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SUSTAINABLE GROWTH OF SOCIETIES IN POST-SOCIALIST COUNTRIES

ZRÓWNOWAŻONY ROZWÓJ SPOŁECZEŃSTW KRAJÓW POSTSOCJALISTYCZNYCH

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Streszczenie. Dążenie do zrównoważonego społeczeństwa jest istotnym elementem współczesnego rozwoju. Głównym celem badań była analiza i ocena stopnia zrównoważenia 29 społeczeństw krajów postsocjalistycznych. Oceny dokonano z wykorzystaniem dobrobytów indeksu zrównoważonego społeczeństwa SSI: ludzi, środowiska i gospodarki oraz współczynnika rozwoju społecznego HDI. Bardzo wysoko i wysoko oceniony został poziom rozwoju społecznego dla 25 krajów według indeksu HDI. Również ocena dobrobytu ludzi indeksu SSI wskazuje na bardzo wysokie oceny dotyczące zabezpieczenia podstawowych potrzeb, zapewnienie możliwości rozwoju osobistego oraz zbilansowanie społeczeństwa. Wszystkie państwa ocenione zostały powyżej średniej. Oceny pozostałych dobrobytów: środowiska i gospodarki wskazują na słabe ich zrównoważenie, ponieważ aż 18 państw ocenianych było poniżej wartości średniej i właśnie na te obszary państwa postsocjalistyczne powinny zwrócić szczególną uwagę przy budowie swoich strategii rozwoju.

Słowa kluczowe: zrównoważone społeczeństwo, państwa postsocjalistyczne, indeks HDI, indeks SSI.

Key words: sustainable society, post-socialist countries, HDI, SSI.

INTRODUCTION

In international documents the notion of sustainable development is presented as a strategy consisting in recognition of economic, social and environmental problems the contemporary world is faced with, coupled with an active solution-seeking approach. What it implies is that economic development must support social development and respect the need for protection of natural environment. Sustainable development is a kind of a compromise between environmental, economic and social goals which determine the wellbeing of present and future generations. In this sense, economic development does not equate with merely meeting the needs of the present, but it also embraces ensuring that future generations are able to meet their needs (ecological capital, manmade capital, intellectual and social capital). The ecological aspect implies that certain natural system boundaries must be drawn and never crossed by humans. The social aspect is identified with education and capability to solve major social issues, and with the entire system's involvement in development processes (Ciegis et al. 2009).

The Earth Summit in Rio de Janeiro (1992), convened to address urgent Environment and Development issues, was unprecedented in terms of reconciling the environmental and socio-economic goals of the global community. This milestone change was explicitly expressed in Agenda 21 which set a basis for action, outlined programmes for sustainable development worldwide and provided an implementation framework.

The next Earth Summit, The World Summit on Sustainable Development, was held in Johannesburg in 2002. It was mostly concerned with the opportunities and challenges raised by globalization such as the need for more even distribution of profits, eradication of poverty on the one hand, and excessive consumption on the other. It urged for better management of worldwide natural resources and change of unsustainable patterns of production and consumption. It was concluded that the world community must unite to find global solutions to the challenges of poverty and environmental degradation, and to implement *Agenda 21*. The main message of the Summit reaffirming the world's commitment to sustainable development was that "sustainable development is not only a necessity, but also a unique opportunity to create a more durable basis for the functioning of our economies and societies" (Johannesburg Summit 2002, <http://www.un.org/johannesburg/>).

The notion of sustainable development is also part of the development strategies of post-socialist countries. The latter term refers to Central-Eastern European and Asian countries that discarded the socialist system at the turn of the '80s and '90s, and transitioned towards liberal democracy and free market economy. Political and economic changes in the former Eastern bloc countries were triggered by elections in Poland in June 1989. In October that same year, massive demonstrations in the German Democratic Republic took place which brought about the downfall of Erich Honecker and the collapse of Berlin Wall. Around that time the Hungarian Socialist Workers' Party disintegrated. In November the Velvet Revolution began in what was then Czechoslovakia, and in Bulgaria Todor Zhivkov was removed from power. The entire process ended with the December Uprising in Romania and overthrow of the communist leader, Nicolae Ceausescu. The communist regime came to an end, and the new political order was reinforced by free elections held in 1990: in East Germany (March, reunification of East and West Germany), Hungary (April), Romania (May), Czechoslovakia and Bulgaria (in June). In Poland elections were held later, in autumn 1991. The effect of these changes and the crisis in the Soviet Union was the revival of sovereign nation states in Central and Eastern Europe, reunification of Germany and the dissolution of the USSR (26 Dec. 1991).

In effect, 14 new countries – post-Soviet states – emerged on the world's political map: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Tadjikistan, Turkmenistan, Ukraine and Uzbekistan.

Yugoslavia (Socialist Federal Republic of Yugoslavia, SFRY) comprised of 6 republics. In June 1991 three of them declared independence: the republics of Croatia, Slovenia and Macedonia. In April 1992 independence was proclaimed by the republics of Bosnia and Herzegovina and Serbia & Montenegro. In 2006 the state union of the two latter republics ended and they officially separated into Montenegro and Serbia (Wprowadzenie do studiów... 2013; Karmowska and Marciniak 2015).

RESEARCH MATERIAL AND METHODOLOGY

The main objective of this paper was to analyze and evaluate the sustainability of the post-communist societies from both static and dynamic perspectives.

The definition adopted by the authors was formulated by the Sustainable Society Foundation: „A sustainable society is a society that meets the needs of the present generation, that does not compromise the ability of the future generations to meet their own needs, in which each human being has the opportunity to develop itself in freedom, within a well-balanced society and in harmony with its surroundings.”

The authors sought to measure, with the use of one indicator, the key aspects of a sustainable society embracing given country's citizens' ability to meet their basic needs, pursue their personal development, lead a healthy and decent life, as well as overall care for natural environment and implementation of sustainable development programmes in individual countries.

The HDI, which measures development of human resources and the country's economy, but does not consider environmental wellbeing, did not suit this purpose. The Index is a geometric mean of rescaled values of normalized indices for each of the three dimensions. The health dimension is assessed by life expectancy at birth, the education dimension is assessed by average years of schooling for adults aged 25 years and more, and expected years of schooling for children of school age. The standard of living dimension is measured by gross national income per capita. The HDI uses the logarithm of income to reflect the diminishing importance of income with increasing gross national income (GNI). The scores for the three dimensions of HDI are then aggregated into a composite index using a geometric mean. The HDI simplifies and captures only part of what human development entails (Human Development Reports 2016).

The HDI scale is from 0.0 to 1.0. It ranks countries into 4 tiers of human development:

1. Very high human development.
2. High human development.
3. Medium human development.
4. Low human development.

The Sustainable Society Index (SSI) measures the level of sustainability and overall stability of a country more adequately than the HDI. The SSI measures how sustainable a society is in the three wellbeing dimensions: Human, Environmental and Economic.

Each country is evaluated on the 21 independent variables that build up the SSI, divided into 7 categories and 3 wellbeing dimensions that define the overall sustainability of a society (Table 1).

Indicator values are normalized on a 1–10 scale, where 10 is most sustainable, and aggregated into the SSI categories by simple geometric mean. Similarly, the three Wellbeing dimensions are calculated as the geometric average of the underlying categories. The country's overall SSI score is defined by the geometric average of the underlying indicators in all categories aggregated into scores for the three Wellbeing dimensions. Finding a synthetic measure of sustainable society development is still an open research question and challenge. Hitherto attempts at creating a synthetic measure raised too many controversies, which is why the Wellbeing dimensions levels are not aggregated into one figure for the overall Index but scored separately (Sustainable Society Index...2016).

Table 1. Structure of the Sustainable Society Index

Sustainable Society Index		
dimensions	categories	indicators
Human Wellbeing	Basic Needs	Sufficient Food Sufficient Drink Safe Sanitation
	Personal Development and Health	Education Healthy Life Gender Equality
	Well-balanced Society	Income Distribution Population Growth Good Governance
Environmental Wellbeing	Natural Resources	Biodiversity Renewable Water Resources Consumption
	Climate and Energy	Energy Use Energy Savings Greenhouse Gases Renewable Energy
Economic Wellbeing	Transition	Organic Farming Genue Savings
	Economy	GDP Employment Public Debt

Source: information provided by the Sustainable Society Foundation SSI (2016).

The level of sustainability falls into one of the four classes:

1. High sustainability: score from 7.5 to 10;
2. Above the average sustainability: score from 5.0 to 7.49;
3. Below the average: score from 2.5 to 4.99;
4. Low sustainability: score from 0 to 2.49.

The research question is: Did the overall sustainability of post-socialist countries improve over the 2006–2016 period and if so, in which areas?

Answers to these questions were sought through comparative analysis of the scores on the SSI Human, Environmental and Economic Wellbeing dimensions and the Human Development Index.

The research was based on statistical data provided by the World Bank, Eurostat, Human Development Reports and the Sustainable Society Foundation reports. The research covered years 2006–2016.

GENERAL OUTLINE OF THE POST-SOCIALIST COUNTRIES

The subject countries are very diversified in terms of geography and demography. They cover in total an area of approx. 25 mln km² with 411 mln inhabitants – the coefficient of variation for these data is approx. 360% for Surface area and approx. 190% for Population total.

The group of post-Soviet states covers approx. 90% of the area indicated, with 72% population total. The seven states of the former Yugoslavia cover only 0.6% of the area, with approx. 3% of the population total.

Among the 29 countries, 11 are members of the European Union (making up for approx. 38% of the EU), covering 4.5% of the EU area and accounting for 25% of the EU population total.

Table 2 presents the population and total area of the countries surveyed.

Table 2. Surface area and population of the surveyed countries in 2016

Country		Surface area		Population, total	
Name	code	thousand. sq. km	%	in millions of people	%
Albania	ALB	28.8	0.11	2.9	0.70
Armenia	ARM	29.7	0.12	2.9	0.71
Azerbaijan	AZE	86.6	0.35	9.8	2.37
Belarus	BLR	207.6	0.83	9.5	2.31
Bosnia and Herzegovina	BIH	51.2	0.20	3.5	0.86
Bulgaria	BGR	111.0	0.44	7.1	1.73
Croatia	HRV	56.6	0.23	4.2	1.01
Czech Republic	CZE	78.9	0.32	10.6	2.57
Estonia	EST	45.2	0.18	1.3	0.32
Georgia	GEO	69.7	0.28	3.7	0.90
Hungary	HUN	93.0	0.37	9.8	2.39
Kazakhstan	KAZ	2724.9	10.88	17.8	4.33
Kyrgyz Republic	KGZ	199.9	0.80	6.1	1.48
Latvia	LVA	64.5	0.26	2.0	0.48
Lithuania	LTU	65.3	0.26	2.9	0.70
Macedonia, FYR	MKD	25.7	0.10	2.1	0.51
Moldova	MDA	33.9	0.14	3.6	0.86
Mongolia	MNG	1564.1	6.25	3.0	0.74
Montenegro	MNE	13.8	0.06	0.6	0.15
Poland	POL	312.7	1.25	37.9	9.23
Romania	ROU	238.4	0.95	19.7	4.79
Russian Federation	RUS	17 098.3	68.29	144.3	35.11
Serbia	SRB	88.4	0.35	7.1	1.72
Slovak Republic	SVK	49.0	0.20	5.4	1.32
Slovenia	SVN	20.3	0.08	2.1	0.50
Tajikistan	TJK	141.4	0.56	8.7	2.12
Turkmenistan	TKM	488.1	1.95	5.7	1.38
Ukraine	UKR	603.6	2.41	45.0	10.95
Uzbekistan	UZB	447.4	1.79	31.8	7.75
Together		25 037.8	100.00	411.1	100.00
Statistical characteristics					
Maximum		17 098	68.29	144	35.11
Minimum		14	0.06	0.62	0.15
Average		863		14	
Distance		17 084		144	
Standard deviation		3117		27	
Variability %		361		190	

Source: elaboration based on data from The World Bank (2016).

Preliminary analysis was conducted with the use of the HDI. It is a metric that allows to assess human development at the aggregate country level, capturing key aspects of this development: long and healthy life, knowledge and decent standard of living (Human Development Report 2014).

In the 2015 ranking, 12 countries scored very high on HDI, 13 had a high score, and only 4 showed medium human development (Table 3).

Table 3. Human Development Index growth, 2006–2015

HDI rank	Country	HDI		Change in HDI rank	Average annual HDI growth [%]
		2006	2015	2006–2015	2006–2015
Very high human development					
25	Slovenia	0.904	0.890	1	–1.52
28	Czech Republic	0.874	0.878	3	0.44
30	Estonia	0.853	0.865	8	1.42
36	Poland	0.858	0.855	0	–0.32
37	Lithuania	0.852	0.848	2	–0.46
40	Slovakia	0.849	0.845	0	–0.48
43	Hungary	0.862	0.836	–8	–2.99
44	Latvia	0.836	0.830	5	–0.73
45	Croatia	0.841	0.827	–1	–1.62
48	Montenegro	0.762	0.807	5	5.93
49	Russia	0.795	0.804	11	1.12
50	Romania	0.792	0.802	12	1.31
High human development					
52	Belarus	0.786	0.796	14	1.25
56	Bulgaria	0.808	0.794	–1	–1.78
56	Kazakhstan	0.761	0.794	23	4.35
66	Serbia	0.743	0.776	–3	4.41
70	Georgia	0.732	0.769	29	5.11
75	Albania	0.703	0.764	8	8.68
78	Azerbaijan	0.729	0.759	22	4.05
81	Bosnia and Herzegovina	0.703	0.750	–28	6.66
82	Macedonia	0.730	0.748	–6	2.48
84	Armenia	0.759	0.743	–8	–2.13
84	Ukraine	0.766	0.743	–7	–3.00
92	Mongolia	0.679	0.735	21	8.22
105	Uzbekistan	0.694	0.701	6	0.96
Medium human development					
107	Moldova	0.671	0.699	8	4.18
111	Turkmenistan	0.738	0.691	–15	–6.30
120	Kyrgyzstan	0.702	0.664	–11	–5.47
129	Tajikistan	0.652	0.627	–7	–3.76

Source: own study based on the Human Development Report... (2016).

Looking at the extremities, Slovenia (25) came at the top and Tajikistan (129) came at the bottom of the 2015 ranking. Over the period analyzed, the biggest improvement in HDI was noted for Georgia (by 29 positions), Kazakhstan and Azerbaijan (by 23 each). Over the same period, Bosnia and Herzegovina dropped in the ranking by 28 positions. Overall, from among 29 surveyed countries 16 climbed up and 11 fell in the ranking, and 4 countries maintained the same position.

ANALYSIS OF SUSTAINABILITY OF A SOCIETY

SSI captures how sustainable a society is and describes societal progress along three dimensions: Human Wellbeing (SSI HW), Environmental Wellbeing (SSI EnvW) and Economic Wellbeing (SSI EconW). The Wellbeing levels in the countries surveyed in the years 2006 and 2016 are presented in Table 4.

Table 4. Wellbeing dimensions for SSI-2006 and SSI-2016

Countries		Human Wellbeing		Environmental Wellbeing		Economic Wellbeing	
		2006	2016	2006	2016	2006	2016
Albania	ALB	7.5	8.1	4.9	5.4	3.7	2.6
Armenia	ARM	7.3	7.6	5.2	4.0	3.1	3.2
Azerbaijan	AZE	7.0	7.3	4.3	3.9	4.0	5.7
Belarus	BLR	7.8	8.0	3.6	3.6	4.7	3.9
Bosnia-Herzegovina	BIH	6.9	7.3	4.1	3.8	3.1	3.2
Bulgaria	BGR	7.7	7.6	4.2	4.5	4.1	6.2
Croatia	HRV	8.1	8.1	4.3	5.9	4.6	3.6
Czech Republic	CZE	8.3	8.6	2.1	3.3	7.3	7.8
Estonia	EST	8.2	8.4	2.1	2.2	7.3	8.1
Georgia	GEO	7.0	7.5	6.3	4.9	3.7	4.0
Hungary	HUN	8.3	8.2	3.9	5.2	5.8	5.2
Kazakhstan	KAZ	7.3	7.6	2.5	2.7	3.1	5.3
Kyrgyz Republic	KGZ	6.8	7.0	6.4	4.9	2.5	2.2
Latvia	LVA	8.0	8.0	3.8	4.7	6.5	6.6
Lithuania	LTU	8.1	8.1	3.0	4.0	6.3	6.9
Macedonia	MKD	7.1	7.1	4.9	5.4	2.7	3.8
Moldova	MDA	7.0	7.6	4.0	5.4	4.2	5.2
Mongolia	MNG	6.2	6.4	3.8	2.9	3.0	4.3
Montenegro	MNE	7.7	7.9	6.3	6.7	5.2	3.5
Poland	POL	7.9	8.4	3.9	4.2	4.4	6.6
Romania	ROU	7.7	8.1	3.9	5.6	4.4	6.7
Russia	RUS	6.8	6.9	2.4	2.5	4.9	5.5
Serbia	SRB	7.7	8.2	3.4	5.2	3.5	2.6
Slovak Republic	SVK	8.2	8.3	3.9	4.9	5.5	6.0
Slovenia	SVN	8.4	8.7	3.4	4.9	7.6	5.2
Tajikistan	TJK	5.8	6.1	6.4	5.3	2.2	3.5
Turkmenistan	TKM	5.6	5.8	1.7	1.7	4.2	4.9
Ukraine	UKR	7.8	8.0	3.5	4.8	5.0	2.9
Uzbekistan	UZB	6.4	6.6	4.9	5.1	3.4	4.0

Comments on the Table: degrees of sustainability

■	1.High degree of sustainability
■	2.Sustainability above average
■	3.Sustainability below average
■	4.Low degree of sustainability

Source: own study based on data provided by the SSustainable Society Foundation SSI – 2016.

After examining the values of SSI Wellbeing indices, one can conclude that the post-socialist countries scored very high on the Human Wellbeing dimension: Basic Needs, Personal Development and Health and Well-balanced society. In 2006 Turkmenistan ranked the lowest with a score of 5.6, though in 2016 it improved by 0.2 and classified *assustainability above average*. Beside Turkmenistan, the category included 13 countries in 2006, whereas in 2016 four countries improved their scores. The remaining countries showed high degree of sustainability. In 2016 the highest ranking countries were Slovenia and the Czech Republic, with a score of 8.7 and 8.6 respectively.

Despite the fact that all of the countries surveyed showed progress, the improvement was different in different categories. As it comes to Human Wellbeing, the categories of Personal Development and Health, and Basic Needs changed the least, whereas the indicator score

for Well-balanced Society changed the most. Moreover, it is worth noting that as many as 11 countries scored lower in 2016 compared to 2006 on the latter indicator.

Dynamics in the three Human Wellbeing categories is illustrated in Fig. 1.

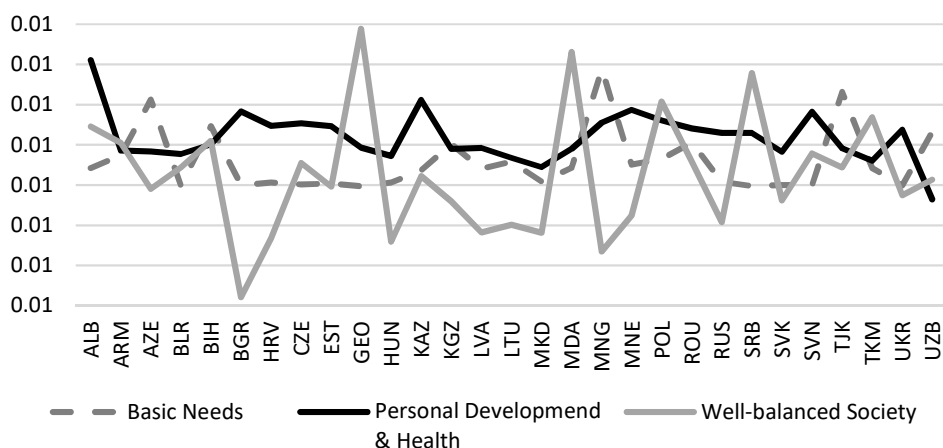


Fig. 1. Dynamics of changes in Human Wellbeing categories in 2016 compared to 2006

As presented in Table 5 below, the subject countries show the highest variance in Income Distribution – approx. 28%, Population Growth – approx. 23% and Good Governance – approx. 27%. The highest score on Income Distribution and Population Growth, that is above 7.5 (high degree of sustainability) was observed for: Albania, Belarus, Czech Republic, Moldova, Romania and Ukraine. It must be emphasized that for Good Governance these countries scored below 5, with the exception of the Czech Republic and Slovenia, 6.8 and 6.7 respectively.

Table 5. Statistics of Human Wellbeing in 2016

Statistics	Basic Needs			Personal Development & Health			Well-balanced Society		
	Sufficient Food	Sufficient to Drink	Safe Sanitation	Education	Healthy Life	Gender Equality	Income Distribution	Population Growth	Good Governance
Maximum	10.00	10.00	10.00	9.95	8.52	7.84	10.00	10.00	7.43
Minimum	6.68	6.04	5.02	6.13	6.63	6.68	3.04	3.34	2.45
Distance	3.32	3.96	4.98	3.82	1.88	1.16	6.96	6.66	4.98
Average	9.75	9.38	8.85	8.53	7.70	7.06	7.00	7.48	5.00
Standard deviation	0.71	1.04	1.27	1.02	0.44	0.27	1.95	1.71	1.35
Coefficient of variation [%]	7.29	11.10	14.34	11.90	5.75	3.77	27.88	22.85	26.98

Unfortunately, Environmental Wellbeing, comprising Natural Resources and Climate & Energy, did not perform as well as Human Wellbeing. Turkmenistan and Estonia ranked the lowest on this category, with 1.7 and 2.2 respectively, but showed progress and in 2016 were moved to a higher class (from 2.1 to 3.3).

Natural Resources, one of the two Environmental Wellbeing categories, remained at the same level for most of the countries surveyed. The biggest decline was observed for Belarus, from 5.9 to 4.5. Yet in case of the Czech Republic the change was to the contrary – the score

increased from 4.5 to 6.6. The Climate & Energy category showed more dynamics. Eight countries received a lower score in 2016 than in 2006. The biggest increase, almost twofold, was noted for Serbia (from 2.1 to 4.4) – Fig. 2.

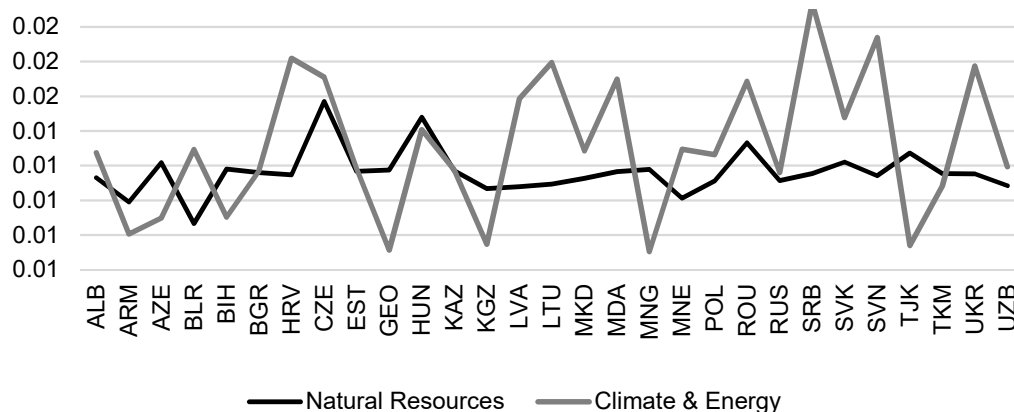


Fig. 2. Dynamics of changes in Environmental Wellbeing categories in 2016 compared to 2006

Categories constituting the Environmental Wellbeing dimension show a very large variation between the countries surveyed. Renewable Energy scored the lowest, below 5. Country-wise, Turkmenistan ranked the lowest, and was classified in the low degree of sustainability class on five indicators (Table 6).

Table 6. Statistics of Environmental Wellbeing in 2016

Statistics	Natural Resources			Climate & Energy			
	Biodiversity	Renewable Water Resources	Consumption	Energy Use	Energy Savings	Greenhouse Gases	Renewable Energy
Maximum	10.00	9.93	7.51	9.32	9.82	9.44	4.91
Minimum	3.17	1.00	1.00	1.00	1.00	1.00	1.00
Distance	6.83	8.93	6.51	8.32	8.82	8.44	3.91
Average	6.40	8.63	5.05	5.53	4.78	5.22	1.73
Standard deviation	1.88	1.95	2.06	2.40	2.86	2.53	1.02
Coefficient of variation [%]	29.39	22.59	40.78	43.32	59.95	48.44	58.94

Economic Wellbeing embraces economic changes in terms of level of transition to a sustainable economy and a country's overall economic condition. Only 8 countries scored above 5.0 (above average sustainability) on the two Economic Wellbeing categories, that is Transition and Economy: Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Poland, Romania and Slovakia. The Kyrgyz Republic (1.6) and Albania (2.1) scored the lowest on Transition, and had very low scores for Economy, 2.8 and 3.1 respectively. When comparing the year 2016 with 2006, the biggest improvement took place in the Transition category. Here the biggest increases were recorded by Kazakhstan (3-fold increase), Romania and Tajikistan (2.7-fold), and Bulgaria (2.4-fold) – Fig. 3.

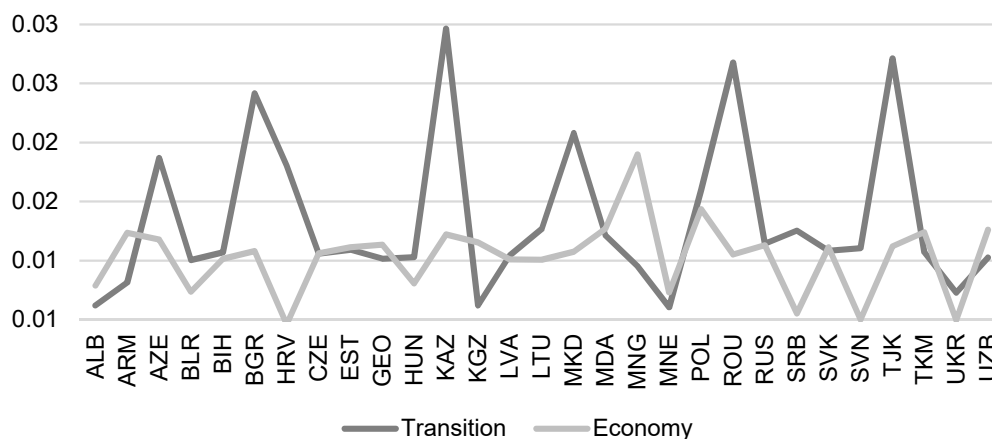


Fig. 3. Dynamics of changes in Economic Wellbeing categories in 2016 compared to 2006.

The analysis of specific indicators of Economic Wellbeing reveals that the biggest variation occurred with regard to Organic Farming with as much as 50% of countries scoring below 2. On the other hand, five countries had a score above 9 (Czech Republic, Estonia, Latvia, Slovakia, Slovenia). Respective indicator values are presented in Table 7.

Table 7. Statistics of Economic Wellbeing in 2016

Statistics	Transition		Economy		
	Organic Farming	Genuine Savings	GDP	Employment	Public Debt
Maximum	9.85	9.28	8.90	7.12	9.72
Minimum	1.00	2.26	1.76	1.00	1.00
Distance	8.85	7.02	7.13	6.12	8.72
Average	3.82	7.66	6.47	3.79	6.14
Standard deviation	3.19	1.89	2.07	1.73	3.00
Coefficient of variation [%]	83.50	24.61	32.07	45.68	48.88

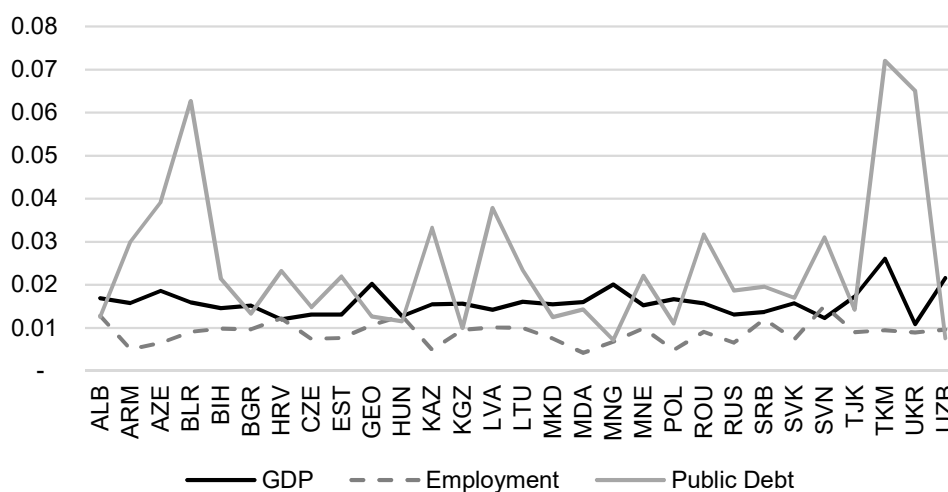


Fig. 4. Dynamics of changes in Economy category in 2016 compared to 2006

Comparison of the values obtained in 2016 and 2006 (Fig. 4) shows that the largest variation was observed for Public Debt. It grew the most in Belarus (6.3-fold) and Turkmenistan (7.2-fold). The indicator value declined only in case of two countries, that is Mongolia and Uzbekistan.

CONCLUSIONS

It can be concluded that most of the countries surveyed, regardless of their geographical location, made progress towards sustainability over the period analyzed. The scores on the three SSI Wellbeing dimensions improved over time, but with a few exceptions, although the extent of the improvement varied from country to country.

Overall, a gradual evolution towards a more sustainable society was observed, with the level of sustainability being relatively high in most countries and little variation between them. In 2006 only two of the post-socialist countries scored very high on both measures, i.e. HDI and the Human Wellbeing dimension (very high HDI, class 1 of SSI HW), whereas in 2016 this number increased to 11 countries. Similarly, in 2006 six countries were grouped in the high sustainability class on SSI HW, whereas in 2016 three more joined in. Only three countries scored comparatively lower: Turkmenistan, Kirghizstan and Tajikistan, and in result fell from class 1 to class 2 on the Human Wellbeing dimension (Table 8).

Table 8. Social sustainability in the years 2006 and 2016 according to HDI & Human Wellbeing

HDI		Human Wellbeing			
		classes in 2006		classes in 2016	
		1	2	1	2
Human Development	very high	MNG, RUS	BIH, CZE, EST, HUN, LVA, LTU, POL, ROU, SVK, SVN	SVN, CZE, EST, POL, LTU, SVK, HUN, LVA, HRV, MNE, ROU	RUS,
	high	ALB, BLR, GEO, KAZ, MKD, UZB	ARM, AZE, BGR, HRV, MNE, UKR	ARM, UKR, BLR, BGR, KAZ, SRB, GEO, ALB, UZB	AZE, BIH, MKD, MONG
	medium	KGZ, MDA, TJK, TKM		MDA	TKM, KGZ, TJK

The lowest scoring dimension was definitely Environmental Wellbeing. None of the countries could classify as class 1 on EnvW, and in 2006 only four of them scored above average on that dimension. In 2016 as many as 12 countries reached that level of environmental sustainability.

The situation was very similar for Economic Wellbeing, though in 2006 only one country – Slovakia – was classified in class 1. In 2016 two countries moved up in the classification and joined class 1, i.e. the Czech Republic and Estonia. Interestingly, in 2006 two countries ranked above average (class 2) on Environmental and Economic Wellbeing, and ten years later the number remained three (Table 9).

Table 9. Sustainable Environment & Economy in the years 2006 and 2016 according to Environmental and Economic Wellbeing indices

2006		Economic Wellbeing			
		classes in 2006			
Environmental Wellbeing	Classes	1	2	3	4
	2		LTU, MNE	ARM, KGZ	TJK
	3	SVN	HUN, LVA, LTU, SVK, UKR	ALB, AZE, MKD, MDA, ROU, BLR, BHI, KAZ, MNG, SRB, BGR, HRU, GEO, POL, UZB	
	4		CZE, EST, TKM		
2016		Economic Wellbeing			
		classes			
Environmental Wellbeing	Classes	1	2	3	4
	2		HUN, MDA, ROU	HRV, ALB, MKD, MGN, MNE, POL, SRB, TJK, UZB	
	3	CZE	AZE, BGR, KAZ, RUS, SVN, SVK	UKR, ARM, BLR, BHI, GEO, UKR	KGZ, LVA, LTU
	4	EST	TKM		

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Summary. Concern for sustainable social growth is a significant element of overall development. The main goal of the paper was to analyze and evaluate sustainability of societies of 29 post-communist countries. The evaluation was conducted with the use of the Wellbeing dimensions of the SSI index: Human, Environmental and Economic Wellbeing and the Human Development Index (HDI). 25 countries scored very high and high on HDI thus showing high human development. The countries also scored high on the three categories of the SSI Human Wellbeing dimension, that is basic needs, personal development, and health and well-balanced society. All studied countries ranked higher than average. The score on the two other SSI dimensions, i.e. Environmental and Economic Wellbeing was not as satisfactory, and revealed weaker sustainability with 18 countries ranking below average. The findings clearly indicate that these two areas should receive particular attention in the countries' development strategies.