Comparative Economic Research, Volume 18, Number 4, 2015
10.1515/cer-2015-0032

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Spatial Diversification Of Living Standards In The Former Communist Countries Of Central And Eastern Europe And The Balkans

Abstract

The aim of this paper is to present the results of research on the variation in the standard of living and quality of life of the inhabitants of Central and Eastern European and the Balkan countries previously belonging to the Soviet sphere of influence. Nineteen post-communist countries were selected for this research, including: seven from the group of post-socialist countries, seven post-Soviet countries, and five from former Yugoslavia. The research procedure adopted involved static (comparative analysis of life quality indexes - Quality of Life Index (QLI) and Human Development Index (HDI) and dynamic (assessment of standard of living based on synthetic taxonomic measures for the years 2007 and 2012) data analysis. The findings indicate a significant variation in the living standards among the inhabitants of post-communist countries. Depending on the scope and accuracy of the quality life measures used, the countries' ranking positions show a slight variation, though in all cases similar trends are noticeable. The countries of former Czechoslovakia (the Czech and the Slovak Republics) show the highest standard of living. Other countries belonging to the EU also ranked relatively high. Such Balkan states as Albania, Moldova, Bosnia and Herzegovina ranked poorly. The results of multidimensional analysis confirmed

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these findings and, moreover, allowed for the determination of the trends in living conditions in particular countries. In 2007 a higher-than-average standard of living was identified in nine countries, whereas in 2012 this was the case for 10 countries. As compared to 2007, GDP growth was observed in 16 countries, as well as improvements in health care (increases in health care outlays) and increases in the number of Internet users. However, some phenomena may be disturbing – the rise in unemployment (16 countries), decline in population growth (9 countries) and growing inflation (7 countries).

To recapitulate, the standard of living enjoyed by the population of post-communist countries is gradually improving, though the pace of changes and trends vary across those countries. What's more, the results show that with the exception of those countries which are EU members, belonging to specific groups of post-communist countries (post-socialist, post-Soviet and former Yugoslavia) does not affect significantly their populations' standard of living and quality of life.

Keywords*: post-communist countries, standard of living, socioeconomic development*

1. Introduction

One of the objectives of regional development is an improved livelihood (improvement in living standards and quality of life) of the region's inhabitants. The fact that nowadays social and economic policies pay increasingly more attention to the quality of life reflects the general need to shift the focus from consumption-oriented lifestyles towards lifestyles that encompass other values. Assessment of life quality is a truly challenging task and so it must be considered from various perspectives. The objective approach allows for drawing conclusions about life quality based on quantitative and qualitative measures, whereas the subjective approach enables a researcher to consider subjective measures such as reported overall life satisfaction, corresponding to satisfaction of individual needs. Assessment and measurement of the quality of life depend on, *inter alia*, access to material goods and social infrastructure, the condition of the economy, and the quality of the natural environment.

The crisis in the Soviet Union (USSR) and subsequent disintegration of the so-called people's democracies led to the dissolution of the Warsaw Pact and the Council for Mutual Economic Assistance. The consequences were the creation of sovereign nation states, unification of Germany, and collapse of the Soviet Union. At the turn of the 1980s and 1990s a new group of states which

departed from socialism emerged on the world's political map, now referred to as the post-communist states.

Our main research objective was to objectively assess the quality of life in selected post-communist countries of Central and Eastern Europe and the Balkans. To achieve that, the following research questions were formulated: Are there any differences in terms of life quality between those countries, and if so, how big are they? How does the changing socioeconomic environment affect the quality of life in those countries? To answer these questions, comparative analysis of objective life quality measures (QLI, HDI indexes) and taxonomic methods (multidimensional analysis) were applied.

2. Material and research methods

The main aim of this study was to analyse and assess the quality of life of inhabitants of post-communist countries of Central and Eastern Europe, with the application of static (comparative analysis of life quality measures for 2011) and dynamic (assessment of life quality in 2007 and 2012) approaches. The chosen time frame was dictated by source data availability (in case of rankings) and the planned scope of analysis, which gave consideration to individual countries' membership in the EU. The research made use of statistic data compiled by the World Bank and other reports (UN HDI Ranking, QLI calculated by the Economist Intelligence Unit).

The Quality of Life Index, currently referred to as the where-to-be-born index, is an indicator developed in 2005 by the Economist Units to reflect the standard of living and life satisfaction in individual countries. This index is based on a unique methodology that links the results of subjective life-satisfaction surveys to the objective determinants of quality of life across countries. The QLI reflects the current situation and does not attempt to make any predictions of the future. As such, it does not take into account dynamic factors such as growth, and only represents their visible results. The QLI is a composite of six sub-indexes, each describing one of the domains considered to objectively influence the quality of life. Each sub-index is briefly explained in Table 1.

The national ranking is created on the basis of the value of QLI, calculated according to the formula:

$$QLI = 20\%I_{health} + 20\%I_{edu} + 15\%I_{wealth} + 15\%I_{dem} + +15\%I_{peace} + 10\%I_{env} \quad (1)$$

The Human Development Index (HDI) is used to measure the development of human resources in each country and allows to specify achievements in key dimensions of human life:

- long and healthy life (I_{health}), incorporating the life expectancy (in years) indicator,
- access to knowledge ($I_{Ieducation}$), calculated on the basis of two indicators: mean years of schooling and expected years of schooling,
- decent standard of living (I_{income}), and gross national income (GNI) per capita (Technical Notes. Human Development Report 2014).

The value of HDI is the geometric mean of normalized indices for each of the three dimensions.

$$HDI = \sqrt[3]{I_{health} I_{education} I_{income}} \tag{2}$$

Dimension indexes for each country are calculated based on the following equation:

$$Index_{national} = \frac{value_{national} - value_{min} + 15\% I_{peace} + 10\% I_{env}}{value_{max} - value_{min}} \ldots\ldots . \tag{3}$$

Table1. Description of the QLI sub-indexes and list of the diagnostic variables

No.	Name of sub-index	Description	Diagnostic variables
1.	Health Index (I_{health})	Health of average person, access to and quality of health care	- Life expectancy at birth - Mortality amenable to health care (when available) - Infant mortality - Access to health care
2.	Education Index (I_{edu})	Education, access to and quality of education	- Adult literacy rate - School life expectancy - PISA results (when available)
3.	Wealth Index (I_{wealth})	Wealth of the average person	- GDP (PPP) per capita - Gini coefficient of national income distribution
4.	Democracy Index (I_{dem})	Individual rights and liberties	- Freedom House political rights index - Freedom House civil liberties index - Freedom House freedom of the press index
5.	Peace Index (I_{peace})	Security from crime, repression and armed conflict	Global Peace Index
6.	Environment Index (I_{env})	Quality and preservation of the environment	Environmental Performance Index

Source: https://nationranking.wordpress.com/category/quality-of-life-index/

To assess the variation in the quality of life score in respective countries, multidimensional analysis using non-parametric aggregate measures was applied. To achieve that, a synthetic indicator Qi was computed from selected diagnostic variables that met the substantive and formal criteria (relative informative value, high degree of variability and capacity to comprehensively capture the research problem). Before proceeding, data were preliminarily analysed using the zero unitarization method, which consists in stimulation of destimulants and standardization of variables (Kukuła 2000, pp. 98-102; Karmowska 2013, p. 10). X_i variables, depending on the way they affect the phenomenon analysed, were transformed into z_i according to the following formulas:

- stimulants (positive impact)

$$z_{ij} = \frac{x_{ij} - \min_i x_{ij}}{\max_i x_{ij} - \min_i x_{ij}}; \quad \max_i x_{ij} = \min_i x_{ij} \tag{4}$$

- destimulant (negative impact)

$$z_{ij} = \frac{\max_i x_{ij} - x_{ij}}{\max_i x_{ij} - \min_i x_{ij}}; \quad \max_i x_{ij} = \min_i x_{ij} \tag{5}$$

Further on, synthetic indicators q_i and their statistical measures were calculated:

$$q_i = \frac{1}{s}\sum_{j=1}^{s} z_{ij}; \quad \overline{q} = \frac{1}{n}\sum_{i=1}^{n} q_i; \quad S(q) = \left[\frac{1}{n}\sum (q_i - \overline{q})^2\right]^{0.5} \tag{6}$$

The synthetic indicators obtained were later on used to aggregate objects according to ranges formed by the $\overline{q}$ arithmetic mean and *S(q)* standard deviation (Table 2).

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Table 2. The classification criteria and the diagnostic meaning of the groups

Group	Range	Diagnostic significance
1	$q_i \leq \overline{q} + S(q)$	High standard of living
2	$q_i \in \langle \overline{q}, \overline{q} + S(q))$	Good standard of living
3	$q_i \in \langle \overline{q} - S(q), \overline{q})$	Below average standard of living
4	$q_i < \overline{q} - S(q)$	Low standard of living

Source: own compilation based on (Kukuła 2000).

To determine where the trends are heading in particular countries, a comparative analysis of the results obtained for selected time frames was conducted.

3. Genesis and characteristics of post-communist countries

The political and economic changes in the socialist bloc, which later took on a "domino effect", were triggered by 1989 elections in Poland followed three months later by the establishment of the first non-communist government in the Socialist bloc. In October of the same year mass protests in DDR forced Erich Honecker to step down as leader and eventually led to the collapse of the Berlin Wall. In the same month the Hungarian Socialist Workers' Party was dissolved. In November, the Velvet Revolution was set in motion in Czechoslovakia, whereas in Bulgaria a communist dictator, Todor Zhivkov, was overthrown. This process ended in the December 1989 revolution in Romania. The new political order was consolidated and legitimized by free elections held in 1990: in DDR (in March, leading to the unification of Germany), in Hungary (in April), in Romania (in May), in Czechoslovakia and Bulgaria (in June). In Poland elections were held as late as in autumn 1991, however they were preceded by first direct presidential elections (November-December 1990). In academic publications these former socialist countries are jointly referred to as "*Former Socialist Republics*" (FSR).

One of the most salient events of the 20th century was the breakup of the Soviet Union. This was one of the turning points in Europe's political history, as it transformed the political situation not only in Eurasia, but in the entire world. This was the effect of growing internal opposition in the socialist bloc, as well as changes occurring within the USSR during the "perestroika" period. The factor that played a crucial role in the overthrow of the satellite regimes was the Soviet Union's departure from the Brezhnev doctrine and its release of its hold on the so-called external empire – the sphere of influence granted to the Soviets under Yalta-Potsdam agreements. The collapse of the Soviet Union was a process that lasted over the period 1988-1991, during which all federal republics were first granted autonomy within the Union of Soviet Socialist Republics, later to break away from the USSR and become independent states. The dissolution of the Soviet Union was formally enacted on 26 December 1991. As a result, fourteen new states appeared on the world's political map, including, *inter alia*: Estonia, Lithuania, Ukraine, Belarus and Moldova (including Moldova in the category of post-Soviet states might not be accurate as since 2001 its ruling party is a communist party). Along with the Russian Federation, these post-Soviet states are collectively known as the "*Former Soviet Union"* (FSU).

Yugoslavia was the most densely populated country in the Balkans, incorporating territories that for centuries remained under various influences of both the West and the East. Initially its political system was modelled on the Russian constitution, but following the 1948 political changes implemented in Yugoslavia it had nothing ideologically to do with the USSR, due to the conflict between Josip Broz Tito and Josef Stalin. Its 1963 constitution was the result of the belief that the economic model should be based on self-management of working people, with districts of the state (municipalities, counties, provinces) becoming autonomous socio-political communities; and the country was renamed the Socialist Federal Republic of Yugoslavia (SFRY). Beginning in June 1991 a series of political upheavals and referendums led to the dissolution of SFRY and creation of a new political order in the region – three out of six republics of former Yugoslavia declared independence: the Republic of Croatia, Slovenia and Macedonia. On 5 April 1992 the Republic of Bosnia and Herzegovina declared sovereignty and few weeks later (on 28 April 1992) two remaining republics – Serbia and Montenegro – formally dissolved the SFRY and formed the Federal Republic of Yugoslavia, with its capital in Belgrade. This situation lasted until 4 February 2003, when the Republic of Yugoslavia ceased to exist and Serbia and Montenegro were reconstituted as a state union. This form the state as very short-lasting, on 3 June 2006 this nominally single country split into two sovereign states: Montenegro and Serbia. Finally, on 17 February 2008 Kosovo unilaterally declared its independence from Serbia (a decision which was not recognized by Serbia) (Podolak pp. 65-80). States which came into being on the territory of former Yugoslavia are called "*Former Republic of Yugoslavia"* (FRY).

Largely because of data availability, for the purpose of detailed research nineteen countries were selected from among the newly established post-communist states, comprising seven post-socialist countries, seven post-Soviet and five post-Yugoslavian countries. Table 3 below presents general characteristics, classification of countries by research criteria and, in the case of the EU states – date of accession.

The data clearly demonstrate that the Russian Federation is the largest state in terms of its size (88.8% share in the overall structure) and population (44.7%), but it has the lowest population density (9 persons per 1 km^2). In stark contrast to the Federation, Montenegro comprises only 0.1% size-wise and 0.2% population-wise in overall structure. The most densely populated countries are the Czech Republic (136 persons per 1 km^2), and Poland and Moldova (over 120 persons per 1 km^2). Croatia is the top destination in terms of attracting the highest stock of immigrants (17.65%) as opposed to Bosnia and Herzegovina with merely 0.61%.

Table 3. Basic characteristics of selected countries (year 2013)

Country	Population (in millions)	Stock of immigrants (% of population)	Surface area (in thousand sq. km)	Population density (people per sq. km)	Date of accession to the EU	Symbol of the group of countries
Albania	2.8	3.05	28.8	101		FSR
Belarus	9.5	11.60	207.6	47		FSU
Bosnia and Herzegovina	3.8	0.61	51.2	75		FRY
Bulgaria	7.3	1.16	111.0	67	1.01.2007	FSR
Croatia	4.3	17.65	56.6	76	1.07.2013	FRY
Czech Republic	10.5	4.04	78.9	136	1.05.2004	FSR
Estonia	1.3	16.31	45.2	31	1.05.2004	FSU
Hungary	9.9	4.75	93.0	109	1.05.2004	FSR
Latvia	2.0	13.80	64.5	32	1.05.2004	FSU
Lithuania	3.0	4.90	65.3	47	1.05.2004	FSU
Moldova	3.6	8.16	33.9	124		FSU
Montenegro	0.6	1.74	13.8	46		FRY
Poland	38.5	0.92	312.7	126	1.05.2004	FSR
Romania	20.0	5.60	238.4	87	1.01.2007	FSR
Russian Federation	143.5	7.73	17098.2	9		FSU
Serbia	7.2	2.75	88.4	82		FRY
Slovak Republic	5.4	11.26	49.0	113	1.05.2004	FSR
Slovenia	2.1	11.39	20.3	102	1.05.2004	FRY
Ukraine	45.5	11.39	603.6	79		FSU

Source: own compilation.

4. Social development and life quality

General aspects of the quality of life are captured in measures such as the HDI and the Quality of Life Index (QLI). Wellbeing is a broader concept, and captures not only GDP/GNP and material and physical standards of living, but also hedonic aspects. Wellbeing is a global concept reflecting incomes, physical standards of living and happiness. There is increasing interest in measuring wellbeing and behavioral economics offers some insights into how to capture the psychological, hedonic nature of happiness and how to build this into

a macroeconomic measure of aggregate wellbeing. Wellbeing has both intrinsic and instrumental value: instrumental because happiness promotes learning, productivity, creativity and health, all of which impact on social welfare. But it also has an intrinsic value of its own, which partly links it with utilitarianism (Baddeley 2013, p. 247). The QLI ranking has been calculated for 137 countries, and the HDI ranking is for 144 countries. Both rankings apply for the year 2011 are presented in Table 4 below.

Table 4. Summary of rankings for post-communist countries, according to the indicators: QLI (with its sub-indices) and HDI

Country	**QLI rank**	Components of the QLI						**HDI rank**
		Health	Educa-tion	Wealth	Demo-cracy	Peace	Enviro-ment	
Czech Republic	**16**	24	33	30	15	12	20	**28**
Slovenia	**20**	27	15	26	29	11	46	**25**
Slovakia	**24**	35	31	34	23	21	11	**37**
Hungary	**25**	30	28	37	23	20	29	**43**
Poland	**29**	32	24	43	27	29	55	**35**
Lithuania	**30**	34	25	44	20	42	33	**36**
Estonia	**32**	42	6	41	13	46	50	**33**
Croatia	**33**	31	39	40	40	41	31	**45**
Latvia	**37**	47	32	46	34	53	18	**48**
Romania	**40**	51	46	52	49	45	39	**54**
Serbia	**41**	37	50	51	46	85	25	**75**
Bulgaria	**43**	64	48	47	44	50	57	**58**
Ukraine	**49**	52	30	72	59	90	74	**82**
Macedonia	**55**	55	59	65	62	79	64	**83**
Bosnia and Herzegovina	**56**	36	52	89	69	59	84	**84**
Belarus	**60**	43	29	45	128	97	45	**52**
Moldova	**66**	58	54	106	76	64	73	**116**
Albania	**70**	66	64	64	63	63	21	**96**
Russian Federation	**83**	65	37	50	114	131	60	**57**

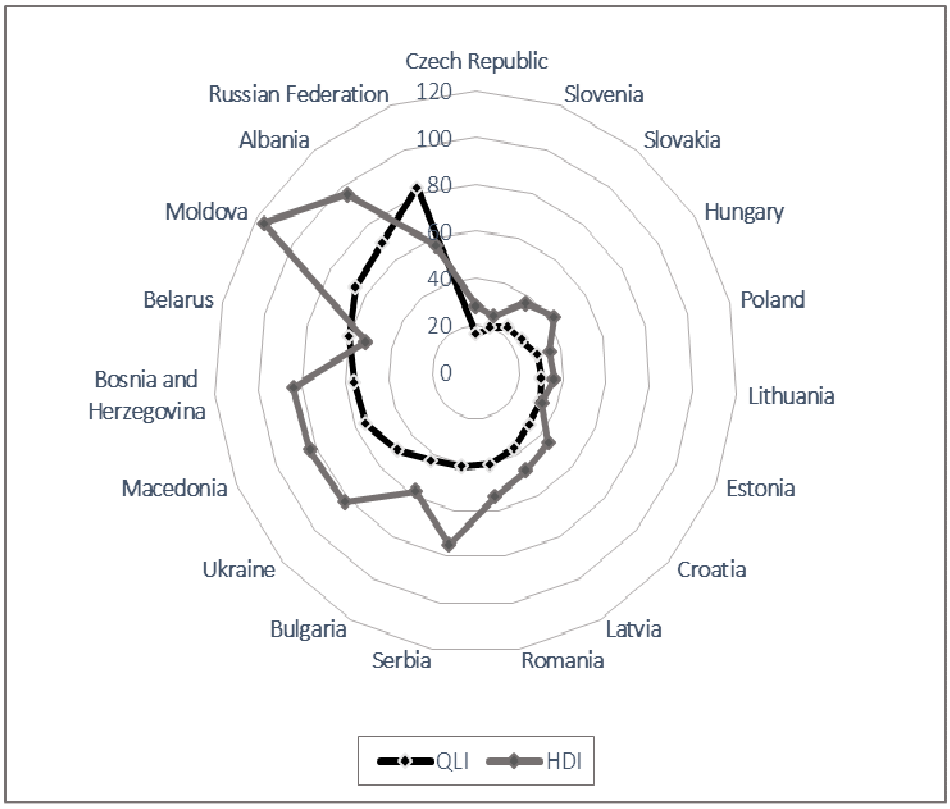
Source: based on (2011 Quality of Life Index, Human Development Report 2011).

Our analysis of QLI and HDI indicated that the Central and Eastern European countries, as well as Slovenia and Croatia, came out on top in both rankings, whereas Moldova and Albania ranked at the bottom of the list.

Interestingly, in case of Russia the situation is different. According to QLI, Russia is last in the ranking (83rd position), though in HDI classification it holds a middle position in the ranking (57th). It is thus noticeable that there are considerable differences between the classifications. Moldova (-50), Serbia (-34) and Ukraine (-33) placed significantly lower in the HDI ranking as compared to the QLI ranking, while higher positions were obtained only by post-Soviet countries, that is Russia (+26) and Belarus (+8). Among the EU member states the highest differences in ranking positions were observed in the case of: Hungary (-18), Bulgaria (-15), Slovakia (-13) and the Czech Republic (-12).

A Graphical comparison of the countries' positions in the ranking is presented in Figure 1.

Figure 1. The comparison of national rankings according with QLI index and HDI index



Source: own compilation.

Rankings of QLI sub-indices provide information on the quality of selected domains of life for average inhabitant. As is evident from the chart above, the best conditions in terms of healthcare and environmental protection are present in the

countries of former Czechoslovakia (Czech Republic and Slovakia), whereas with respect to education and democracy Estonia ranked highest. In turn, the inhabitants of Slovenia enjoyed relatively the most wealth and the highest sense of safety.

Belarus and the Russian Federation were found to be the most dangerous and undemocratic states among the countries analysed, whilst their economic results indicate a relative wealth of their inhabitants. These two countries also showed the biggest differences in their ranking positions (a difference of 99 for Belarus and 94 for Russia). Definitely the least developed countries in terms of economy and environmental protection are Moldova and Bosnia and Herzegovina, whereas Albania ranked the lowest with respect to education and healthcare.

5. Spatial diversification of the populations' living standards

The set of potential diagnostic variables contains all measures which, according to experts, have the highest informative value and best capture the phenomenon in focus. The set of potential diagnostic variables was reduced using statistical procedures to a set of features with discriminatory value. From among a wide range of statistical data describing the standard of living and life quality, eight indicators (features) were selected from the World Bank database. These are based on data aggregated on the country level, comprising the years 2007 and 2012. Table 5 presents these diagnostic variables along with diagnostic properties assigned to them (where S is a stimulant, and D – a destimulant).

Table 5. Characteristics of diagnostic variables

Diagnostic variable	Diagnostic property	Maximum		Minimum		Coefficient of variation [%]	
		2007	2012	2007	2012	2007	2012
Population growth (annual %)	S	0.5835	0.2100	-1.4772	-1.3412	-151.64	-153.78
GDP per capita (current US$)	S	23841.32	22488.44	1230.81	2046.537	61.14	54.26
Health expenditure per capita (constant 2005 international $)	S	2148.21	2419.86	296.08	490.27	48.14	43.86
Inflation, consumer prices (annual %)	D	12.84	59.22	1.52	0.56	55.85	200.09
Unemployment, total (% of total labor force)	D	29.7	28.1	4.3	5.5	69.03	50.55

Internet users (per 100 people)	S	66.19	78.39	6.55	35.27	45.45	20.56
Motor vehicles (per 1,000 people)	S	547.03	614.86	105.93	118.07	44.53	40.75
Hospital beds (per 1,000 people)	S	11.23	11.30	2.92	2.43	32.76	32.83

Source: own compilation.

In accordance with the methodology we adopted, synthetic measures were computed for each of the subject countries for the years 2007 and 2012, and finally, based on that, rankings of these countries were created (Table 6).

Table 6. Rankings of countries by synthetic indicators

Country	Q_{2007}	Ranking in 2007	Q_{2012}	Ranking in 2012
Slovenia	0.85496	1	0.84214	1
Czech Republic	0.80529	2	0.82390	2
Croatia	0.71253	3	0.66546	6
Slovak Republic	0.69802	4	0.74434	3
Poland	0.63989	5	0.70302	4
Hungary	0.62020	6	0.64816	8
Lithuania	0.61905	7	0.55010	11
Latvia	0.59890	8	0.60263	9
Estonia	0.58166	9	0.65428	7
Bulgaria	0.46938	10	0.59314	10
Russian Federation	0.46833	11	0.68392	5
Belarus	0.44032	12	0.41594	16
Montenegro	0.43441	13	0.47394	13
Serbia	0.39439	14	0.38785	18
Romania	0.39089	15	0.49180	12
Bosnia and Herzegovina	0.29689	16	0.38850	17
Ukraine	0.28777	17	0.44407	14
Moldova	0.28773	18	0.43624	15
Albania	0.26528	19	0.30325	19

Source: own compilation.

In the 2007 ranking the first 10 positions were held by the EU member states (although Croatia joined the EU much later, in 2013). Two post-Soviet countries were found near the bottom of the ranking (Ukraine and Moldova), followed only by Albania. In the 2012 ranking, as compared to the previous classification, only six countries remained in the same position, while six moved up and seven dropped down. It was Russia that moved up most strikingly

(shifting by 6 positions), whereas the worst drop (by 4 positions) was observed in the cases of Lithuania, Belarus and Serbia. In the FSU group, four states improved their ranking positions and three went down (including two EU states). Among the FSR states, decline was noted only in one case (Hungary), while three states were upgraded (including Romania by three positions) and three held their positions. The worst situation was observed in case of the FRY group – three states recorded a drop and two remained in the same low positions. Analysis of the shifts in the rankings among the EU member states leads to rather distressing conclusions. Romania, the newest EU member (since 2007) made the biggest upward move (by three places), whereas states with longer EU membership recorded a drop, including Hungary (-2 positions) and two Baltic states, i.e. Lithuania (-3 positions) and Latvia (-1).

Finally, all countries being the subject of this research were grouped according to the classification criteria adopted. The classification of countries based on a synthetic measure is provided in Table 7.

Table 7. Summary of the countries' classification by a synthetic measure

Class number	2007 classification	2012 classification
1.	Slovenia, Czech Republic, Croatia	Slovenia, Czech Republic, Croatia
2.	Slovak Republic, Poland, Hungary, Lithuania, Latvia, Estonia	Slovak Republic, Poland, Hungary, Latvia, Estonia, Russian Federation, Bulgaria
3.	Bulgaria, Russian Federation, Belarus, Montenegro, Serbia, Romania	Lithuania, Belarus, Montenegro, Romania, Ukraine, Moldova
4.	Bosnia and Herzegovina, Ukraine, Moldova, Albania	Serbia, Bosnia and Herzegovina, Albania

Source: own compilation.

According to the 2007 classification the overall situation was as follows:

- FSR countries–the highest standard of living was recorded for the Czech Republic (class 1), with three EU states showing a good standard of living (class 2), two new EU member states (Bulgaria and Romania) displaying a below average standard (class 3), and Albania showing the lowest standard of living (class 4);
- FSU countries –countries being members of the EU (Latvia, Lithuania and Estonia) definitely enjoyed a higher standard of living than others (class 2) since Russia and Belarus were classified as below the average (class 3), with the remaining countries belonging to class 4;
- FRY countries – there has always been a conspicuous divide between the rich North and poor South, and in line with that Slovenia and Croatia ranked highest in terms of wealth (class 1). Both countries are members of the EU.

A significantly lower standard of living, that is below the average standard (class 3), was observed in the eastern (Serbia) and south-western parts of the former Federation (Montenegro). The lowest standard of living was identified in the central part (Bosnia and Herzegovina).

The cluster formed on the basis of 2012 data resulted in a new classification of countries. **Class 1** countries did not change their positions. In case of **class 2** countries, Bulgaria and Russia moved upwards, whereas Lithuania fell down considerably (owing to a twofold rise in unemployment and deterioration of healthcare infrastructure, with a 50% drop in the number of hospital beds). In the case of Russia, its position improved as its GDP per capita increased by 54%, inflation dropped by 43%, the unemployment rate fell by 8%, healthcare outlays increased by 82%, and the population of Internet users went up by as much as approximately 160%. In turn, Bulgaria's progress can be attributed to improved economic situation (an approximate 25% increase in GDP per capita and an almost 65% drop in the inflation rate), as well as improved healthcare (67% rise in the number of hospital beds) and access to Internet (increase of 163%). The standard of living in the cases of Ukraine and Moldova also improved, moving from the lowest standard in 2007 to below the average (**class 3**). Ukraine recorded relatively the biggest drop in inflation (by almost 96%), while the number of Internet users grew almost fourfold and healthcare infrastructure showed considerable improvement (twofold rise in the number of hospital beds). When it comes to Moldova, its GDP per capita increased by over 66% and its inflation declined by circa 62%. However, in comparison to the 2007 classification, a drop into the lowest-ranking class (**class 4**) was recorded in the case of Serbia, with its deteriorated economic situation attributable to a 32% increase in the unemployment rate and 15% increase in the inflation rate. The remaining countries did not change their classification.

6. Conclusions

The research findings confirm the existence of significant variation in the standard of living among post-communist countries. The analysis of the nations' ranking positions showed only insignificant differences, depending on the scope and accuracy of the indicators applied, while the same trends could be observed in all the states researched. The highest standard of living was found in the countries of former Czechoslovakia (the Czech and Slovak Republics) and Slovenia. Other EU states were also classified relatively high in this regard, whereas such Balkan states as Albania, Moldova, and Bosnia and Herzegovina showed the lowest standard of living.

The results of the multidimensional analysis led to the conclusion that overall the overall standard of living in post-communist countries is gradually improving. In 2007 it was classified as above the average (class 1 and class 2) in nine countries, and in the year 2012 – in ten. Among the selected subject countries 16 recorded increases in GDP per capita, improvements in healthcare (increased healthcare outlays) and a rise in the number of Internet users (in Ukraine by a stunning 438.5%). However, certain distressing phenomena could also be noticed, such as increased unemployment (16 states), declining population growth (9 states), and rising inflation (7 states).

It could also be observed that a country's historical background (being part of either the FSR, FSU or FRY group of post-communist countries) did not have a salient impact on the standard of living and quality of life of its inhabitants, as opposed to the positive effects associated with EU membership, which was found to stimulate socioeconomic development.

It might be thus concluded that the pace and changes taking place in individual countries with regard to their populations' standard of living vary strongly despite the new political and economic order and ongoing globalization.

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Streszczenie

ANALIZA ZRÓŻNICOWANIA PRZESTRZENNEGO POZIOMU ŻYCIA W KRAJACH POSTKOMUNISTYCZNYCH EUROPY ŚRODKOWO- WSCHODNIEJ I NA BAŁKANACH

Celem artykułu jest przedstawienie wyników badań dotyczących zróżnicowania poziomu i jakości życia mieszkańców krajów postkomunistycznych Europy Środkowo-Wschodniej i krajów bałkańskich. Z grupy państw postkomunistycznych, do badań szczegółowych wybrano 19 krajów, w tym: 7 z grupy państw postsocjalistycznych, 7 poradzieckich i 5 z byłej Jugosławii. Przyjęta procedura badawcza pozwoliła na analizę zagadnienia zarówno w ujęciu statycznym (analiza porównawcza rankingów wskaźników jakości życia – Quality of Life Index (QLI) i Human Development Index (HDI)), jak i dynamicznym (ocena poziomu życia na podstawie taksonomicznych mierników syntetycznych za lata 2007 i 2012). Wyniki przeprowadzonych badań wskazują na znaczne zróżnicowanie poziomu życia mieszkańców w krajach postkomunistycznych. W zależności od zakresu i stopnia szczegółowości użytych wskaźników jakości życia pozycje rankingowe badanych krajów nieznacznie się różnią, ale we wszystkich zauważalne były te same tendencje. Najwyżej oceniono warunki życia panujące w krajach byłej Czechosłowacji (Czech i Słowacji) oraz Słowenii. Na stosunkowo wysokich pozycjach sklasyfikowano także pozostałe kraje należące do UE. Natomiast najsłabiej wypadły kraje bałkańskie takie jak: Albania, Mołdawia i Bośnia i Hercegowina. Wyniki analizy wielowymiarowej potwierdziły te oceny i ponadto, pozwoliły na określenie kierunków zmian w warunkach życia mieszkańców poszczególnych krajów. W 2007 roku poziom życia określony jako wyższy od przeciętnego stwierdzono w 9 krajach, a w 2012 roku było już 10 takich krajów. W porównaniu do 2007 roku wzrost GDP per capita odnotowano w przypadku 16 państw, poprawiła się sytuacja w ochronie zdrowia (wzrost wydatków na ochronę zdrowia) oraz wzrosła liczba użytkowników Internetu. Odnotowano również niepokojące zjawiska– wzrost bezrobocia (16 krajów), spadek przyrostu naturalnego (9 krajów) oraz rosnąca inflacja (7 krajów).

Reasumując, poziom życia mieszkańców w krajach postkomunistycznych stopniowo się poprawia, lecz tempo i kierunki zmian w poszczególnych krajach nadal są różne. Ponadto stwierdzono, że w przeciwieństwie do członkostwa w Unii Europejskiej, przynależność danego państwa do określonej grupy krajów postkomunistycznych (postsocjalistycznych, poradzieckich i byłej Jugosławii) nie ma istotnego wpływu na poziom i jakość życia jego mieszkańców.

***Słowa kluczowe**: kraje postkomunistyczne, poziom życia, rozwój społeczno-gospodarczy*