

HOUSING AFFORDABILITY AS A FACTOR OF WELL-BEING AND LIFE SATISFACTION

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Abstract

The relationship between housing affordability and household well-being has garnered increasing attention in academic literature and policy debates. This study examines the empirical relationship between housing cost burden, median disposable income, and life satisfaction across 27 European Union member states for the period 2021–2025. The theoretical framework is grounded in the OECD well-being framework, which defines well-being as a multidimensional concept encompassing material conditions and quality-of-life factors. Life satisfaction is operationalized as the dependent variable, representing the final integrated outcome of well-being, while housing cost burden and median disposable income serve as independent variables, both being key components of housing affordability indicators. Data are sourced from Eurostat's EU Statistics on Income and Living Conditions (EU-SILC) and analyzed using multiple linear regression. The results confirm that both variables are statistically significant determinants of life satisfaction, with income exerting a stronger influence than housing cost burden. The residual variance suggests that life satisfaction is influenced by additional dimensions of well-being beyond housing affordability, pointing to directions for future research.

Keywords: housing affordability; life satisfaction; well-being; housing cost burden.

1. INTRODUCTION

Among the main challenges in the European Union's socio-economic policy are housing affordability and citizens' well-being. Rising housing prices and the increasing burden of housing costs raise the question of whether these processes influence citizens' subjective perception of their overall well-being and life satisfaction. Despite growing academic interest, empirical research focusing on the direct link between housing affordability and multidimensional well-being in a European context remains limited. An example of such research is the work by Stoenchev and Hrischeva (2025), who note that "housing prices are inversely related to the standard of living" (Stoenchev & Hrischeva, 2025, p. 207), which aligns with the main hypothesis of this study that housing unaffordability has a negative impact on households' subjective sense of well-being.

The aim of this study is to determine whether the housing cost burden and median disposable income have a statistically significant impact on life satisfaction in EU countries for the period 2021–2025. The theoretical framework is based on the concept of multidimensional well-being developed by the OECD in the report *How's Life?* (OECD, 2011), which views well-being as a combination of material conditions and quality-of-life factors. Within this concept, housing and income are key material determinants of well-being, while life satisfaction represents its ultimate subjective outcome.

2. LITERATURE REVIEW

Simon Kuznets is the author of the modern concept of GDP, which he first developed in a 1934 report to the U.S. Congress in which he proposed a single indicator for measuring a country's aggregate economic activity over a given period. In this report, he explicitly emphasizes that national income defined in this way is not a suitable indicator for measuring the well-being of the population because it takes into account neither the distribution of income among individual households in the economy nor non-market activities such as domestic labor and leisure time (Kuznets, 1934, pp. 6–7).

In the following decades, criticism of GDP as a measure of well-being intensified, and the search for its substitutes accelerated. Nordhaus and Tobin (1973) noted that GNP "is an index of production, not of consumption" and proposed the alternative MEW (Measure of Economic Welfare) index, which attempts to avoid the more significant discrepancies between GNP and economic well-being (Nordhaus & Tobin, 1973, p. 512). Over time, awareness of these limitations spread beyond academic circles. Political circles on both sides of the Atlantic raised the question of alternative measures of well-being: from Senator Robert Kennedy's speech at the University of Kansas in 1968, in which he noted that GDP "measures everything except what makes life worth living" (Kennedy, 1968), to the "Beyond GDP" conference in Brussels, organized by the European Commission, the European Parliament, the OECD (Organization for Economic Cooperation and Development), and others in November 2007 (European Commission, 2007).

The specific alternatives proposed by a number of international institutions must also be taken into account. The UNDP (United Nations Development Programme) introduced the concept of human development as an extension of the individual's right to choose (UNDP, 1990), while Stiglitz, Sen, and Fitoussi note that the time has come for the measurement system to shift its focus from economic activity to the well-being of households and individuals (Stiglitz, Sen, & Fitoussi, 2009, p. 12). A turning point in this development and in the overall definition of well-being is the OECD's first report, *How's Life?* (2011), which defines well-being as a combination of material and social factors of quality of life (OECD, 2011, p.

18). Subjective well-being is one of the factors in the OECD framework that can be viewed as a final integrated outcome, insofar as it reflects people's subjective assessment of their quality of life.

The OECD definition is widely accepted in academic circles because it emphasizes the well-being of households and individuals as the ultimate outcome, rather than aggregate economic indicators such as resources or final products—a distinction that is key to the present study (OECD, 2011, p. 18).

This definition of well-being is institutionally recognized and widely applied in the European statistical context, including as the conceptual basis for EU-SILC (European Union Statistics on Income and Living Conditions).

The specific measurement of well-being in European countries began in 2013, when the first ad hoc module for measuring subjective well-being was introduced in EU-SILC. A second ad hoc module followed in 2018, and following the entry into force of Regulation (EU) 2019/1700 on "Integrated European Social Statistics" (IESS) in 2021, the collection of data on life satisfaction within the EU-SILC framework became annual.

The EU-SILC data, covering some of the key well-being factors according to the OECD framework, form the basis of this study. The relationship examined is between the final well-being outcome of the individual household and selected well-being factors outlined in the OECD framework. For the purposes of the analysis, a linear multiple regression model is applied, with the variable "life satisfaction"—which reflects each individual's or household's subjective assessment of their level of well-being—serving as the final integrated well-being outcome. This assessment reflects the influences of other factors of well-being (health, income, social ties, etc.), to which each household assigns subjective importance and weight. That is why "life satisfaction" serves as the outcome variable in the statistical model. It is measured as an annual average for each of the 27 EU member states based on data from EU-SILC. Housing cost burden and median disposable income were selected as independent variables in the model, as these specifically operationalize the level of housing affordability for households.

Housing affordability is a concept with multiple dimensions that has been studied by the academic community since the late 19th century. Broadly speaking, the concept encompasses households' ability to cover their housing costs without compromising their ability to meet other basic needs.

Most often, housing affordability is measured by the ratio of housing costs to household income. There are two main forms of this ratio: 1) the housing cost burden, measured as the percentage of households whose housing costs exceed 40% of their monthly income, and 2) the HPIR (House Price Income Ratio), which measures the ratio between the price of an average home and the median household income. This approach is widely used but also heavily criticized in the literature. Hulchanski (1995) points out that the

commonly accepted thresholds for housing affordability are not based on scientific research and data, but are rather empirical in nature, with values that change over time. From the popular late-19th-century expression “one week’s wages for one month’s rent” (Hulchanski, 1995, p. 471), through 25% by 1950, to 30% by the end of the 20th century. To date, Eurostat and the OECD (Organisation for Economic Cooperation and Development) define the threshold of housing cost burden exceeding 40% of gross household income as the operational standard for measuring housing affordability.

In the same vein, other researchers note that the percentage of housing costs is not a sufficient measure, as it does not account for the residual income remaining after households’ mandatory expenditures on food, clothing, transportation, and other necessities (Stone, 2006, p. 42) (Stoencheva, 2021, p. 150).

The literature contains a series of studies on the relationship between the housing cost burden and well-being at the individual and single-factor levels. Based on EU-SILC microdata from 14 European countries and using an ordered logit model alongside the OLS model, Acolin and Reina (2022) find a significant negative relationship between housing cost burden and life satisfaction. They show that households spending over 30% of their income on housing are less likely to report higher life satisfaction compared to those with a lower housing cost burden. This relationship is even more pronounced among lower-income households, where high housing costs lead to a significant reduction in consumption of essential non-housing goods and services. Shamsuddin and Campbell (2022) confirm that a high housing cost burden is associated with reduced well-being, which manifests itself in various forms of material hardship. Matel (2026) examines specific demographic groups and demonstrates the same relationship among aging European households. This study contributes to the existing literature through a multivariate regression analysis at the aggregate level for the 27 EU member states, incorporating housing cost burden and median disposable income as independent variables.

3. RESEARCH METHODOLOGY

The methodology section includes a description of the data and operationalization of the variables, specification of the regression model, and diagnostic checks for its reliability.

The two independent variables selected for the model are the housing cost burden and median household income. These two factors from the OECD definition are most closely associated with housing affordability. As we have noted, the housing cost burden is a direct measure of housing affordability, reflecting the percentage of households that spend more than 40% of their monthly gross income on housing. Median income is included in the other mentioned indicator for measuring housing affordability—the HPIR. In this ratio, income is included in the denominator, which is important to note for the final interpretation of the analysis results.

This establishes the link between housing affordability and household well-being, which is the subject of this analysis.

EU-SILC was officially launched in 2003 based on an agreement between Eurostat and six Member States, and by 2004, EU-SILC already covered a total of 15 EU Member States. Data are collected at the local level by the respective national statistical institutes and published on the Eurostat website. The data for this analysis cover the period from 2021 to 2025.

The variables housing cost burden and median income are part of the group of economic indicators. They are quantitative variables and can be placed on a ratio scale, which is characterized by the presence of an absolute zero and the continuous nature of the values. The housing cost burden is measured as a percentage, reflecting the share of households in the respective country whose housing costs exceed 40% of their gross income. Median income is measured in PPS or euros; for the purposes of this analysis, PPS has been selected as the unit of measurement. PPS (Purchasing Power Standard) is a standard for purchasing power. The purpose of this choice is to largely avoid the influence of currency risks and fluctuations. The Purchasing Power Standard (PPS) is defined by Eurostat as an artificial currency unit that can purchase an equal quantity of goods and services in every country. The Purchasing Power Standard is calculated by dividing a given economic aggregate of the country, expressed in national currency, by the corresponding purchasing power parity. Price differences between countries mean that different amounts of national currency are required for the same goods and services depending on the country (Eurostat, 2023). An advantage of this unit of measurement is the ease of comparing data across countries and over different periods.

The “life satisfaction” indicator is measured using a 10-point scale (0–10). The indicator itself is numerical, but the scale is ordinal. It uses numerical categories from 0 to 10. However, this differs from the presence of zero in the sense of proportional scales. There is a clear ordering of the categories, but the intervals between them are not guaranteed to be equal. The type of scale should theoretically limit the use of parametric methods, but in practice, these scales are used for analyses based on parametric statistical methods. There has been a long-standing methodological debate on this topic in the scientific literature, with this type of variable—and especially this type of scale—first described by Rensis Likert in 1932 in his work “A technique for the measurement of attitudes” (Likert, 1932). In the ensuing discussion, such individual statements and the scales formed from them were referred to as “Likert items” and “Likert scales,” respectively.

Two schools of thought emerged: “ordinalists” and “intervalists,” with the former denying the possibility that Likert statements and scales could be analyzed using parametric statistical methods. A typical representative of this group is Stevens, who, according to Carifio & Perla (Carifio & Perla, 2008, p. 1150)

argues that what is—or can be—ordinal data at the level of a single element (i.e., an atom) cannot be converted into interval data at the scale level (i.e., at the molecular level). Another proponent of this view is Jamieson, who argues that Likert scales fall within the ordinal level of measurement and that the response categories are ordered, but the intervals between values cannot be considered equal (Jamieson, 2004, p. 2).

Authors such as Carifio & Perla (2008), Sullivan & Artino (2013), G. Norman (2010), and others argue that even if individual items possess a certain quality, the scale itself may have other qualities and can be treated as an interval scale. For example, Carifio and Perla (2008) emphasize that, according to many studies, Likert scales (unlike single Likert items) produce interval data and that the F-test is exceptionally robust to violations of its assumptions. (Carifio & Perla, 2008, p. 1150). They support their claim with the results of numerous Monte Carlo simulations of the F-test conducted by Glass (1972), which convincingly demonstrate that the F-test is exceptionally robust to violations of its assumptions (Glass, Peckham, & Sanders, 1972). Carifio and Perla's conclusion is unequivocal: "the weight of empirical evidence clearly supports the view and position that Likert scales (composed of multiple Likert items) produce interval data, especially when the scale meets the standard psychometric rule of including at least eight sufficiently related items" (Carifio & Perla, 2008, p. 1150). Norman (2010) supports the use of parametric methods in the presence of Likert data and argues that "parametric statistical methods can be used with Likert data, with small samples, with unequal variances, and with non-normal distributions—without concern that this will lead to an incorrect conclusion." (Norman, 2010, p. 631). Sullivan and Artino (2013) reach a similar conclusion, emphasizing that Likert-type items are ordinal, but treating them as interval data and using parametric tests is a widespread practice and is often entirely appropriate. (Sullivan & Artino, 2013, p. 541)

For the present analysis, it is significant that life satisfaction appears as a response variable measured on an ordinal scale, whose treatment as interval data is methodologically justified by Carifio & Perla (2008), Norman (2010), and Sullivan & Artino (2013)—which allows us to search for a relationship between the independent variables and the outcome variable without concern that the result might be distorted.

3.1. Data and methods

The data we use in this study exhibit characteristics of panel data—data from the same 27 countries are collected over a 5-year period. In this analysis, these data are treated as a pooled cross-section because

they are used as independent observations for each country and year, without tracking the individual development trajectories of the individual countries (Wooldridge, 2009, p. 444).

The data for this study are from Eurostat, extracted from EU-SILC (European Union Statistics on Income and Living Conditions) for the period 2021–2025. The sample is representative and covers the 27 member states of the European Union, with the analysis based on 125 valid observations.

This study applies a quantitative approach to analyze the relationship between housing affordability and household well-being using multiple linear regression. The method allows for the simultaneous assessment of the influence of several independent variables on the dependent variable. The model is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 D + \varepsilon \quad (1)$$

where Y is life satisfaction, X_1 is the housing cost burden, X_2 is the median disposable income, D is a dummy variable to control for the time effect, and ε is the random error.

A certain limitation of the available data is that they are aggregated at the national level and presented by year for each of the 27 member states. This creates conditions for a phenomenon referred to in the literature as spurious regression, in which the apparent dependence between the variables is the result of a common time trend rather than a real causal relationship (Wooldridge, 2009, p. 363). To avoid this risk, a dummy variable is introduced into the model to control for the time component in the data.

In Equation (1), the time effect is represented concisely by defining a binary dummy variable D , but in practice, $g-1$ binary variables are defined—one for each year of the analyzed period, excluding a reference year. The number of defined binary variables is one less to avoid perfect linear dependence between them and the constant, which would lead to the phenomenon known as the “dummy variable trap”, which would render the matrix singular and compromise the model estimates (Wooldridge, 2009, p. 235). In the presented model, the period spans 5 years (2021–2025), which requires the definition of 4 dummy variables (d_{2022} , d_{2023} , d_{2024} , d_{2025}), with 2021 designated as the reference year.

A significant advantage of this approach is that the estimated regression coefficients have the nature of “partial effects”—each coefficient measures the change in the dependent variable when the corresponding independent variable changes by one unit, holding all other variables constant. This means that the influence of a given factor is interpreted after statistically “controlling for” the effects of the other included variables, which allows for more reliable conclusions regarding causal relationships.

In the context of this study, this is of key importance, as indicators of housing affordability (e.g., HPIR or housing cost burden) are closely linked to household income and other socioeconomic characteristics.

Consequently, the use of multiple regression allows for the estimation of the “net” effect of the housing cost burden on well-being, independent of the influence of income and other factors.

An important step in the analysis is examining multicollinearity among the independent variables. The presence of strong correlation among them can lead to unstable estimates of the regression coefficients and difficulties in interpreting individual effects. The test for multicollinearity among the explanatory variables is performed using indicators such as the Variance Inflation Factor (VIF) and Tolerance, which allow for a quantitative assessment of the degree of interdependence among the factors (Belsley, Kuh, & Welsch, 1980, pp. 93–94).

The stability of the model is also confirmed by an additional diagnostic check using a residual plot (scatter plot of standardized residuals against predicted values), which reveals no systematic deviations from homoscedasticity.

In the present study, the linear model was chosen based on established practice in the literature on subjective well-being using aggregated national data, as well as due to the limited number of observations, which does not allow for a reliable estimation of more complex nonlinear specifications.

Given the assumptions of the classical linear regression model, the OLS (Ordinary Least Squares) estimates possess the BLUE (Best Linear Unbiased Estimator) property according to the Gauss-Markov theorem, which guarantees their efficiency and reliability (Montgomery, Peck, & Vining, 2012, p. 587).

Statistical analysis was conducted using IBM SPSS Statistics (IBM Corp., 2023).

A major limitation of the present analysis is the scope of the data. The 2021–2025 period is dictated by institutional reasons, as the annual collection of subjective well-being data in EU-SILC begins only after the entry into force of the IESS Regulation in 2021. Nevertheless, the data for each country and year are based on a probability sample representative of the entire population of the respective country.

A further limitation concerns the assumption of independence across observations. Although year fixed effects are included to control for common time trends, the pooled cross-sectional design does not account for potential clustering of errors within countries. Clustered standard errors or multilevel modelling would provide more robust estimates and are recommended for future research employing a longer time series or individual-level microdata.

4. RESEARCH RESULTS AND DISCUSSIONS

4.1. Descriptive Statistics

The main descriptive statistics for the variables included in the model are presented in Table 1. The data reveal significant economic differences among individual EU member states with respect to the three variables. The wide range of values reflects the substantial economic heterogeneity within the EU, which makes the study of these relationships particularly relevant in a European context and demonstrates the challenge faced by European policies, which must be implemented under very different conditions in individual countries.

TABLE 1 - DESCRIPTIVE STATISTICS

	N	Minimum	Maximum	Mean
Life satisfaction	126	5.6	8.00	7.3
Housing cost burden	125	2.40	28.90	7.8
Median disposable income (thous. PPS)	126	8,698	37,781	18,801
Valid N (listwise)	125			

The difference in N is due to one missing observation in the housing cost burden variable; the analysis was conducted with N=125 (listwise deletion).

Source: Eurostat, EU-SILC, 2021–2025. Own calculations.

4.2. Regression Analysis

The coefficient of determination $R^2 = 0.256$ from Table 2 indicates that the model explains 25.6% of the variation in life satisfaction. The adjusted coefficient of determination accounts for the number of independent variables included, but its value does not differ significantly from that of R^2 (Adjusted $R^2 = 21.8\%$).

TABLE 2 - MODEL SUMMARY

R	R2	Adjusted R2
0.506a	0.256	0.218

a. Predictors: (constant), housing cost burden, median disposable income (thous. PPS), d2022, d2023, d2024, d2025

Source: Eurostat, EU-SILC, 2021–2025. Own calculations.

Table 3 (ANOVA) presents the results of the analysis of variance. The obtained values of $F(6, 118) = 6.761$ exceed the critical value of 2.09 at a significance level of $\alpha = 0.05$, and $p < 0.001$ confirm the statistical validity of the model and reject the general null hypothesis of no dependence between the independent variables and the outcome variable at a 5% significance level.

The residual sum of squares (Residual SS = 16.428) indicates that a significant portion of the variation in the dependent variable remains unexplained within a model with two independent variables. This result highlights the multidimensional nature of life satisfaction as a measure of household well-being, which is defined beyond the narrow confines of the housing cost burden and median disposable income. Important components of well-being, such as educational attainment, access to healthcare, security, environmental quality, social ties, and civic engagement, remained outside the scope of the model. Including more of the dimensions of well-being defined within the OECD framework in future studies would allow for a more complete explanation of the variation in households' subjective assessments of their well-being.

TABLE 3 - ANOVA

	Sum of Squares	df	F	Sig.
Regression	5.648	6	6.761	<.001b
Residual	16.428	118		
Total	22.076	124		
a. Dependent variable: life satisfaction				
b. Predictors: (constant), housing cost burden, median disposable income (thous. PPS), d2022, d2023, d2024, d2025.				

Source: Eurostat, EU-SILC, 2021–2025. Own calculations.

The table of coefficients (Table 4) presents the values of the regression coefficients. Their individual statistical significance is tested using the t-test, with the null hypothesis for each stating that the respective coefficient is equal to zero, i.e., that the variable has no effect on the dependent variable. The regression coefficients for both main independent variables reject the null hypothesis at the $\alpha = 0.05$ level. The nominal value of the housing cost burden coefficient is negative, $B = -0.017$ ($p=0.010$), indicating that a 1% increase in the share of households with housing costs exceeding 40% of their gross income reduces the average life satisfaction of the entire population by 0.017 points, *ceteris paribus*.

An important methodological clarification regarding the interpretation of the housing cost burden ratio is that this indicator measures the proportion of households whose housing costs exceed 40% of their gross income—that is, it covers only the affected portion of the population. Life satisfaction, however, is an average value for the entire population of the country in question, including households that do not experience a housing cost burden. Given this observation, the established statistical correlation takes on particular significance—even a relatively small increase in the proportion of affected households has a measurable negative impact on the average level of well-being of society as a whole. This underscores the key social role of housing affordability—its impact is not limited to the directly affected households but extends to public welfare as a whole.

The regression coefficient for median disposable income is positive, with a value of $B = 0.031$ ($p < 0.001$). For the purposes of the regression model, median disposable income is expressed in thousands of PPS to obtain more meaningful values for the regression coefficient. Consequently, when annual household income increases by 1,000 PPS, life satisfaction increases by an average of 0.031, all other things being equal.

As noted in the methodology, median disposable income is included in the denominator of the HPIR coefficient, meaning that an increase in income leads to a decrease in the HPIR and, consequently, to an improvement in housing affordability. As expected, this improvement also has a positive effect on life satisfaction. However, the direct relationship between income and life satisfaction ($\beta = 0.439$) is stronger than the mediated relationship via housing affordability ($\beta = -0.210$), suggesting that income influences households' subjective well-being not only by improving housing affordability but also by expanding their opportunities for consumption and quality of life.

Since the two independent variables are measured in different units, standardized Beta coefficients—which are dimensionless—are used to compare their relative influence on the dependent variable (life satisfaction). The Beta value for median disposable income ($\beta = 0.439$) is higher in absolute terms than that of the housing cost burden ($\beta = -0.210$), which highlights the stronger influence of income on life satisfaction.

The difference between the unstandardized (B) and standardized ($Beta$) coefficients warrants further explanation. The Beta coefficient is calculated using the formula:

$$\beta = B \times (\sigma_x / \sigma_y) \quad (2)$$

where σ_x is the standard deviation of the respective independent variable, and σ_y is the standard deviation of the dependent variable. By its very nature, Beta expresses the change in the dependent variable in standard deviations when the independent variable changes by one standard deviation. This is precisely what makes this coefficient dimensionless and suitable for direct comparison between variables measured in different units.

For median disposable income, the standard deviation is 5.971 PPS. This difference reflects the significant economic disparities within the EU—from the poorest economies such as Bulgaria, Romania, and Slovakia to the richest such as Austria and Luxembourg. For its part, the housing cost burden is measured in percentages. Precisely because of the different scales of measurement for the two independent variables—percentages for the housing cost burden and thousands of PPS for median disposable income—a direct comparison of the nominal B coefficients would be methodologically incorrect. Standardization using Beta coefficients resolves this issue by bringing the two variables onto a

single dimensionless scale, thereby allowing for a correct comparison of their relative influence on life satisfaction.

TABLE 4 - COEFFICIENTS

	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Beta			Tolerance	VIF
(Constant)	6.812		50.668	<.001		
Housing cost burden	-.017	-.210	-2.623	.010	.986	1.014
Median disposable income (thous. PPS)	.031	.439	5.359	<.001	.941	1.063
d2022	-.028	-.027	-.265	.792	.597	1.674
d2023	.047	.046	.442	.659	.590	1.696
d2024	-.005	-.005	-.051	.959	.578	1.729
d2025	.016	.014	.135	.893	.625	1.601

Source: Eurostat, EU-SILC, 2021–2025. Own calculations.

The multicollinearity check between the independent variables shows that none of them influences the other in a way that compromises the model and its results. The VIF value for all variables is below 2, which is well below the critical threshold of 10, and the Tolerance values for all variables exceed 0.5, which is well above the critical threshold of 0.1, confirming the absence of multicollinearity.

The results obtained appear to contradict the intuitive perception that the two independent variables should be correlated because the housing cost burden is calculated using income. There is no contradiction, however, because the two variables measure different aspects of housing affordability at different levels of aggregation—the housing cost burden reflects the share of households whose individual housing costs exceed 40% of their own income, while median disposable income is an aggregate indicator for the entire population of the respective country. This difference in scale and measurement method explains the absence of multicollinearity between the two variables.

The dummy variables we defined to control for the time component and the probability of a spurious regression problem are not statistically significant at the $\alpha = 0.05$ level, indicating that the time component is not significant in explaining the variation in life satisfaction. This confirms that the observed relationship between the independent variables and the dependent variable is not the result of a general time trend (spurious regression), but reflects a real statistical relationship between housing burden and median disposable income, on the one hand, and life satisfaction, on the other.

The model constant ($B_0 = 6.812$) represents a theoretical value that has no practical economic interpretation, since real-world zero values for housing cost burden and median disposable income are impossible. Geometrically, it corresponds to the intersection of the regression line with the y-axis at a zero value on the x-axis.

Other additional factors that could be included in the study are a number of dimensions from the OECD framework that fall outside the scope of this analysis—such as employment, economic security, the quality and accessibility of healthcare, access to and quality of education, the sense of personal security, the quality of the environment, and the degree of social integration. It is precisely these factors that account for the unexplained 74.4% of the variation in life satisfaction—that part of the subjective sense of well-being that the model with two independent variables fails to capture.

The model intentionally focuses on housing affordability indicators — housing cost burden and median disposable income — as its primary predictors. While additional variables such as unemployment rates, income inequality (Gini coefficient), educational attainment, homeownership rates, social trust, and environmental quality are recognized determinants of life satisfaction within the OECD well-being framework, their inclusion would require a substantially larger dataset to avoid overfitting given the current sample size ($N = 125$). Future research with a longer time series or a broader set of country-level indicators would allow a more comprehensive model of subjective well-being.

This conclusion confirms the OECD's theoretical premise that well-being is a multidimensional phenomenon that cannot be reduced to one or two indicators—even if they are the most significant ones. In this study, housing cost burden and median disposable income were selected as the most significant factors of well-being in the context of housing affordability, and the model demonstrated their statistical significance. Nevertheless, they explain only 25.6% of the variation in life satisfaction. The remaining 74.4% fall outside the scope of the model—a clear indication of the complexity of measuring subjective well-being and the need for a broader, multidimensional approach to its study.

5. CONCLUSIONS

The results of the multiple linear regression analysis confirm that the housing cost burden and median disposable income are statistically significant determinants of life satisfaction in EU countries. The null hypothesis of no relationship between housing affordability and household well-being is rejected at a 5% significance level.

An analysis of the standardized coefficients reveals that median disposable income has a stronger influence on life satisfaction ($\beta = 0.439$) compared to the housing cost burden ($\beta = -0.210$). The impact of

income on well-being is twofold—on the one hand, it is direct, through an increase in household purchasing power, and on the other hand, it is indirect, through improved housing affordability by reducing the HPIR, since income is included in the denominator of this ratio. This means that policies aimed at increasing income may have a more significant effect on subjective well-being compared to measures aimed solely at reducing the housing cost burden.

The results of the regression model showed a lack of statistical significance for the time component in the data, which rules out the possibility of a spurious regression problem.

The study has certain limitations. The model explains 25.6% of the variation in life satisfaction, reflecting the multidimensional nature of well-being and the presence of other significant determinants outside the scope of the analysis. Future research could incorporate additional dimensions from the OECD framework, such as health, education, social ties, and environmental quality, which would allow for a more comprehensive explanation of the variation in households' subjective well-being.

These results highlight the key role of housing affordability as a factor in households' subjective well-being in a European context and underscore the need for an integrated approach in EU housing and social policies, while the significant heterogeneity of data across individual European countries suggests a growing need for a more intensive transfer of best practices in the field of housing affordability at the European level.

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