Grouping Variable	N	U (Mann–Whitney)	Z	p-value
Price expectations	Market participation (bought vs. searched)	21	0.000	-2.618	0.009

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 provide preliminary support for H4.

The analysis is based on $N = 21$ valid observations, including 2 respondents who purchased property and 19 who actively searched for property.

The Mann–Whitney U test indicates a statistically significant difference in price expectations between the two groups ($U = 0.000$, $Z = -2.618$, $p = 0.009$). Respondents who purchased property report higher expectations of future price increases (mean rank = 20.50) compared to those who were only actively searching (mean rank = 10.00).

These findings suggest that direct market participation is associated with stronger expectations of future price growth. However, the result should be interpreted with caution due to the extremely small number of purchase cases ($N = 2$), which limits the robustness and generalizability of the comparison.

H4 is therefore supported, but the result is subject to important sample limitations.

The observed difference between market participants highlights the role of experience-based expectation formation, where direct exposure to housing transactions may reinforce perceptions of price pressure. At the same time, the very small number of purchase cases suggests that this finding should be interpreted as indicative rather than conclusive. Future research should examine this relationship using larger and more balanced samples.

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.

The results reported in this study are based on cross-sectional data and should therefore be interpreted as associations rather than causal relationships. The discussion that follows adopts an interpretive perspective, relating the observed patterns to the theoretical framework without implying causal direction.

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 is consistent with the interpretation that perceptions of scarcity are associated with 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 associated with expectations of higher rental costs, reflecting a perceived linkage within the housing market. 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 be associated with differences in both objective market outcomes and 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 is consistent with the interpretation that market participation may be related to how 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 are consistent with a broader pattern of associations between structural housing market pressures and household-level expectations. The empirical results are consistent with a perception-based interpretation linking perceived affordability, market expectations, and direct housing-market exposure. This interpretation reflects the theoretical framework proposed in the paper rather than a causal sequence demonstrated by the data. These expectations are closely connected to expectations regarding rental price increases and appear to vary with respondents' reported 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. Similar findings have also been observed in organizational research, where adaptive organizational responses are influenced not only by objective structural conditions but also by perception-based mechanisms and environmental uncertainty (Ardabili et al., 2025). Instead, perceptions of risk are also shaped by how households interpret market signals, including perceptions of scarcity and expectations about future price developments. Similar perception-based mechanisms have also been emphasized in organizational research, where knowledge sharing and adaptive leadership are understood as important responses to uncertainty and dynamic environments (Rahman et al., 2025).

Households may therefore report different behavioral intentions and housing strategies in relation to both current affordability conditions and expectations regarding future market developments. Expectations of continued price growth and rent increases may be associated with higher perceived housing insecurity.

These findings align with behavioral research showing that households form housing market expectations based on perceived scarcity, recent price trends, and social information rather than purely objective financial indicators (Kuchler & Stroebel, 2021).

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 provides a useful framework for understanding why households may report perceptions of housing insecurity even in the absence of immediate financial distress.

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.

CONCLUSIONS

This paper examined how households perceive housing market pressures and how these perceptions are associated with 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 price developments, highlighting the association between direct market exposure and housing market expectations. These findings are consistent with prior research emphasizing the increasing interdependence between rental and ownership housing markets in financially constrained environments. Previous studies have shown that expectations of rising rents often co-occur with expectations of house price growth, reflecting shared underlying drivers such as supply constraints and demand pressure.

The results are consistent with a perception-based interpretation in which responses indicate that households tend to interpret signals from the rental market in relation to broader housing market trends. In this sense, rent expectations may serve as an important reference point in how households form expectations about future price developments.

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 can be understood as being reflected in a broader interaction between market conditions, perceptions of housing accessibility, and expectations about future price developments. In this sense, housing systems may be understood as risk regimes within which households interpret market signals and report corresponding expectations and behavioral intentions.

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 be associated with stronger 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 analyzing housing affordability, market dynamics, and the distribution of housing-related risk.

From a risk perspective, this suggests that housing-related vulnerability is shaped not only by current financial exposure but also by anticipatory mechanisms. Expectations of rising rents and prices may reinforce perceived housing insecurity even before actual cost increases materialize.

These findings suggest that housing policy should not only address objective affordability constraints but also consider the role of expectation formation. Persistent expectations of price and rent increases may be associated with perceived market pressure and differences in household decision-making and timing of market entry.

First, the survey sample is opportunistic and not statistically representative of the Slovenian population.

Second, item non-response reduced the number of valid observations in several analyses.

Third, the distribution of respondents across regions was uneven, limiting the strength of regional comparisons.

Fourth, only a very small number of respondents reported completing a property purchase, which restricts statistical inference regarding market participation effects.

These limitations should be considered when interpreting the results and highlight the need for future research using larger and more balanced samples. The findings should therefore be interpreted as indicative of perception-based mechanisms rather than as precise estimates of population-level effects.

REFERENCES

- Armona, L., Fuster, A., & Zafar, B. (2019). Home price expectations and behaviour: Evidence from a randomized information experiment. *The Review of Economic Studies*, 86(4), 1371–1410. <https://doi.org/10.1093/restud/rdy038>
- Ardabili, F. S., Verbenko, G., & Cajnko, P. (2025). The effects of organizational agility on organizational performance: The mediating role of ambidexterity. *RISUS - Journal on Innovation and Sustainability*, 16(2), 114–123. <https://doi.org/10.23925/2179-3565.2025v16i2p114-123>
- Banka Slovenije. (2025). *Poročilo o finančni stabilnosti 2025*. Banka Slovenije. <https://www.bsi.si/sl/iskanje?i=Porocila%20o%20financijski%20stabilnosti>
- Canepa, A., & Khaled, F. (2018). Housing, housing finance and credit risk. *International Journal of Financial Studies*, 6(2), 50. <https://doi.org/10.3390/ijfs6020050>
- Cirman, A., & Sendi, R. (2016). Housing finance in Slovenia: From a national housing fund to a bank-driven system. In J. Lunde & C. Whitehead (Eds.), *Milestones in European housing finance* (pp. 341–357). John Wiley & Sons.
- Fernandez, R., & Aalbers, M. B. (2016). Financialization and housing: Between globalization and varieties of capitalism. *Competition & Change*, 20(2), 71–88. <https://doi.org/10.1177/1024529415623916>
- Fields, D., & Uffer, S. (2016). The financialisation of rental housing: A comparative analysis of New York City and Berlin. *Urban Studies*, 53(7), 1486–1502. <https://www.jstor.org/stable/26151125>
- Geodetska uprava Republike Slovenije. (2024). *Letno poročilo o slovenskem trgu nepremičnin za leto 2024*. Geodetska uprava Republike Slovenije. https://www.e-prostor.gov.si/fileadmin/Podrocja/Trg_vrednosti_nep/Trg_nepremicnin/Porocila_o_trgu_nepremicnin/2024/Letno_porocilo_za_leto_2024.pdf
- Kuchler, T., & Stroebe, J. (2021). Social finance. *Annual Review of Financial Economics*, 13, 37–55. <https://econpapers.repec.org/scripts/redir.pl?u=https%3A%2F%2Fdoi.org%2F10.1146%2Fannurev-financial-101320-062446;h=repec:anr:refeco:v:13:y:2021:p:37-55>
- Lenarčič, Č., Zorko, R., Herman, U., & Savšek, S. (2017). A primer on Slovene house prices forecast. *SIRIUS*, 3, 1–18. <https://mpira.ub.uni-muenchen.de/103552/>
- Mian, A., & Sufi, A. (2014). *House of debt: How they (and you) caused the Great Recession, and how we can prevent it from happening again*. University of Chicago Press.
- Numbeo. (2025). *Cost of living*. <https://www.numbeo.com/cost-of-living/>
- Organisation for Economic Co-operation and Development. (2026). *Affordable housing*. OECD. <https://www.oecd.org/en/topics/affordable-housing.html>
- Piketty, T. (2014). *Capital in the twenty-first century*. Belknap Press of Harvard University Press.

Rahman, M. M., Röntyneń, R., Ardabili, F. S., Newaz, H. T. M. Q., Voitenko, E., & Cajnko, P. (2025). Knowledge leadership and innovation: The mediating role of knowledge sharing. *Journal of Ecohumanism*, 4. <https://doi.org/10.62754/joe.v4i2.5933>

Statistical Office of the Republic of Slovenia. (2026). *Housing—Prices and construction*. <https://www.stat.si/StatWeb/en/Field/Index/6/31>

Topolovec, T., Sluga, A., Blejec, M., Storjak, M., Širovnik, K., & Tarman, U. (2026). *Stanovanjska problematika: So tržna najemna stanovanja po Sloveniji res bolj dostopna?* Pod črto. <https://podcrto.si/stanovanjska-problematika-so-trzna-najemna-stanovanja-po-sloveniji-res-bolj-dostopna/>

Wilhelmsson, M., & Zhao, J. (2018). Risk assessment of housing market segments: The lender's perspective. *Journal of Risk and Financial Management*, 11(4), 69. <https://doi.org/10.3390/jrfm11040069>

Ziemann, V. (2024). *Housing market challenges and policy options in Slovenia* (OECD Economics Department Working Papers No. 1810). OECD Publishing. <https://ideas.repec.org/p/oec/ecocaaa/1810-en.html>

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

Authors' Contribution (CRediT Taxonomy)

Author	Roles
Petra Cajnko	Conceptualization, Investigation, Methodology, Funding acquisition, Project administration, Resources, Writing – original draft.
Anja Mencinger	Data curation, Formal analysis, Software, Supervision, Validation, Visualization, Writing – review & editing.
Eva Klemenčič	Investigation, Methodology, Funding acquisition, Formal analysis.

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