

## THE IMPACT OF ECONOMIC SECURITY DIFFERENTIATION ON QUALITY OF LIFE IN EUROPEAN UNION MEMBER STATES

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**Purpose:** The aim of this article is to assess the variation in economic security and quality of life across European Union (EU) Member States and to identify the interdependencies between these phenomena. The study includes an analysis of income, household consumption expenditure, the risk of poverty, income inequality, and subjective assessments of quality of life, as well as an assessment of changes and the degree of convergence among EU Member States over the period 2013–2023.

**Design/methodology/approach:** The article adopts a theoretical and empirical approach. The analysis is based on Eurostat data from the EU Statistics on Income and Living Conditions (EU-SILC), covering 27 EU Member States. From an initial set of 44 indicators, 8 indicators related to economic security and 3 indicators referring to quality of life were selected, with incomplete data excluded. Descriptive statistics, variability analysis, the Shapiro-Wilk test, correlation analysis, and multiple regression were applied to assess the impact of economic variables on subjective quality of life.

**Findings:** The study revealed pronounced differences among EU Member States in terms of economic security and quality of life, with a noticeable convergence trend observed in recent years. Higher income levels, lower income inequality, and a lower risk of poverty are strongly associated with better self-reported life satisfaction. A high quality of life is positively correlated with income and household consumption expenditure, and negatively correlated with financial difficulties and income inequality. The most favourable outcomes are observed in Western European countries, whereas the highest adverse indicators are recorded in Bulgaria and South-Eastern European countries. Multiple regression analysis confirmed the statistical significance of selected economic variables for quality of life, while also indicating the importance of non-material factors.

**Research limitations/implications:** The findings are constrained by data availability, which necessitated a reduction in the number of indicators. The study addresses only selected determinants of quality of life; therefore, future research should focus on social, health-related, environmental, and regional factors, and incorporate additional statistical methods.

**Practical implications:** The results may support the design of socio-economic policies. They highlight the need to strengthen households' financial stability, reduce income inequality, and improve households' resilience to unexpected expenditures.

**Social implications:** The study emphasises the importance of economic security for societal well-being and points to the need for measures aimed at reducing regional disparities.

The findings may be useful for public institutions responsible for cohesion policy and quality of life in the European Union.

**Originality/value:** The article provides an up-to-date assessment of economic security and quality of life in the European Union, based on the most recent data, and combines the analysis of objective economic indicators with subjective well-being assessments, offering valuable insights for policymakers and researchers.

**Keywords:** economic security, quality of life, income, income inequality, convergence, EU Member States.

**Category of the paper:** research paper.

## Introduction

Security is an issue that is widely analysed in the literature due to the role it plays in social life as an essential element of individual human needs (Fehler, 2012, p. 7; Misiuk, 2018) and as a fundamental human right (Gierszewski, 2013). The subject of security is always the individual, while its object consists of phenomena and processes related to human existence (Kitler, 2011, pp. 22-23). One of the fundamental types of security is economic security (Gębska, 2017; Kosowski, Kułakowska, 2022; Majka, 2015, p. 48). Economic security affects quality of life by determining the satisfaction of basic needs, access to education, healthcare provision, and the ability to invest in the future. It constitutes the foundation of well-being and individual satisfaction (Ficoń, 2020, p. 84). However, despite its importance for social policy and state strategic decision-making, this issue has not been addressed in the literature as frequently as it deserves. The analysis of the variation in economic security and its relationship with quality of life is essential for undertaking rational public actions. In view of the above, the aim of this article is to assess the variation in economic security (ES) and the quality of life of the population (QoL) in the European Union Member States and to identify the interdependencies between these phenomena. Within the main research objective, three specific objectives were formulated:

- to analyse the level, variation, and degree of change and convergence of economic security in EU Member States,
- to analyse the level, variation, and degree of change and convergence of the quality of life of EU residents,
- to identify the relationship between economic security and quality of life in EU Member States.

At the outset of the study, a hypothesis was formulated assuming that the level of economic security in the European Union Member States is becoming more equal and affects the quality of life of the population, and that important determinants of life satisfaction include such indicators as income and consumption levels, the risk of poverty, income inequality, and difficulties in meeting unexpected financial expenditures. The article adopts a theoretical

and empirical approach. In order to achieve the research objective and verify the hypothesis, a literature review was conducted, a study based on indicators derived from Eurostat (EU-SILC) was carried out, and the results and conclusions were presented.

## Literature review

The term “security” is widely used, and the need for security is one of the most important human necessities (Czechowska et al., 2020, p. 111). Socio-economic and political realities require security to be treated as a paramount human need (of a collective), understood as the “absence of something that is necessary to preserve life, development, and the maintenance of a social role” (Stachowiak, 2012, p. 38). According to R. Zięba, it denotes the certainty of existence and survival, resulting not only from the absence of threats but also from the activity of the subject (Zięba, 2012, p. 8). Security is sometimes understood as a process, a basic need, and a value and goal of existence (Pokruszyński, 2010, p. 9). It is an indivisible category (Fehler, 2012, p. 9); however, for research purposes, various typologies are distinguished. These include, among others, international, national, political, military, economic, social, cultural, and environmental security (Leszczyński, 2017; Wiśniewski, 2011, pp. 11-13). According to the spatial criterion, local, subregional, and regional security can be distinguished (Szczepański, 2023). Security is also treated as a public good, characterised by non-rivalry and provided by the state (Czechowska et al., 202). Its absence or the subjective perception of its absence causes anxiety and mobilises individuals to neutralise threats (Zięba, 2012, p. 9).

Economic security is analysed interdisciplinarily, in the context of countries, regions, and regional arrangements (Jaźwiński, 2019), from both macro- and micro-level perspectives. It constitutes the foundation of socio-economic development and economic growth of states and regions, as well as an important area of socio-economic policy (Raczkowski, 2012, p. 81; Stachowiak, 2012, p. 45). At the macro level, it denotes economic stability and the maintenance of development indicators, as well as balance in relation to other economies (Książopolski, 2011). At the micro level, it refers to the solvency of households and enterprises (Raczkowski et al., 2013, p. 35). The objective is the creation, fair distribution, and consumption of goods, which builds societal well-being (Leszczyński, 2017). At the individual level, economic security is based on the satisfaction of basic needs, while at the societal level it is closely linked to social security, the objective of which is the certainty of existence (Stachowiak, Dziurny, 2018). The literature identifies various aspects of economic security, including healthcare costs among low-income groups (Butler, 2006; Rizal et al., 2022), the importance of financial education for older people (Wierzbicka, 2019), perceptions of family and employment security (Kosowski, Kułakowska, 2022), as well as the quality of life of low-income individuals (Puciato et al., 2023).

Quality of life is a multidimensional concept and is widely used in both scientific and everyday language. The literature offers numerous concepts of quality of life, defined from philosophical, psychological, sociological, economic, pedagogical, and medical perspectives (Gawęł-Luty, 2022). The essence and conceptual scope of quality of life are broad, ranging from its identification with material well-being to assessments of personal satisfaction and happiness resulting from consumption, health, the natural environment, or social position. Thus, quality of life refers to the degree of satisfaction of an individual (or society) with the overall conditions of their existence (Bywalec, 2010, p. 42). Quality of life has been examined by many authors (Barlybaev et al., 2021; Gutkowska, Murawska, 2010; Koochi et al., 2017; Lalić et al., 2024; Micelli, Giliberto, 2023; Murawska, 2012; Petelewicz, Drabowicz, 2016; Rizal et al., 2022). These studies include, among others, assessments of personal satisfaction (Micelli, Giliberto, 2023). The measurement of quality of life involves both objective factors – living conditions – and subjective factors – individual criteria of evaluation (Gawęł-Luty, Lemańczyk, 2022; Panek, 2015).

An individual's quality of life is influenced by the material goods they possess, which are crucial because they enable the attainment of psychological well-being and higher-order needs. However, Amartya Sen points out that the ability to use goods in order to live a dignified life is more important than their mere possession, and that a high quality of life is reflected in an individual's capability to achieve valued functionings (Sen, 1973). Living conditions should therefore be assessed from the perspective of their significance for the individual, rather than as values in themselves (Petelewicz, Drabowicz, 2016). Quality of life is linked to the concept of life satisfaction, often identified with happiness and well-being. This implies acceptance of living conditions and the fulfilment of individual needs (Oladipo et al., 2013). Thus, quality of life constitutes an assessment of both the objective and subjective condition of an individual within a local context (WHO, 2012).

An important body monitoring the social situation and quality of life in EU countries is Eurostat (Eurostat, 2025). The data support public policies in diagnosing problems and evaluating interventions. Data comparability enables the analysis of trends and the impact of macroeconomic phenomena. European treaties emphasise the importance of quality of life and well-being: the Treaty of Rome (1992) introduced the objective of the “improvement of citizens' quality of life”, while the Treaty of Lisbon introduced the concept of well-being. The concept of sustainable development has also influenced the development of social statistics (EC, 2025a). The implementation of these principles (EC, 2025a; EC, 1993; OECD, 2013) led to the development of a set of quality-of-life indicators. The “8+1” model comprises eight resource domains (including material living conditions, health, education, leisure time, economic security, rights, the living environment, and the natural environment), as well as an additional overall subjective assessment of well-being (EC, 2025b).

In summary, security is a fundamental human need, a public good, and a subjective perception of the absence of threats. The multidimensional nature of this good reflects its importance in a risk society, in which economic security occupies a special place, playing a key role both at the macro level – where it signifies economic stability – and at the micro level – where it determines the solvency of market actors and affects the quality of life of the population.

## Research methodology and research process

The data source consisted of datasets from the European Statistical Office, in particular the Statistics on Income and Living Conditions (EU-SILC). The information collected within EU-SILC refers to households and their members. The achieved sample size surveyed in the EU in 2023 amounted to 293 thousand households and 558.7 thousand individuals aged 16 and over (Eurostat, 2025). The data covered 27 European Union Member States and the period 2013-2023. At the initial stage of the study, 27 indicators describing the economic security of the population (ES) (referred to as independent variables X) and 17 indicators describing the quality of life of the population (QoL) (referred to as dependent variables Y) were collected. Subsequently, indicators with missing data were eliminated, and ultimately 8 ES indicators and 3 QoL indicators were included in further analyses. Variables X01–X03 were classified as stimulants (S), while variables X04-X08 were classified as destimulants (D) of the population's quality of life (Table 1).

**Table 1.**

*Indicators included in the analysis of economic security (ES) and quality of life (QoL)*

Symbol	Variable description	DOI	Data years	S/D
Economic security of the population (ES) – independent variables				
X01	Mean equivalised net income in PPS	<a href="https://doi.org/10.2908/ILC_DI03">https://doi.org/10.2908/ILC_DI03</a>	2015–2023	S
X02	Median equivalised net income in PPS	<a href="https://doi.org/10.2908/ILC_DI03">https://doi.org/10.2908/ILC_DI03</a>	2015–2023	S
X03	Gross domestic product (GDP) per capita at market prices – individual consumption in PPS	<a href="https://doi.org/10.2908/NAMA_10_PC">https://doi.org/10.2908/NAMA_10_PC</a>	2013–2023	S
X04	Households making ends meet with difficulty – %	<a href="https://doi.org/10.2908/ILC_MDES09">https://doi.org/10.2908/ILC_MDES09</a>	2015–2023	D
X05	Households making ends meet with great difficulty – %	<a href="https://doi.org/10.2908/ILC_MDES09">https://doi.org/10.2908/ILC_MDES09</a>	2015–2023	D
X06	At-risk-of-poverty rate – % (threshold: 50% of median equivalised income)	<a href="https://doi.org/10.2908/ILC_LI02">https://doi.org/10.2908/ILC_LI02</a>	2015–2023	D
X07	Inability to face unexpected financial expenses – %	<a href="https://doi.org/10.2908/ILC_MDES04">https://doi.org/10.2908/ILC_MDES04</a>	2015–2023	D
X08	Gini coefficient of equivalised disposable income – % (scale 0-100)	<a href="https://doi.org/10.2908/TESSI190">https://doi.org/10.2908/TESSI190</a>	2014–2023	D

Cont. table 1.

Subjective assessment of quality of life – life satisfaction (QoL) – dependent variables				
Y01 QoL_H	Overall life satisfaction – high (%)	<a href="https://doi.org/10.2908/ILC_PW05">https://doi.org/10.2908/ILC_PW05</a>	2013,2018, 2021–2023	-
Y02 QoL_M	Overall life satisfaction – medium (%)	<a href="https://doi.org/10.2908/ILC_PW05">https://doi.org/10.2908/ILC_PW05</a>	2013,2018, 2021–2023	-
Y03 QoL_L	Overall life satisfaction – low (%)	<a href="https://doi.org/10.2908/ILC_PW05">https://doi.org/10.2908/ILC_PW05</a>	2013,2018, 2021–2023	-

Notes: S – stimulant; D – destimulant.

Source: authors' own elaboration based on Eurostat (2025).

The indicators were subjected to further detailed analysis, and descriptive statistics were calculated. Among others, coefficients of variation ( $V_s$ ), range measures (R), coefficients of skewness (S), and kurtosis (K) were computed. The normality of the variables' distributions was examined using the Shapiro–Wilk (S–W) test. Differences in the values of the analysed indicators were also calculated for the periods 2015–2023 (ES) and 2013–2023 (QoL) in order to determine increases or decreases in their values. In addition, correlation and regression analyses were conducted between the independent variables X (ES) and the dependent variables Y (QoL) to verify the relationships between them.

## Results

### 1.1. PROBLEMS OF ECONOMIC SECURITY OF THE POPULATION

Economic security is reflected by objective indicators such as population income, the level of individual consumption, the risk of poverty, and income inequality. Population income can be measured and analysed in national currency, euro, or PPS (i.e. in terms of purchasing power parity). According to data for 2023, the mean equivalised net income measured in purchasing power standards (X01) in EU Member States amounted to 21.3 thousand PPS per capita per year. The median net income (X02) was lower in 2023 and amounted to 18.7 thousand PPS per capita. The lowest population income levels (both mean and median) were recorded in Slovakia, while the highest were observed in Luxembourg. Actual individual consumption (X03), which is one of the measures of gross domestic product (GDP), amounted to 24.3 thousand PPS per capita; the lowest level was recorded in Bulgaria, while the highest was again observed in Luxembourg. The at-risk-of-poverty rate (X06) amounted to 14.1%, with the lowest value in Belgium (7.5%) and the highest in Bulgaria (22.9%). A considerable amount of information on the fairness of income distribution, which subsequently translates into a higher sense of economic security, is provided by the Gini coefficient (X08), which in 2023 amounted to 29.5%. The lowest income inequality was observed in Slovakia (21.6%), while the highest was recorded in Bulgaria (37.2%).

Important indicators reflecting economic security also include subjective measures, namely respondents' direct declarations. In the EU-SILC survey on living conditions, one of the

questions addressed to respondents concerned the assessment of their financial situation in terms of making ends meet. It turns out that in 2023, the proportion of respondents in the EU declaring that they made ends meet with difficulty (X04) amounted to 12.4%, while those declaring that they did so with some difficulty (X05) accounted for 28.3%. Such declarations were most frequently reported by residents of Greece and Lithuania, and least frequently by residents of Luxembourg and Germany. One of the indicators reflecting the population's sense of economic security is the proportion of people who are unable to cope with unexpected financial expenses (X07). In the EU, more than 30% of respondents declared such difficulties. In 2023, the highest proportions of individuals experiencing problems with unexpected expenses were recorded in Bulgaria (46.7%), Romania (46.4%), Latvia (44.8%), and Greece (44.3%). The most favourable situation was observed in Netherlands (15.9%), Malta (15.9%), and Czechia (19.7%) (Table 2).

**Table 2.**

*Descriptive statistics of variables characterising the economic security of the population (ES) in EU Member States in 2023*

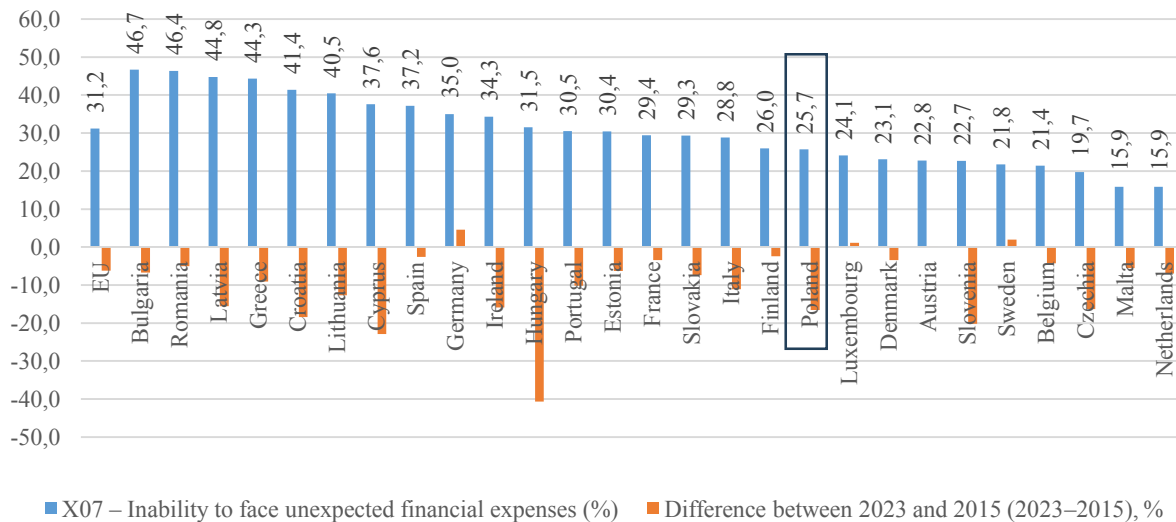
Variable	$\bar{x}_j$	$x_{min}$	Country $x_{min}$	$x_{max}$	Country $x_{max}$	R	$V_s$	A	K	SW-W
X01	21278.2	10777.0	SK	39914.0	LU	29137.0	32.1	0.57	0.54	0.95(ND)
X02	18759.7	10670.0	SK	34777.0	LU	24107.0	32.4	0.57	0.23	0.94(ND)
X03	24353.4	16382.2	BG	39336.9	LU	22954.7	21.8	0.79	0.68	0.93(ND)
X04	12.4	3.9	LU	30.3	GR	26.4	47.3	1.18	2.08	0.93(ND)
X05	28.3	12.1	DE	48.0	LT	35.9	37.2	0.13	-1.05	0.96(ND)
X06	14.1	7.5	BE	22.9	BG	15.4	32.3	0.33	-1.02	0.95(ND)
X07	30.6	15.9	NL	46.7	BG	30.8	30.2	0.28	-0.95	0.95(ND)
X08	29.5	21.6	SK	37.2	BG	15.6	12.5	-0.10	-0.04	0.99(ND)

Notes: S – stimulant; D – destimulant;  $\bar{x}_j$  – mean for the EU (27);  $x_{min}$  – minimum value of the variable;  $x_{max}$  – maximum value of the variable;  $V_s$  – coefficient of variation; R – range (max–min); A – skewness; K – kurtosis; S–W – Shapiro–Wilk test result; ND – normal distribution; SK – Slovakia; BG – Bulgaria; LU – Luxembourg; DE – Germany; BE – Belgium; NL – Netherlands; GR – Greece; LT – Lithuania.

Source: authors' own calculations based on Eurostat (2025).

Poland was among the leading countries with the fewest problems related to covering current and unexpected financial obligations, following the previously mentioned Netherlands, Malta, and Czechia. Such problems were reported less frequently also by residents of Belgium, Sweden, Slovenia, Austria, Denmark, and Luxembourg. In the majority of EU Member States, the proportion of people experiencing financial difficulties decreased compared with 2015 (negative orange bars). The largest improvement was recorded in Hungary (a decrease of approximately 40%), as well as in Cyprus and Slovenia. An increase in financial difficulties occurred only in Germany, Sweden, Austria, and Luxembourg, where the orange bars are positive (Figure 1).

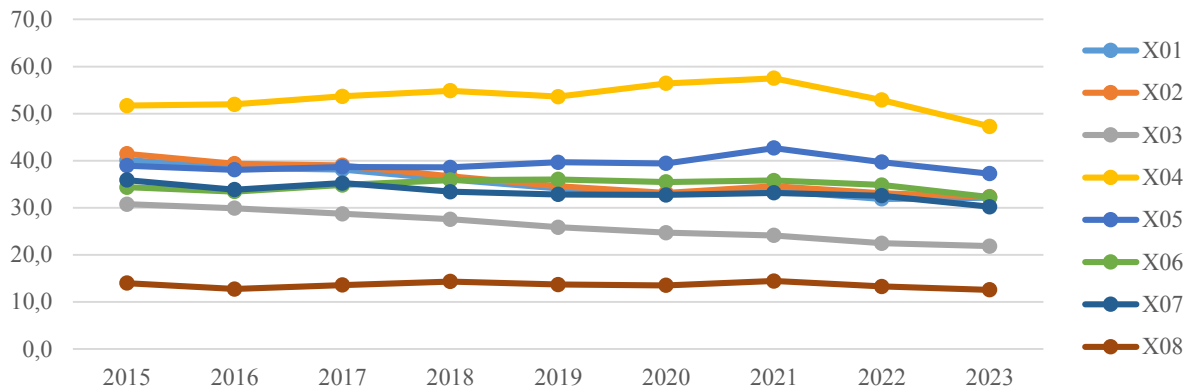
Although financial resilience of households is improving across the EU as a whole, inequalities remain substantial – countries of Central and Eastern Europe continue to perform worse than Western European countries. The improvement in the situation may indicate more effective social policy and rising income levels; however, challenges persist, particularly in the poorest EU Member States.



**Figure 1.** Inability to face unexpected financial expenses in EU Member States in 2023.

Source: authors' own calculations based on Eurostat (2025).

Based on the coefficient of variation ( $V_s$ ), it can be stated that the highest degree of variation among EU Member States in the period 2015-2023 was observed for indicator X04 (“households making ends meet with difficulty”), whose values fluctuated around 50-58%, with a clear decline in the years 2022-2023. Indicators X01 and X02 (mean and median equivalised net income) exhibited moderate and stable levels of variation, at approximately  $V_s = 35-43\%$ . In contrast, variable X03 (GDP per capita – actual individual consumption) is characterised by the lowest level of variation. A decline from about 30% to 22% was observed, which may indicate a convergence of EU Member States in terms of consumption levels. Indicators X06 (risk of poverty) and X07 (inability to face unexpected financial expenses) remain at a moderate level of variability, with a slight downward trend. By contrast, the Gini coefficient (X08) shows the lowest and most stable values of the coefficient of variation (12-14%) (Figure 2).



Notes: explanations of the independent variables X01-X08 are provided in Table 1.

**Figure 2.** Changes in the variation of the economic security of the population (ES) in EU Member States based on the coefficient of variation  $V_s$  (%).

Source: authors' own calculations based on Eurostat (2025).

In summary, the level of economic security continues to differ among EU Member States, although these differences have been gradually decreasing, particularly in recent years (2022-2023). This may indicate a slow convergence of economic conditions among EU Member States with respect to income, poverty, and financial difficulties. The greatest degree of variation is observed in subjective assessments of material conditions, which may result both from actual differences and from diverse cultural norms and expectations of residents. The smallest differences are observed in consumption levels and income inequality. This can be attributed to the effective implementation of EU equalisation policies and the strengthening of socio-economic integration within the European Union.

## 1.2. LEVEL AND VARIATION OF THE QUALITY OF LIFE OF THE POPULATION

Quality of life constitutes a key factor in the assessment of the social and economic development of regions, while the level of satisfaction and well-being, in turn, affects the physical and mental health of individuals. It is a category that goes beyond the framework of classical economics and is difficult to measure and interpret unambiguously. For example, it is possible to live at a high cultural or material standard and nevertheless be dissatisfied with life. Conversely, individuals with low income or health problems may feel happy with the life they have. Therefore, it is important that categories such as economic development, standard of living, well-being, and the level of economic security, which are generally measured using objective indicators, are analysed jointly with the assessment of quality of life, which is a subjective category.

In 2023, in the EU, 23.4% of surveyed respondents assessed their life satisfaction as high (Y01 QoL\_H). The lowest level of high life satisfaction was recorded in Bulgaria (8.8%), while the highest was observed in Austria (33.0%). The subjective assessment of quality of life as medium (Y02 QoL\_M) exhibited the highest stability among the analysed variables.

The proportion of respondents declaring a medium quality of life amounted to 60.3%, with the lowest value recorded in Bulgaria (46.8%) and the highest in Italy (73.4%). By contrast, the data concerning negative aspects of quality of life (Y03 QoL\_L) show very high variability. This indicates that while most countries recorded low values of this indicator, in some countries (e.g. Bulgaria) extremely unfavourable conditions were observed. The distribution of this variable deviates from normality, indicating substantial disparities in the level of negative assessments. As many as 16.3% of the total population surveyed in the EU assessed their life satisfaction as low in 2023; notably, in Bulgaria as many as 44.4% of respondents declared low satisfaction, compared with only 6.5% in Belgium. In summary, the data indicate a relatively even situation with regard to the subjective perception of quality of life, while the largest cross-country differences occur in the negative factors reducing it. Bulgaria records the lowest levels of well-being, whereas Austria and Italy achieve the highest values in terms of high and medium quality of life (Table 3).

**Table 3.**

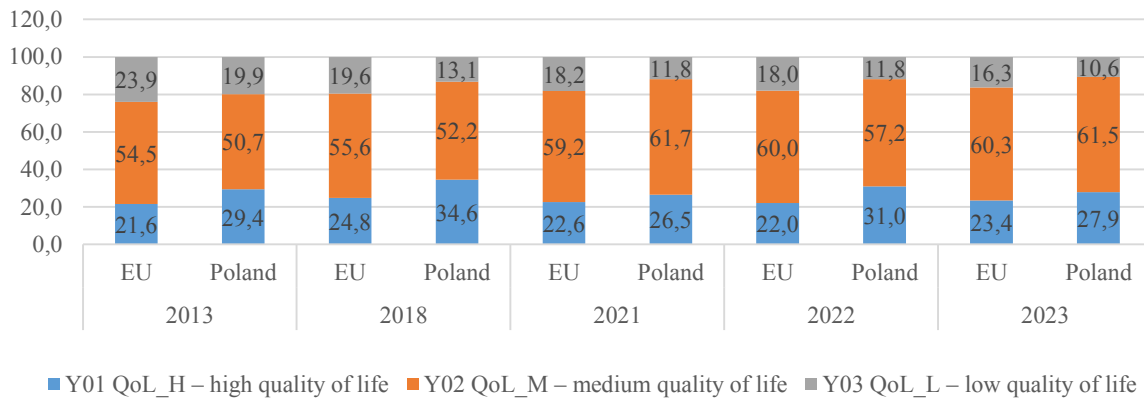
*Descriptive statistics of variables characterising high, medium, and low quality of life of the population (QoL) in EU Member States in 2023*

Variable	$\bar{x}_j$	$x_{min}$	Country $x_{min}$	$x_{max}$	Country $x_{max}$	R	$V_s$	A	K	SW-W
Y01 QoL_H	23.4	8.8	BG	33.0	AT	24.2	24.0	-0.38	0.53	0.97(ND)
Y02 QoL_M	60.3	46.8	BG	73.4	IT	26.6	9.2	0.26	1.23	0.96(ND)
Y03 QoL_L	16.3	6.5	BE	44.4	BG	37.9	46.4	1.91	6.54	0.84

Notes:  $\bar{x}_j$  – mean for the EU (27);  $x_{min}$  – minimum value of the variable;  $x_{max}$  – maximum value of the variable;  $V_s$  – coefficient of variation (%); R – range (max–min); A – skewness; K – kurtosis; S–W – Shapiro–Wilk test result; ND – normal distribution; BG – Bulgaria; BE – Belgium; AT – Austria; IT – Italy.

Source: authors' own calculations based on Eurostat (2025).

In the period 2013-2023, quality of life (QoL) in the EU and in Poland showed a gradual improvement, particularly evident in the decline in the proportion of people assessing it as low (Y03 QoL\_L). In the EU, the share of such individuals decreased from 23.9% in 2013 to 16.3% in 2023, while in Poland the decline was even more pronounced – from 19.9% to 10.6%. At the same time, the proportion of residents assessing their quality of life as medium (Y02 QoL\_M) increased, both in the EU (from 54.5% to 60.3%) and in Poland (from 50.7% to 61.5%). In the category of “high quality of life” (Y01 QoL\_H), some fluctuations are observed. In the EU, this indicator oscillated around 22-24%, whereas in Poland it was higher and more dynamic, reaching a maximum of 34.6% in 2018 and then declining to 27.9% in 2023. Overall, the data indicate a significant improvement in quality of life in Poland over the decade, approaching or even exceeding the levels recorded in the EU (Figure 3).

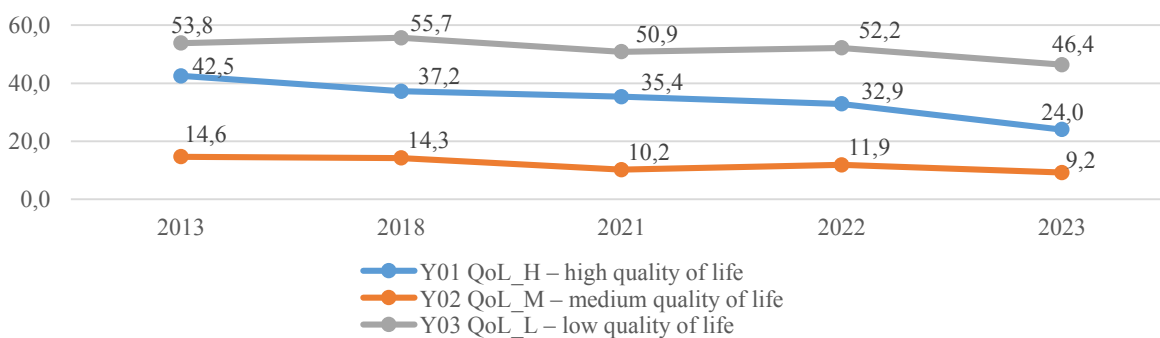


**Figure 3.** Assessment of quality of life (QoL) by residents of the EU as a whole and Poland in the period 2013-2023 (%).

Source: authors’ own calculations based on Eurostat (2025).

Data on the coefficient of variation ( $V_s$ ) of quality of life in EU Member States over the period 2013-2023 show a clear downward trend, particularly for the assessment of high quality of life (Y01 QoL\_H), where variability decreased from 42.5% in 2013 to 24.0% in 2023. This indicates that differences among EU Member States in this respect have been significantly reduced, which may point to a progressing convergence of living conditions. The coefficient of variation for the assessment of medium quality of life (Y02 QoL\_M) also declined systematically, reaching its lowest level of 9.2% in 2023. By contrast, for low quality of life, fluctuations were smaller; however, a decline is also observed here, from 53.8% to 46.4% (Figure 4).

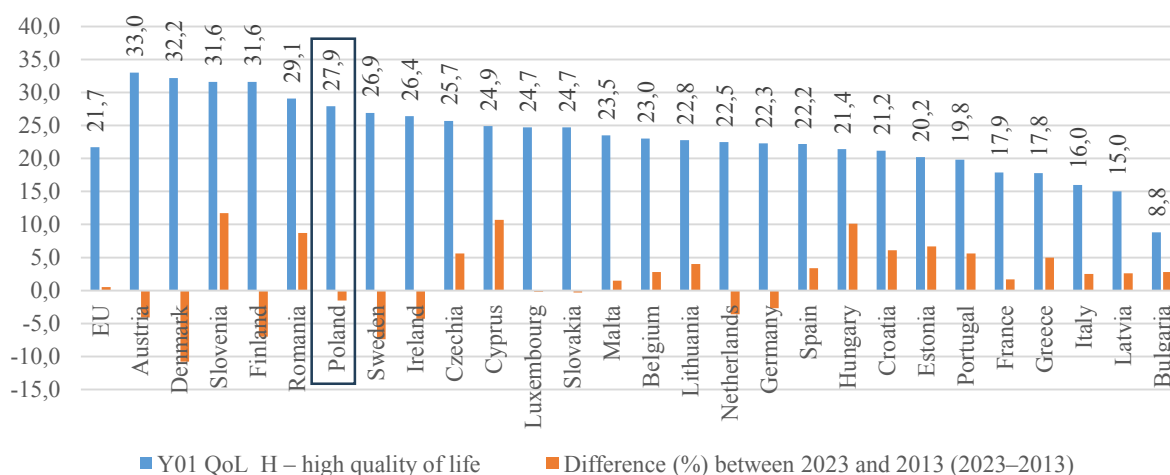
The declining variability of life satisfaction in EU Member States indicates progressing socio-economic cohesion and may confirm the effectiveness of policies supporting less developed regions. However, the risk of “downward convergence” should also be taken into account, whereby statistical improvement results from a deterioration in quality of life in more developed countries. The equalisation of indicators does not always imply a real convergence of well-being levels; therefore, continuous monitoring is necessary, along with support for qualitative development rather than merely reducing numerical disparities.



**Figure 4.** Variation in the quality of life of the population (QoL) in EU Member States in the period 2013-2023, based on the coefficient of variation  $V_s$  (%).

Source: authors’ own calculations based on Eurostat (2025).

In 2023, a high quality of life (Y01 QoL\_H) in EU Member States was declared by 21.7% of all surveyed respondents. A slight increase in high quality-of-life assessments was observed – by only 0.5 percentage points compared with 2013. The highest values of this indicator were recorded in Austria (33.0%), Denmark (32.2%), and Slovenia and Finland (31.6% each). It should be noted, however, that some of these countries recorded a decline in quality-of-life assessments (e.g. Denmark: –10.8 p.p., Finland: –7.0 p.p., Austria: –4.1 p.p.). By contrast, the largest increases were observed in Slovenia (+11.7 p.p.), Romania (+8.7 p.p.), Hungary (+10.1 p.p.), and Cyprus (+10.7 p.p.), which may indicate positive changes in the perception of quality of life in these countries. Poland ranked above the EU average (27.9%); however, compared with 2013, a slight decline was recorded (–1.5 p.p.). Attention should also be drawn to Central and Eastern European countries that improved their positions – among others Czechia, Estonia, Lithuania, and Latvia – which demonstrates the progressing convergence in quality of life between the “old” and the “new” EU (Figure 5).



**Figure 5.** Ranking of EU Member States characterised by a high quality of life (Y01 QoL\_H) in 2023 and changes in respondents' opinions over the period 2013-2023.

Source: authors' own calculations based on Eurostat (2025).

In Central and Eastern European countries, the proportion of individuals assessing their quality of life as high has increased, which indicates an improvement in living conditions and socio-economic circumstances. In many Western European countries, the indicators have remained at a high level, confirming their stability. However, a decline in life satisfaction in countries that previously recorded the highest values (including Denmark, Finland, Austria, Sweden, and Ireland) is a cause for concern, as it may reflect rising expectations or growing dissatisfaction. The lack of a clear increase in the EU average nevertheless suggests that progress has been uneven. An improvement in the “new” EU Member States constitutes a positive signal for cohesion policy; however, deteriorating sentiments in some Western European countries may generate tensions. Therefore, policymakers should not only support less developed regions but also ensure the maintenance of well-being in the most developed countries.

### 1.3. ANALYSIS OF THE RELATIONSHIP BETWEEN ECONOMIC SECURITY (ES) AND QUALITY OF LIFE (QOL)

Based on the conducted analysis, it was demonstrated that a high quality of life (Y01 QoL\_H) is significantly positively correlated with income, confirming that higher income levels are conducive to better assessments of quality of life. At the same time, strong negative correlations were observed between high quality of life and indicators reflecting a difficult economic situation, such as the risk of poverty (X06), difficulties in covering unexpected financial expenses (X07), and income inequality (X08). In the case of low quality of life (Y03 QoL\_L), opposite relationships are observed – low quality of life is significantly positively associated with poverty, income inequality, and financial difficulties, and negatively associated with income levels. By contrast, medium quality of life (Y02 QoL\_M) does not exhibit statistically significant relationships with the analysed economic variables (Table 4).

**Table 4.**

*Relationships between independent variables describing economic security of the population (ES) and dependent variables reflecting the assessment of quality of life (QoL)*

Variables	Correlation coefficients							
	X01	X02	X03	X04	X05	X06	X07	X08
Y01 QoL_H	0.35	0.41*	0.39*	-0.52*	-0.33	-0.63*	-0.49*	-0.61*
Y01 QoL_M	0.12	0.15	0.18	-0.15	-0.11	-0.13	-0.23	-0.16
Y01 QoL_L	-0.35	-0.41*	-0.42*	0.49*	0.33	0.56*	0.53*	0.57*

Notes: correlation coefficients marked with an asterisk (\*) are statistically significant at  $p < 0.05$ ;  $N = 27$  (cases with missing data were excluded); Explanations of variables ES and QoL are provided in Table 1.

Source: authors' own calculations based on Eurostat (2025).

In addition, a multiple regression analysis was conducted between the independent ES variables (X01-X08) and the dependent variable Y01 (Y01 QoL\_H), representing a high quality of life. The summary statistics indicate that the regression model achieved a moderate strength of association ( $R = 0.73$ ). The coefficient of determination  $R^2$  equals 0.53, which means that approximately 53% of the variability in the assessment of high quality of life can be explained by the economic security variables included in the model. However, after accounting for the number of predictors and the sample size, the adjusted  $R^2$  decreases to 0.32, indicating that only 32% of the variance in the dependent variable is actually explained by the model. The F-statistic  $F(8,18) = 2.56$  with a p-value of 0.05 indicates that the model as a whole is statistically significant at the borderline level; therefore, it can be assumed that a relationship exists between at least one independent variable and quality of life. In summary, the model explains part of the variation in the assessment of quality of life, but it also leaves considerable room for other factors that were not included in this study (Table 5).

**Table 5.**

*Summary statistics of the multiple regression analysis between independent variables describing the economic security of the population (ES) (X01-X08) and the dependent variable Y01 QoL\_H – high quality of life*

Statistic	Multiple R	Multiple R <sup>2</sup>	Adjusted R <sup>2</sup>	F(8,18)	p-value	Standard error of the estimate
Value	0.73	0.53	0.32	2.56	0.05	4.63

Source: authors' own calculations based on Eurostat (2025).

The comparison of economic security and quality of life allows for a more comprehensive understanding of the real living conditions of societies and facilitates more accurate formulation of socio-economic policy. It reveals situations in which favourable material indicators are not accompanied by a high quality of life, pointing to hidden problems such as inequality, lack of stability, or high living costs. Combining objective and subjective data helps to better identify areas of exclusion and instability and to design support programmes that address not only material needs but also psychological and social ones. Such an approach supports the development of more balanced strategies for development and poverty reduction.

#### **1.4. POLICY AND PRACTICAL IMPLICATIONS**

The obtained results indicate the significant role of economic security in shaping the quality of life of residents in the European Union countries, which has direct implications for socio-economic policy. In particular, public actions should focus on strengthening the financial stability of households by reducing poverty, decreasing income inequalities, and increasing the economic resilience of the population to unexpected expenses. Such policies may include, among others, the development of income support instruments, improving access to stable employment, and implementing measures aimed at enhancing the financial security of households.

The results of the study also indicate the need to further strengthen socio-economic cohesion between EU countries and regions. The persistent differences in the level of economic security and quality of life justify the continuation of cohesion policy measures aimed at supporting the development of less economically developed economies and reducing development disparities. At the same time, the process of designing public policies should take into account both objective economic indicators and subjective assessments of quality of life, which allows for a better diagnosis of social needs and the creation of more comprehensive development strategies.

## Conclusions

The study revealed considerable variation in economic security across the EU – highest in the Netherlands, Belgium, Luxembourg, Austria, and Finland, and lowest in Bulgaria, Greece, Romania, Latvia, and Lithuania. In the years 2022–2023, a reduction in this variation was observed, indicating a gradual convergence of living conditions. Quality of life also improved, as evidenced by a declining share of individuals assessing it as low, with Poland ranking above the EU average. Convergence is particularly visible in Central and Eastern Europe; however, in several highly developed countries (including Denmark, Austria, and Finland), life satisfaction declined, which may reflect rising expectations or the impact of global crises. The largest disparities continue to concern the negative aspects of quality of life. The analysis of the relationship between the economic security of the population and quality of life in EU countries confirmed the stated hypothesis. Higher levels of income and consumption, lower income inequality, and a reduced risk of poverty significantly contribute to better assessments of quality of life, whereas indicators reflecting a difficult economic situation – such as poverty risk, high income inequality, and difficulties in meeting unexpected expenses – are strongly associated with low quality of life. The findings indicate that economic security has a significant, though not exclusive, impact on quality of life, and that combining material and perceived perspectives allows for a more comprehensive understanding of the complexity of living conditions and provides valuable guidance for designing more accurate and comprehensive socio-economic policies. The results underscore the need to reduce inequalities and strengthen citizens' financial stability, as well as the importance of an integrated socio-economic policy that combines objective conditions with subjective perceptions in order to more effectively counteract exclusion. From a scientific perspective, they also point to the need for further research into the role of non-financial factors in shaping quality of life.

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