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Differences in the Standard of Living of Inhabitants of Central and Eastern Europe

ABSTRACT

This study deals with the standard of living, and its main aim was to determine the standard of living of the population of the Central and Eastern European countries, which last year celebrated the 20th anniversary of their EU membership. The research included a descriptive and comparative analysis of selected measures, divided into seven thematic areas. Based on the adopted partial indicators, a synthetic measure of the standard of living was established and typological groups were designated, including countries with a similar standard of living. The studies conducted in the years 2004–2024 showed significant differences in the standard of living of the population of the Central and Eastern European countries under scrutiny.

KEYWORDS: standard of living; Central and Eastern Europe; Perkal's method

INTRODUCTION

The standard of living is one of the issues explored in many fields of science, including social statistics. In the extensive literature

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on the subject, there is a multitude of ways of understanding and defining the studied concept. As a result, there is no unambiguous definition that would be acceptable to all researchers. There are two subgroups of definitions have been noted (Gotowska, 2013): (i) definitions considering aspects related to the satisfaction of human material and cultural needs, and (ii) those referring to the degree of satisfaction of needs resulting from the consumption of goods and services.

The first subgroup includes, among others, the project developed in 1954 by the United Nations. The expert commission considered that "the standard of living corresponds to the totality of people's living conditions and the degree of their material and cultural satisfaction through the provision of goods and services for consideration, as well as those originating from social funds" (Piasny, 1993). In this definition, the standard of living is understood as a category inextricably linked to basic human needs. It is one of the first definitions of standard of living, which is why it became the basis for later explanations (among others Hronskỳ, 1967; Manz, 1975; Kędzior, 1997).

The second subgroup includes, among others, the definition proposed by Drewnowski and Scott (1966). They understand standard of living as "the level of satisfaction of needs in a unit of time resulting from the goods, services and living conditions enjoyed by the population in that unit of time". Similarly, the economic aspect of needs satisfied by means of material goods and services was drawn to by other researchers (including Pohorille, 1977; Kalka, 1988; Bywalec & Wydymus, 1992).

The definition of the standard of living, prepared by the UN, was adapted to Polish conditions by Luszniewicz (1982). He indicated that it is "the degree of satisfaction of material and cultural needs of households realized through streams of goods and paid services and through streams of collective consumption funds in a given unit of time and space". When considering the standard of living, seven basic types of needs should be considered, i.e.

food, health care, education, recreation, social security, material management and social protection. Including these elements in the research conducted allows for determining the degree of satisfaction of human needs, i.e. the standard of living.

A high standard of living is often associated with economic prosperity. Supporting the prosperity of citizens is one of the main strategic goals of the European Union. Considering the 20-year-long membership of Poland and other countries of Central and Eastern Europe in the EU, the question arises: How has the standard of living of residents in these countries changed? The main goal of the work was to determine the standard of living of the population of the countries of Central and Eastern Europe, which last year celebrated the 20th anniversary of membership in the structures of the European Union. Indicators describing the standard of living were determined, and synthetic measures of various aspects of the standard of living were therefore constructed. The leading research hypothesis of the study is to indicate that there is significant spatial differentiation in the standard of living of residents of the countries of Central and Eastern Europe.

The study covered 8 Central and Eastern European countries that became member states of the European Union on 1 May 2004, i.e. the Czech Republic, Estonia, Lithuania, Latvia, Poland, Slovenia, Slovakia and Hungary. The main source of data were the collections of the European Statistical Office (Eurostat) and the Economic Commission for Europe. The calculations were carried out for 2004 and 2024. The scope of information used was determined by the availability of data. In the absence of information from the year under study, data from the previous or next year were used. For indicators around healthcare, data was taken from 2022, and for the culture index of 2006. The study used the method of descriptive analysis of selected values, then deepened by statistical analysis.

METHOD

The research procedure included the selection of diagnostic features describing the standard of living in individual countries. The verification of variables was carried out according to the following assumptions:

1. variables were selected for which there is a logical relationship with the standard of living;
2. the nature of variables was determined, i.e. which features determine the improvement of the standard of living of residents of individual countries (stimulants) and which ones affect their deterioration (destimulants);
3. variables for which the internal level of differentiation exceeded 10%, measured using the classic coefficient of variation.

The selected measures were classified into seven thematic areas, in accordance with the methodology proposed by Luszniewicz. Each field presents one of the basic types of needs. The following set of variables was used for the study:

- Group I – Food:

x_1 – household final consumption expenditure per capita,
x_2 – share of food and non-alcoholic beverages in total expenditure (%),
x_3 – actual individual consumption per capita

- Group II – Security:

x_4 – unemployment rate (%),
x_5 – severely materially deprived rate (%)
x_6 – at-risk-of-poverty rate (%),
x_7 – Gini coefficient (before social transfers, pensions excluded from social transfers, %),
x_8 – crime rate (%),

- Group III – Healthcare:

x_9 – number of hospital beds per 100 thousand inhabitants,
x_{10} – number of doctors per 100 thousand inhabitants

- Group IV – Housing conditions:

x_{11} – average number of rooms per person,
x_{12} – housing cost overburden rate (%),
x_{13} – overcrowding rate (%),

- Group V – Communication and transport:

x_{14} – passenger cars in use per 1,000 persons in pieces,
x_{15} – length of the motorways (km),

- Group VI – Education and culture:

x_{16} – population with higher education of total population (%),
x_{17} – young people not continuing their education (%),
x_{18} – persons participating in cultural or sports activities in the last 12 months,

- Group VII – Environment:

x_{19} – air pollution (nitrogen oxides),
x_{20} – the share of energy from renewable sources (%)

Variables x_9, x_{10}, x_{11}, x_{14}, x_{15}, x_{16}, x_{18}, x_{20} were considered stimulants. The remaining features were defined as destimulants of the standard of living. To achieve mutual comparability of the analysed features, standardization of variables was performed. Based on the standardized values of individual variables, indicators of the standard of living were established in individual regions. The Perkal's method was used to calculate the synthetic measure, according to the formula (Szymańska et al., 2011):

$$W_{PER} = \frac{\sum_{i=1}^{n} z_{ij}}{n}$$

where n = number of features taken into account.

Subsequently, using the arithmetic mean and standard deviation, four typological groups of the standard of living were determined (Zeliaś, 2002):

Group I: very high level of the indicator: $x_i \geq \overline{x_i} + s_{xi}$

Group II: high level of the indicator: $\overline{x_i} \leq x_i < \overline{x_i} + s_{xi}$

Group III: low level of the indicator: $\overline{x_i} - s_{xi} \leq x_i < \overline{x_i}$

Group V: very low level of the indicator: $x_i < \overline{x_i} - s_{xi}$

RESULTS

Based on the adopted catalogue of measures, the standard of living of the inhabitants of the Central and Eastern European countries was classified. The values of partial variables used in the study are presented in Table 1.

The area of food was described using indicators informing about the possibilities of satisfying basic physiological needs. In 2004, the average value of consumer expenditure per capita was at the level of EUR 4,262, and in 2024 it increased to almost EUR 14,000. The most visible increase in the indicator was recorded in Lithuania (by 331.99%), and the weakest in Slovenia (by 121.15%). The highest consumer expenditure per capita in both 2004 and 2024 was incurred by the inhabitants of Slovenia, the lowest in 2004 in Latvia and in 2024 in Hungary. Analysing the actual individual consumption per capita, it should be noted that in the period under review, the highest actual level of household consumption was recorded in Slovenia (2004) and Lithuania (2023), and the lowest in Latvia. Food and non-alcoholic beverages in 2004 accounted for an average of 18.74% of total expenditure, and in 2023 they dropped to 18.04%. In individual countries (except Slovakia) a decrease in the analyzed measure was recorded (from 0.52 p.p. in Estonia to 13.81 p.p. in Latvia).

The synthetic indicator concerning the level of satisfaction of food needs showed the advantage of Slovakia in 2004 and Hungary in 2024 (Table 2). A very low level of the measure was recorded in Slovenia in 2004, and in Lithuania and Poland in 2024. The

Table 1. The values of partial variables describing the standard of living in Central and Eastern European countries in 2004–2024.

	Czechia		Estonia		Lithuania	
	beginning	**end**	**beginning**	**end**	**beginning**	**end**
x_1	4616.64	13843.12	3966.19	15348.62	3497.40	15108.55
x_2	15.7	14.0	19.3	19.2	n.d.	18.9
x_3	74	81	56	75	58	88
x_4	8.20	2.60	10.20	7.60	10.70	7.10
x_5	11.8	6.1	12.4	8.2	32.6	12.9
x_6	10.4	9.5	18.3	20.2	20.5	21.5
x_7	0.325	0.271	0.379	0.353	0.399	0.398
x_8	16.5	6.6	23.2	4.3	9.0	2.7
x_9	764.96	654.24	564.38	419.10	756.60	568.05
x_{10}	352.13	431.51	302.37	347.19	362.65	444.27
x_{11}	1.20	1.50	1.10	1.60	1.00	1.60
x_{12}	10.0	9.2	7.9	8.6	9.0	6.2
x_{13}	33.6	16.6	46.1	18.4	52.8	26.3
x_{14}	460	653	374	599	303	415
x_{15}	546	1388	96	225	417	462
x_{16}	10.4	23.8	25.6	36.0	21.6	41.7
x_{17}	6,3	5,4	13,9	11	10,3	8,4
x_{18}	60.40	58.00	61.60	60.70	55.20	47.60
x_{19}	3.90	1.98	1.00	0.52	0.95	0.76
x_{20}	6.773	18.586	18.42	40.95	17.221	31.926

Note. Own elaboration based on data from the Eurostat (n.d.).

Table 1. The values of partial variables describing the standard of living in Central and Eastern European countries in 2004–2024 (continued).

	Latvia		Poland		Slovakia	
	beginning	**end**	**beginning**	**end**	**beginning**	**end**
x_1	3104.38	12992.94	3478.21	13001.54	3522.28	14106.66
x_2	23.9	20.6	28.2	27.2	11.8	13.0
x_3	48	74	57	83	57	77
x_4	11.70	6.90	19.10	2.90	18.60	5.30
x_5	39.3	10.9	33.8	5.5	22.1	12.7
x_6	19.4	21.6	20.5	13.8	13.3	14.5
x_7	0.394	0.369	0.411	0.304	0.317	0.267
x_8	22.6	5.4	10.4	2.8	9.5	3.4
x_9	791.43	502.88	666.81	629.49	691.12	n.d.
x_{10}	291.77	340.06	229.01	356.92	315.29	n.d.
x_{11}	0.90	1.20	1.00	1.20	1.00	1.10
x_{12}	12.8	6.7	16.5	5.2	14.6	6.4
x_{13}	60.3	39.3	54.1	33.7	46.6	29.9
x_{14}	280	435	314	579	456	580
x_{15}	0	0	552	1851	316.20	864.60
x_{16}	16.5	34.7	12.8	34.3	10.4	25.7
x_{17}	15,9	7,9	5,6	4,1	6,8	7,5
x_{18}	54.70	40.10	49.00	50.90	62.30	35.90
x_{19}	0.73	0.51	2.62	1.70	2.10	1.11
x_{20}	32.794	43.223	6.882	16.564	6.39	16.99

Table 1. The values of partial variables describing the standard of living in Central and Eastern European countries in 2004–2024 (continued).

	Slovenia		Hungary	
	beginning	**end**	**beginning**	**end**
x_1	7352.64	16260.21	4558.63	10923.36
x_2	15.2	14.5	17.1	16.9
x_3	81	85	64	70
x_4	6.00	3.70	5.80	4.50
x_5	5.1	4.5	22.9	16.3
x_6	12.2	13.2	13.5	14.7
x_7	0.307	0.279	0.365	0.312
x_8	10.5	6.8	12.4	6.1
x_9	479.92	412.11	788.77	665.32
x_{10}	229.79	337.2	333.69	347.07
x_{11}	1.10	1.60	1.00	1.60
x_{12}	4.7	3.8	18.1	8.5
x_{13}	42.0	10.6	49.9	14.7
x_{14}	222	485	390	592
x_{15}	483	616.023	569	1870.6
x_{16}	15.7	30.5	14.2	27.0
x_{17}	4,3	5	12,6	10,3
x_{18}	38.20	56.60	51.70	39.40
x_{19}	2.66	1.26	1.97	1.08
x_{20}	18.397	25.066	4.364	17.117

analysis confirmed the validity of Engel's first law, which states that with an increase in income, the share of expenditure on food decreases (Dudek et al., 2012). This means that with an increase in the standard of living of the population, the percentage share of expenditure on food in total expenditure decreases. For example, Slovakia with a very high standard of living had the lowest share of food expenditure in total expenditure (11.8% in 2004). In turn, Poland had the highest share of expenditure on food and non-alcoholic beverages in the expenditure structure (27.2% in 2024) and a very low level of the synthetic indicator. Over the years analysed, the level of satisfaction of nutritional needs improved in three countries (Czechia, Slovenia, Hungary) and deteriorated in four (Estonia, Lithuania, Poland, Slovakia).

Table 2. Typological groups of individual categories of needs describing the standard of living in Central and Eastern European countries in 2004–2024.

	I. Food		II. Security		III. Healthcare		IV. Housing conditions		V. Communication and transport		VI. Education and culture		VII. Environment	
	2004	2023/24	2004/05	2024	2004	2022	2005	2024	2004	2023/24	2004/06	2022/24	2004	2022/23
Czechia	III	II	I	I	II	I	I	III	I	I	II	II	IV	IV
Estonia	II	III	III	III	III	IV	II	II	III	III	I	II	II	I
Lithuania	II	IV	III	IV	I	I	II	II	III	IV	I	II	II	II
Latvia	II	II	IV	IV	II	III	IV	IV	IV	IV	IV	III	I	I
Poland	III	IV	IV	I	III	II	III	III	II	I	III	I	III	IV
Slovakia	I	II	II	II	II	n.d.	III	IV	II	II	II	IV	III	III
Slovenia	IV	III	I	II	IV	IV	I	I	III	III	III	II	III	III
Hungary	III	I	II	III	II	II	III	II	II	I	IV	IV	III	III

Note. Own elaboration based on data from the Eurostat (n.d.).

The area of security was determined by indicators related to economic aspects and the level of crime. In 2004, the average unemployment rate for people aged 15–74 was 11.29%, and in 2024 it dropped to 5.08%. The largest percentage of the unemployed population in 2004 was in Poland (19.1%), and in 2024 in Estonia (7.6%). In individual countries, a decrease in the analyzed measure was noted (from 22.41 p.p. in Hungary to 84.82 p.p. in Poland). Analysing the values of the severely materially deprived rate, it should be noted that the best situation was in Slovenia (5.1% in 2005 and 4.5% in 2024, respectively). Latvia and Hungary were at the bottom of the ranking. In 2005, 39.3% of Latvian residents and 16.3% of Hungarian citizens declared that they were unable to meet selected needs due to financial reasons. Over the years studied, the severely materially deprived rate decreased by an average of 47.71 percentage points. Despite a significant improvement in the labour market, in 6 out of 8 countries studied, the percentage of people at risk of poverty increased. This concerned every fifth citizen of Poland (in 2005), Lithuania (in 2005 and 2024) and Latvia (in 2024). In the years studied, the most favourable levels of the indicator were recorded in the Czech Republic (10.4% in 2005 and 9.5% in 2024, respectively). Over the years 2005–2024, income inequality, measured by the Gini coefficient, decreased by an average of 11.94 percentage points. The highest level of income concentration and diversification was recorded in Poland in 2005 and in Lithuania in 2024. The strongest and deepest decrease was recorded in these countries (26.03 percentage points for Poland and 0.25 percentage points for Lithuania, respectively). On average, crime decreased by 63.86 percentage points in the countries studied. The highest level of crime in each area in 2005 was recorded in Estonia and in 2024 in Slovenia.

The Perkal's index, calculated based on partial indicators from the security area, showed that Slovenia and Czechia were at the top of the ranking in 2004, and Poland and Czechia in 2024 (Table 2). A very low level of the measure was recorded in Poland and

Latvia in 2004, and in Lithuania and Latvia in 2024. Over the years analyzed, the level of satisfaction of needs around security improved in Poland, and deteriorated in Lithuania, Slovenia and Hungary.

Healthcare was characterized by measures of access to medical services and healthcare resources. The number of doctors per 100 thousand inhabitants increased by an average of 26.15%. The most visible increase in the indicator was recorded in Poland (by 55.85%), and the weakest in Hungary (by 4.01%). In 2004, Lithuania had the highest number of doctors, and Poland the lowest. In 2022, the situation in this respect was the best in Lithuania and the worst in Slovenia. Over the years studied, the number of available hospital beds per 100 thousand inhabitants decreased by an average of 19.33%. The strongest decrease in the measure was recorded in Latvia (by 36.46%). Slovenia had the smallest number of hospital beds in individual years, and Latvia (in 2004) and Lithuania (in 2022) had the highest number of beds.

Considering the obtained health care value classes, most of the countries studied were characterized by at least a high level of the synthetic index (Table 2). The leaders of the ranking in 2004 were Lithuania, and in 2022 also Czechia. The situation deteriorated only in Estonia and Latvia and improved in Czechia and Poland. In 2005, an average of 14.15% of residents of individual countries assessed their health as very good. In 2023, this indicator increased to 19.11%. In individual years, Czechs assessed their health the most positively, and residents of Latvia the most negatively.

Housing conditions were determined by indicators describing the existing housing realities. Over the years studied, the housing cost overburden rate fell by 34.34 percentage points. This means that the percentage of the population that spends at least 60% of their income on housing costs decreased. In 2005, the highest burden was felt by residents of Hungary and Poland, and in 2024 by Czechia and Estonia. An increase in the indicator was

recorded only in Estonia (by 8.86 percentage points). The largest decrease in the measure occurred in Poland (by 68.48 percentage points). The average number of rooms per person increased in all the countries studied. In this respect, the greatest improvement in the indicator was recorded in Lithuania and Hungary (by 60 p.p.). This translated into a decrease in the overcrowding rate. In 2005, an average of 48.18%, and in 2024 23.69% of people lived in an overcrowded household. The worst situation in each year was in Latvia.

Considering the synthetic indicator, it should be stated that half of the countries studied in 2005 showed a low or very low level of housing needs satisfaction (Table 2). Over the years studied, the situation worsened in Czechia and Slovakia and improved in Hungary. Slovakia joined the countries with a very low level of the indicator, in addition to Latvia. Czechia lost its status as the leader in the ranking. Slovenia continued to have a very high level of the indicator.

The area of communication and transport is characterized by indicators of household equipment with durable consumer goods and the condition of communication infrastructure. Over the years studied, the number of passenger cars in use increased by an average of 59.54%. The largest increase in the measure was recorded in Slovenia. The largest number of passenger cars (per 1,000 people) in the period studied was owned by Czech citizens. Over the years 2004–2023, the average increase in the length of motorways by 120.55% was recorded in the countries of Central and Eastern Europe. The largest number of motorways was in Hungary, but the largest increase was recorded in Poland.

In 2004, in most of the surveyed countries of Central and Eastern Europe, the level of satisfaction of communication needs, measured by the synthetic indicator, remained high (Table 2). The Czechia, as the leader of the ranking, was joined by Hungary and Poland in 2024. Over the years, the level of satisfaction of

communication needs of residents of Poland and Hungary has increased, while that of citizens of Lithuania has decreased.

The criterion of education and culture presents the level of education of the inhabitants of the Central and Eastern European countries and their cultural activity. In 2006, the percentage of people with higher education was 15.9% of the population of the surveyed countries, and in 2024 it increased to 31.71%. The most visible increase in the indicator was recorded in Poland (by 167.97%), and the weakest in Estonia (by 40.63%). The highest percentage of the population with higher education was recorded in 2006 in Estonia, and in 2024 in Lithuania, and the lowest in Czechia. In 2004, in the countries of Central and Eastern Europe, 9.46% of young people aged 18–24 did not continue their education. In 2024, this indicator dropped to 7.45%. The lowest level of the indicator was presented by Slovenia (4.3% in 2004) and Poland (4.1% in 2024), the highest by Latvia (15.9% for 2004) and Estonia (11.0% for 2024). It should be noted that the percentage of early school leavers changed unfavourably only in Slovenia and Slovakia. Over the years studied, the percentage of people taking part in cultural or sports activities decreased by 7.5 percentage points (from 54.14% in 2006 to 48.65% in 2022). The highest level of satisfaction of cultural needs in individual years was recorded in Slovakia and Estonia, and the lowest in Slovenia and Hungary.

In 2004, each level of educational and cultural needs satisfaction was described in the same number of countries (Table 2). Very high levels of the measure were shown in Estonia and Lithuania, and very low in Latvia and Hungary. In 2024, the situation improved, and the dominant group were countries with a high level of synthetic indicators. In 2024, Poland was among the countries with a very high level of needs satisfaction. Hungary and Slovakia took the last places in the ranking.

The area of environmen was described by the air purity index and the degree of renewable energy use. In the period under review, the number of tons of nitrogen oxides per square kilometre

decreased by 40.96%. The cleanest air was enjoyed by Latvians. The most gaseous pollutants were emitted in Czechia. In the years under review, the share of energy from renewable sources increased (from 13.91% in 2004 to 26.3% in 2023). The undisputed leader of the ranking remains Latvia. The lowest degree of renewable energy use was in Hungary, although in the examined period, this country recorded the strongest increase in this regard.

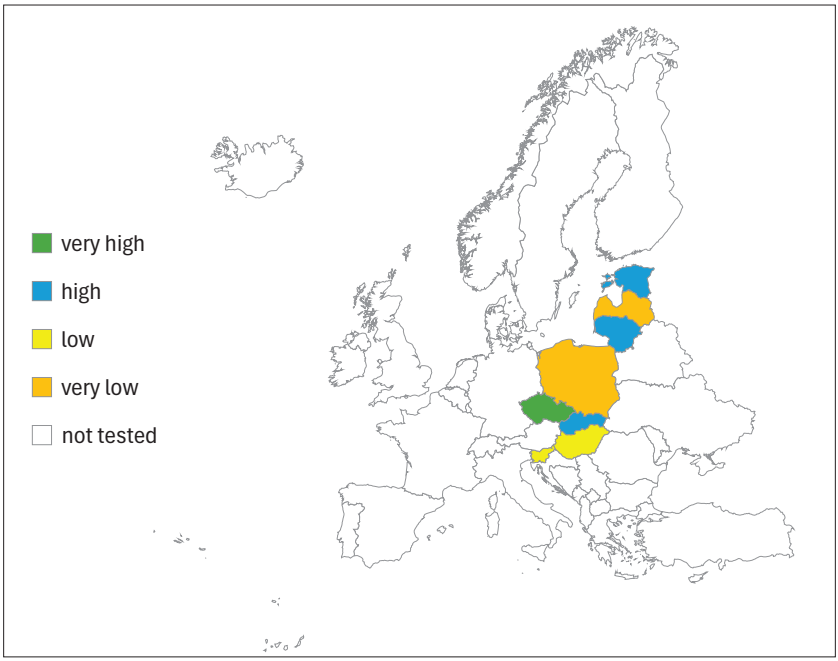
In 2004, the Perkal's index, calculated based on partial indicators from the environment area, assumed low values for most of the countries studied (Table 2). Estonia joined Latvia as the leader of the list in 2024. The group of countries with a very low level of the synthetic indicator included Czechia and Poland. The situation improved in Estonia and worsened in Poland.

The calculated values of statistical variables allowed us to create a ranking of the countries studied and to distinguish typological groups, including countries with a similar standard of living. In 2004, the countries of Central and Eastern Europe covered by the study were classified into the following groups:

- Group I – very high standard of living: Czechia (Perkal's synthetic index was ≥ 0.33);
- Group II – high standard of living: Lithuania, Slovakia, Estonia (synthetic index in the range of 0.02–0.33);
- Group III – low standard of living: Hungary, Slovenia (synthetic index around −0.28–0.02);
- Group IV – very low standard of living: Latvia, Poland (Perkal's synthetic index had values ≤ −0.28).

The spatial differentiation of the standard of living of the inhabitants of Central and Eastern Europe in 2004 is graphically presented in Figure 1.

Figure 1. Spatial differentiation of the standard of living of the inhabitants of Central and Eastern European countries in 2004.



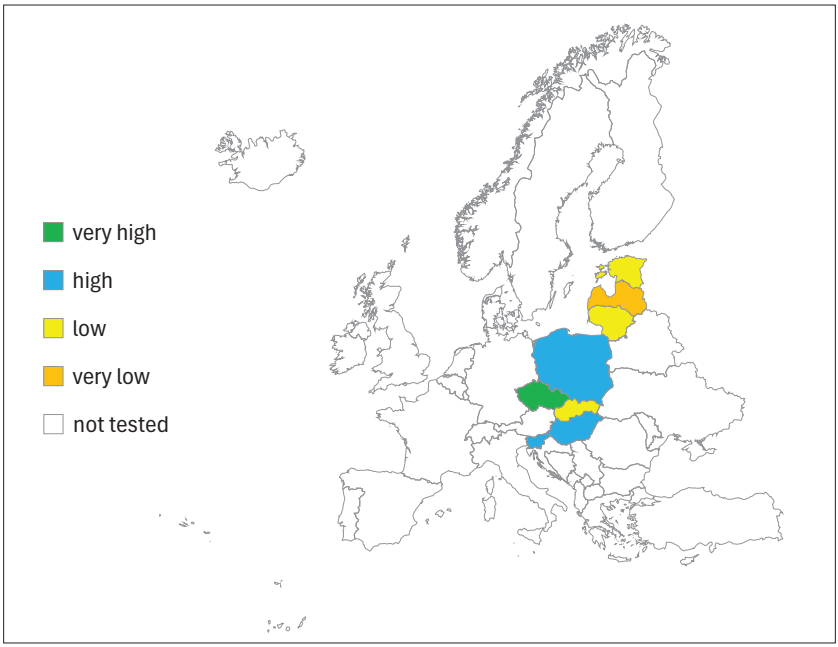
Note. Own elaboration.

In 2024, the countries of Central and Eastern Europe covered by the study were classified into the following groups:

– Group I – very high standard of living: Czechia (Perkal's synthetic index ≥ 0.21);
– Group II – high standard of living: Poland, Slovenia, Hungary (synthetic index ranges from 0.00 and 0.21);
– Group III – low standard of living: Estonia, Slovakia, Lithuania (synthetic index between −0.21 and 0.00),
– Group IV – very low standard of living: Latvia (Perkal's synthetic index assumed values ≤ −0.21).

The spatial distribution of the standard of living of the inhabitants of Central and Eastern Europe in 2024 is graphically presented in Figure 2.

Figure 2. Spatial differentiation of the standard of living of the inhabitants of Central and Eastern European countries in 2024.



Note. Own elaboration.

The research clearly shows that there are significant differences in the standard of living in Central and Eastern Europe. There may be many reasons for these disparities. The countries of Central and Eastern Europe are former socialist bloc countries that belonged to the Soviet Union or were controlled by it. The systemic transformation in individual countries took place differently. Each country struggled with different remnants and

shortages resulting from the centrally planned economy. Despite 30 years of reforms, differences are still visible, including in housing ownership, the energy level of buildings, incomes and prices of goods and services (Pilipenko, 2021).

The adopted directions of national policies determined the place of a given country on the economic map of Europe, thus creating better living conditions for its inhabitants. This applies to countries for which the priority was to achieve increased export competitiveness and the inflow of foreign direct investment (e.g. Czechia, Estonia). This has translated into improved institutional quality, the rule of law, the education system, population growth, entrepreneurship and the level of innovation (Győrffy, 2022; Alemu et al., 2024).

CONCLUSION

Referring to the synthetic measure, it should be noted that over the years 2004–2024 the standard of living of the inhabitants of the countries of Central and Eastern Europe improved. The Czech Republic remained the undisputed leader of the rankings, being the only one to have achieved a very high level of the indicator. The fact that the number of countries with a very low standard of living was reduced should be assessed positively. In the last year of the analysis, only Latvia belonged to this group. In the case of the remaining countries, there were shifts in the positions occupied in the classification. The standard of living improved in Hungary, Slovenia and Poland, and deteriorated in Estonia, Slovakia and Lithuania. It should be emphasized that in the ranking of the standard of living of the inhabitants of the countries of Central and Eastern Europe, which celebrated the twentieth anniversary of membership in the European Union last year, Poland noted a huge advance (from 8th to 2nd place). Over the years studied, there was a gradual reduction in the differentiation of

the standard of living within individual countries. Time will tell whether this trend will continue in the long term, as it should be remembered that the deepening phenomenon of social stratification is typical for developing countries.

REFERENCES

Alemu, S., Udvari, B., & Kotosz, B. (2024). Income convergence in Central and Eastern Europe: Evidence from cross-country panel data analysis. *Acta Oeconomica*, *74*(3), 329–357. https://doi.org/10.1556/032.2024.00016

Bywalec, C., & Wydymus, S. (1992). Poziom życia ludności Polski w porównaniu z krajami Europejskiej Wspólnoty Gospodarczej [The standard of living of the Polish population compared to the countries of the European Economic Community]. *Ekonomista*, (5–6), 669–687.

Drewnowski, J., & Scott, W. (1966). *The level of living index* (UNRISD, Report no. 4). Geneva.

Dudek, H., Koszela, G., & Landmesser, J. (2012). Wpływ sytuacji dochodowej na strukturę gospodarstwa domowego [The impact of income situation on household structure]. *Zeszyty Naukowe SGGW – Ekonomika i Organizacja Gospodarki Żywnościowej*, (97), 237–247. https://doi.org/10.22630/EIOGZ.2012.97.56

European Statistical Office Eurostat. (n.d.). Retrieved April 30, 2025, from https://ec.europa.eu/eurostat/data/database

Gotowska, M. (2013). *Współczesne uwarunkowania poziomu i jakości życia ludzi w Polsce* [Contemporary conditions of the level and quality of life of people in Poland]. Bydgoszcz: Wydawnictwa Uczelniane Uniwersytetu Technologiczno-Przyrodniczego.

Győrffy, D. (2022). The middle-income trap in Central and Eastern Europe in the 2010s: Institutions and divergent growth models. *Comparative European Politics*, *20*, 90–113. https://doi.org/10.1057/s41295-021-00264-3

Hronský, F. (1967). Poňatie výskumu životnej urovně [The concept of living standards research]. *Nova Mysl*, *2*.

Kalka, S. (1988). *Poziom życia, próba wyceny wartościowej* [Standard of living, an attempt at valuation]. ZBSE GUS, (27).

Kędzior, Z. (1997). *Zachowania gospodarstw domowych i przedsiębiorstw (prawidłowości, determinanty)* [Behavior of households and enterprises (regularities, determinants)]. Wydawnictwo Akademii Ekonomicznej w Katowicach.

Luszniewicz, A. (1982). *Statystyka społeczna: podstawowe problemy i metody* [Social statistics: basic problems and methods]. Polskie Wydawnictwo Ekonomiczne.

Manz, G. (1975). *Das materielle und kulturelle Lebensniveau des Volkes und seine volkswirtschaftliche Planung* [The material and cultural standard of living of the people and their economic planning]. Dietz.

Piasny, J. (1993). Poziom i jakości życia ludności oraz źródła i mierniki ich określania [The level and quality of life of the population and the sources and measures of their determination]. *Ruch Prawniczy, Ekonomiczny i Socjologiczny*, *55*(2), 73–92.

Pilipenko, I. V. (2021). The transition process and institutions: On the issue of the standard of living in the countries of Central and Eastern Europe – members of the European Union. *Baltic Region*, *13*(1), 153–179. https://doi.org/10.5922/2079-8555-2021-1-9

Pohorille, M. (1977). Dobrobyt społeczny. Pojęcie, mierzenie, metoda, analiza [Social well-being: Concept, measurement, method, analysis]. *Ekonomista*, *5*.

Szymańska, D., Domin, D. J., Kwiatkowski, G., & Rogatka, K. (2011). Ranking miast w Polsce na podstawie warunków życia w świetle różnych metod pomiaru [Ranking of cities in Poland based on living conditions in the light of different measurement methods]. In L. Mierzejewska & M. Wdowicka (Eds.), *Współczesne problemy rozwoju miast i regionów* (pp. 121–134). Bogucki Wydawnictwo Naukowe.

Zeliaś, A. (Ed.). (2002). *Taksonomiczna analiza przestrzennego zróżnicowania poziomu życia w Polsce w ujęciu dynamicznym* [A taxonomic analysis of spatial differentiation of the standard of living in Poland in a dynamic approach]. Wydawnictwo Akademii Ekonomicznej w Krakowie.