Bulletin of Taras Shevchenko National University of Kyiv. Economics, 2022; 1(218): 45-53
УДК 330.342
JEL classification: A10
DOI: https://doi.org/10.17721/1728-2667.2022/218-1/7

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SOCIO-ECONOMIC DEVELOPMENT OF POST-SOCIALIST COUNTRIES: CONTRADICTORY TRENDS AND CHALLENGES OF THE PRESENT

The article analyses the social and economic development of 14 post-socialist countries from 2001 to 2020. By assessing their clustering, a conclusion was made about the contradictory combination of two evolution tendencies of these countries: simultaneous deployment of processes of divergence, asymmetry of their social and economic development and deployment of convergence processes, and formation of separate clusters of the specified countries. In particular, the European Union member states, such as Estonia, Latvia, Lithuania, Poland, Slovakia, Slovenia, Bulgaria, Hungary, and the Czech Republic, formed a separate cluster in 2020, characterized by the highest GDP per capita in the group, the share of expenditure on education and the highest level of the spending on health care in GDP. A separate cluster was formed by Ukraine and Moldova, potential EU candidate countries. The place of Ukraine among the considered countries in the period 2001-2020 and in modern conditions was analyzed. It was concluded that the indicators of socio-economic development of Ukraine demonstrate cyclical dynamics under the influence of global factors and shocks, taking into account the turning point events for the whole world in 2022. It was noted that new world order is currently developing. There are new initiatives and concepts within the EU, which provide great opportunities for Ukraine for European integration. In this context, the institutional factors of convergent and divergent development of post-socialist countries, which will be aimed at resolving the existing military and political conflicts, settlement of global imbalances, stabilization of world economic development, have an essential role.

Keywords: post-socialist countries; globalization of economy; convergence of socio-economic development of post-socialist countries; divergence of socio-economic development of post-socialist countries; global imbalances; global shocks.

Introduction. Global economic development is generally recognized as a highly complex, multistructural and contradictory process. On the one hand, the deployment of multilevel integration processes, the strengthening of trade relations, the growth of foreign investment, and the institutional and organizational ordering of the global economy contributed to the convergence of socio-economic development levels of developed and developing countries. A vivid manifestation of this is the convergence of national economies, in particular, the so-called new convergence, which began in the 1990s to equalize asymmetries and imbalances in the development of the world economy.

In addition, globalization increases the instability of the world economic system, differentiates national economies, and deepens the gap between them. In particular, the implementation of the neoliberal model of globalization provokes a deepening gap between the financial and real sectors of national economies; the transformation of the countries of the former socialist camp is accompanied by the aggravation of old and the appearance of new socio-economic risks and contradictions, the "difference" of their ways of civilizational evolution. This problem is especially relevant under current conditions of Ukraine's assertion of the right to European integration and the development of a pro-European vector of economic growth. In this context, the comparative analysis of socio-economic development of post-socialist countries based on the dynamics of the macroeconomic indicators in the context of convergent-divergent trajectories of their evolution contributes to more effective and sound managerial decision-making, and improvement of planning and forecasting of further socio-economic and institutional transformations. At the same time, the unprecedented global crisis caused by the COVID-19 pandemic and full-scale invasion of sovereign Ukraine by the Russian Federation bring new accents in the scientific understanding of the impact of global challenges and shocks on the socio-economic development of the former socialist camp countries.

Literature review. The problems of uneven development of national economies have always been the focus of attention of both Ukrainian and foreign scholars. In particular, the representative of the neoclassical direction of economic theory R.Solow analyzed the reasons for absolute and conditional convergence of the economies of poor and rich countries based on the level of capital-employment dynamics as the main factor of their convergence [24]. J.Stigler and F.Fukuyama viewed globalization as a triumph of economic liberalism and democracy, rejecting the role of the state, especially in the social sphere, and arguing that globalization opens to all countries new unprecedented opportunities for economic development, associated with the cross-border distribution of information, knowledge, and new technologies, enabling a more efficient use of resources [5, 25].

Representatives of neo-orthodox research programs have severely criticized such neoliberal approaches. The work of R.Barro and X.Sala-i-Martin's "Convergence of Countries and Regions", which drew attention to the fact that, at the turn of the 20th and 21st centuries, global economic development and economic growth determined greater progress of individual countries on the basis of their convergence, primarily, the diffusion of national economies [3, 23]. J.Baumol, R.Nelson, and I.Wolf came to the conclusion that individual countries in the context of globalization form a kind of dynamic "convergence clubs" on the basis of shared ideas on the implementation of foreign policy. According to the researchers, such clubs include not only industrially developed countries but also countries with transformational economies with the necessary potential for convergence [4]. At the same time, the analysis of economic development of countries outside the "convergence clubs" was carried out by researchers such as D. Kway and L. Pritchett, who substantiated the simultaneous deployment of convergent and divergent processes of socio-economic development of the world countries [19, 20]. In the context of the problem under study the widely cited work of E.Reinert "How the rich countries became rich and why the poor countries remain poor" deserves attention, in which the author emphasizes that the modern economic development of the world countries indicates their divergence, the difference in different trajectories, since globalization by its nature is a contradictory process. This finds expression in the fact that some mostly developed countries specialize in activities with increasing returns (technology, intensive manufacturing, and services), and greatly benefit from the positive effects of globalization.

At the same time, other countries specialize in activities with descending returns (traditional production of raw materials and agriculture), and continue to become poorer, feeling the asymmetric impact of integration processes [21].

As for the trajectories of development of post-socialist countries, comparative studies of their socio-economic evolution during the period of market transformation and integration into the global world economic environment are reflected in the works: L.Balcerovich, who carried out a comparative analysis of the socialist and capitalist systems functioning, investigated the impact of institutions and institutional changes on the economy of post-socialist countries, and also insisted on the need for radical economic reforms aimed at departing from directive planning inherent in the Soviet countries and transition to an efficient market economic system [2]; W.Grzegorz Kolodko, who noted that the economy is not only a means of interpreting the past, but also a tool for shaping strategies for sustainable economic development based on an understanding of the trajectory of inevitable economic processes. The scientist highlighted the impact of globalization processes on the economic development of post-socialist countries and substantiated the strategies that can help less developed countries to catch up with more developed countries, to use the modern wave of globalization in their interests and, as a consequence, to restrain the deepening of global imbalances [10, 11]; Danish researcher A. Norgard and Swedish-American economist A.Aslund, who carried out a comparative analysis of the socio-economic development of post-communist countries in the 1990s post-socialist countries and predict the impact and consequences of economic reforms in individual countries based on internal and external initial conditions for their transformation [15, 17]; well-known developers of the concept of comparative economic systems B.Rosser and M.Rosser, who noted the need to take into account cultural, religious, and historical preconditions for understanding the institutional and systemic mechanisms of a particular economic system [22].

However, despite the significant amount of solid theoretical work in this area, the problems of socio-economic development trajectories of post-socialist countries in the context of current global challenges and shocks remain underdeveloped, which led to the purpose of the study.

Methodology. Testing the presence or absence of convergence of development trajectories of different countries in the modern scientific literature is based on the use of different approaches, ranging from simple statistical methods (estimation of standard deviation dynamics) to the use of complex econometric models to confirm the integration of countries into the world economic space.

To determine the degree of dispersion (dispersion) of economic development indicators, in particular inter-country differentiation, the author applied the calculation of the coefficient of variation and carried out a cluster analysis.

The quantitative assessment of the convergence of the selected group of countries was based on the calculation of the coefficient of variation, which in practice is used to characterize the homogeneity of a given population. Suppose this indicator does not exceed 0.333 or 33.3 %, the variation of the series is considered weak, and the population is homogeneous. In that case, i.e., convergent processes are strengthened, and if more than 0.333 – strong, which means a substantial variation of the series and heterogeneity of the population, i.e. strengthening of divergent processes. The specified technique is actively used for the estimation of the processes of convergence of the countries, in particular, sigma-convergence, by the experts of the European Union [14, p. 5–6].

The calculations were made according to the formula:

$$\sigma = \frac{\sqrt{\frac{1}{n}\sum_{i=1}^{n}(M_i - M_{av})^2}}{M_{av}}$$

Where M_i is the value of the selected indicator for each country; M_{av} is the average value of the selected indicator for the set of countries; *n* is the total number of countries in the sample.

The cluster analysis, it was conducted with the SPSS software based on a sample of 14 post-socialist countries (Armenia, Bulgaria, Czech Republic, Estonia, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Poland, Romania, Slovakia, Slovenia, and Ukraine), for the following two periods:

1) the pre-crisis year 2001,
2) the crisis year of 2020.

In our opinion, these countries should be included in the sample because with approximately the same starting conditions after the collapse of the Soviet Union, the vectors of their economic development have significant differences. Therefore, it is advisable to consider how they will be grouped in 2001, i.e., 10 years after the collapse of the USSR, as well as in 2020 (as the last one available according to the statistical base).

A significant advantage of cluster analysis is that it is possible to produce a breakdown of objects not by one parameter, but by several attributes. Clustering was performed by the single bond method or the "neighbor" method using the Euclidean distance. In this case, before the cluster analysis, all variables were standardized to avoid the diversity of values. After that, dendrograms were constructed separately for each period to further compare the results. The leading macroeconomic indicators involved in the comparative analysis of socio-economic development of these countries through their clustering included the volume of real GDP per person, the unemployment rate, the share of spending on health care (% of GDP), the share of spending on education (% of GDP). Statistical data of the World Bank formed the information base of the conducted research. The economic-statistical analysis was carried out with the use of MS Excel and SPSS software packages.

Results. One of the most debatable problems in the study of market transformations in the countries of the former socialist camp is the ratio of convergence and divergence of post-socialist development trajectories of post-socialist development. It is well known that the term divergence (from Latin *divergere* – to deviate, diverge) is used by researchers of socio-economic processes to reflect the increasing gap between the levels of development of individual countries, the deviation of their macroeconomic indicators from the regional average, as well as the deepening qualitative differences between national economic models. Instead, the concept of convergence (from Latin *convergentio* – to converge) is used as an antipode to the idea of divergence, characterizing the processes of integration, gradual convergence of different economic systems, and the involvement on this basis of a more significant number of countries in the common channel of world civilization.

The hypothesis of convergence of national economies lies in the fact that the economic growth rate of the poorest countries on average exceeds the growth rate of rich countries. The economic literature distinguishes between conditional and absolute convergence, which is divided into δ- and β-convergence (Figure 1) [7].

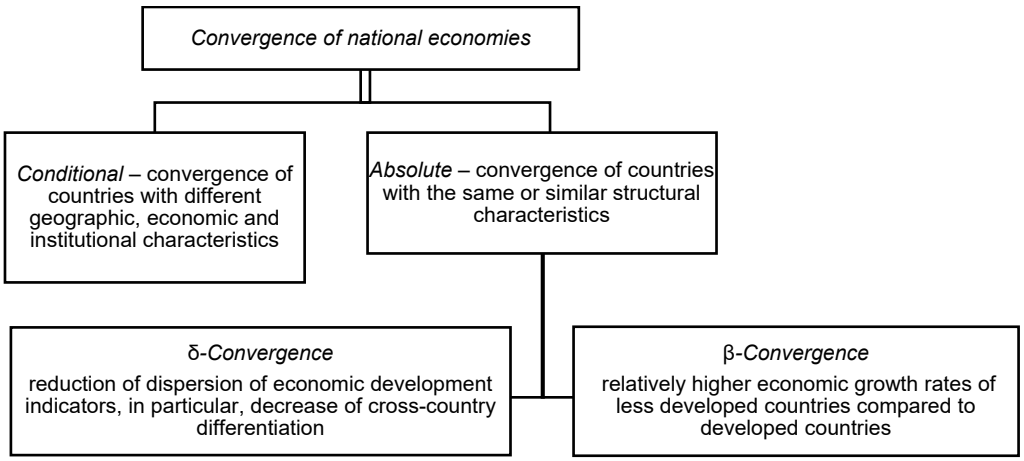

Figure 1. Types of convergence of national economies

Source: Developed by the author based on data [7, p. 14–19].

More balanced, in our opinion, is the position of those researchers who consider convergence and divergence as two complementary determinants of the socio-economic development of national economies in the context of globalization. The point is that the information and technological revolution, the acceleration and deepening of integration processes accelerate the cross-border movement of goods, services, information, knowledge, and human and intellectual capital, whose bearers are representatives of different institutional systems, cultures, traditions, religions, etc. Under these circumstances, the global environment is characterized, on the one hand, by the unprecedented interconnectedness and interdependence of national economies and, on the other hand, by the increasing diversity and plurality of trajectories of their economic evolution.

As noted above, the degree of integration of a country's economy into the global economy can be determined by calculating the coefficient of variation. The criterion for the presence of σ-convergence is the tendency for the coefficient of variation to decrease at the end of the period compared to the beginning of the period. In our case, this is the time interval from 2001–2020 for 14 post-socialist countries.

As it can be seen from Figure 2, during 2001–2008, the value of the coefficient of variation calculated on the basis of GDP per capita has been decreasing annually, which indicated the strengthening of the processes of convergence of development trajectories of the countries under consideration by this indicator. However, starting from 2008, the value of the coefficient has been growing up to 2019, which allows us to state that the processes of divergence in the development trajectories of the national economies under analysis, in particular under the influence of the global financial and economic crisis, have been intensifying. At the same time, in 2020, there was a decrease in the specified indicator and then an increase in convergence processes between a selected group of post-socialist countries. At the same time, the value of the coefficients is significantly greater than 0.33, which means a strong variability of the series and heterogeneity of the population. The slope of the trend line is equal to $y = 0.0362x + 1.3755$, in general, it has an ascending trend.

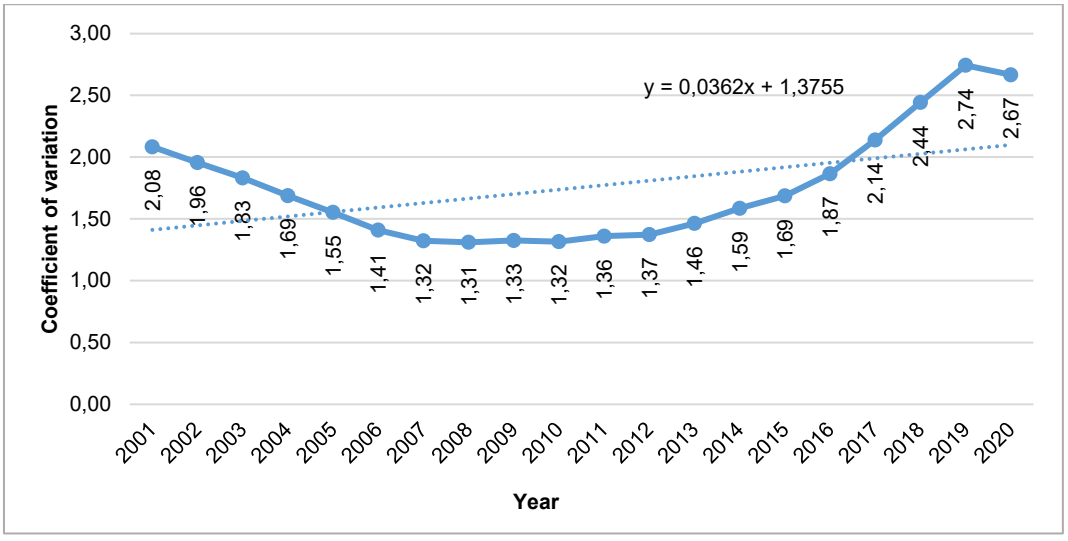

Figure 2. Dynamics of the value of the coefficient of variation calculated on the basis of GDP per 1 person of 14 post-socialist countries for the period 2001–2020

Source: Developed by the author based on [26].

Figure 3 shows that during 2001–2006, the value of the coefficient of variation, calculated on the basis of the unemployment rate, tended to decline, which indicated the strengthening of convergence processes in the employment sphere of the post-socialist countries under consideration during this period. However, from 2004 to 2010, the coefficient's value was growing, indicating an increase in the processes of divergence in this sphere in this period. From 2010 to 2015, the coefficient decreased again, and from 2015 it increased significantly, strengthening the country's imbalances in the sphere of employment. At the same time, the value of the coefficients is markedly higher than 0,33 during the analyzed period, which means a substantial variability of the series and heterogeneity of the population. The slope of the trend line is equal to $y = -0.0001x + 0,4444$, which indicates a general decrease in unemployment in the group of countries in question and is generally a positive trend.

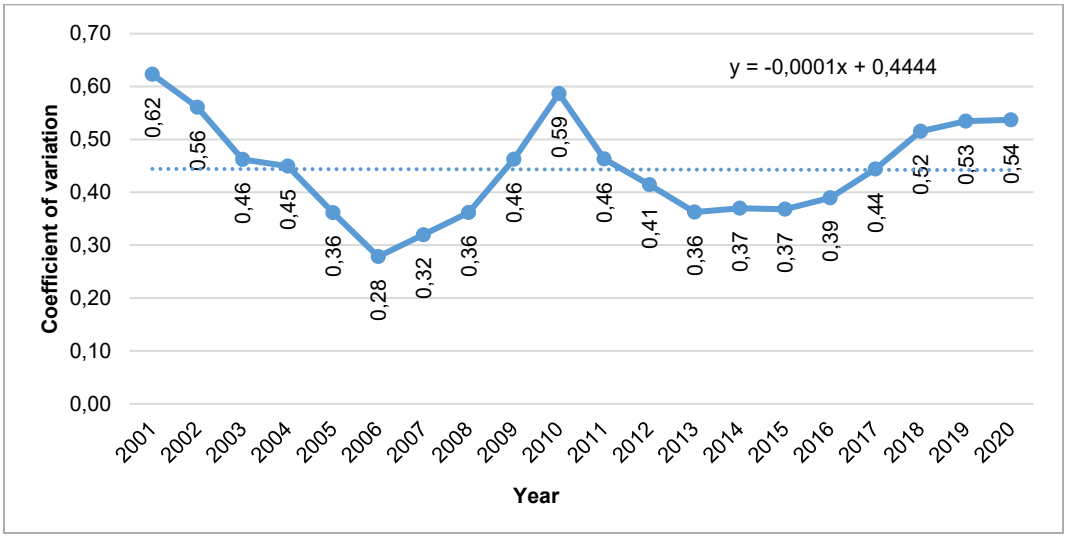

Figure 3. Dynamics of the value of the coefficient of variation calculated on the basis of the unemployment rate of 14 post-socialist countries for the period 2001–2020

Source: Developed by the author based on [26].

Figure 4 illustrates the results of the calculation of the coefficient of variation based on the share of expenditures on health care. In contrast to the dynamics of the coefficient of variation calculated on the basis of GDP volume per 1 person, the value of this coefficient of variation fluctuated to a greater extent during the analyzed period, and the slope of the trend line is $y = 0.0044x + 1.1816$ and in general has an upward trend. At the same time, the coefficient value is less than 0.33 during the whole analyzed period, which indicates homogeneity of the population and strengthening of convergent tendencies in this sphere. However, in recent years, in particular, during the period of the corona-crisis, the coefficient has increased significantly, which indicates the increase of disintegrative trends in health care expenditures of the group of countries under consideration. This can be explained, in particular, by the fact that the share of health expenditures in the GDP structure in some countries has increased significantly (Armenia, the Czech Republic, Estonia, Moldova, Poland, Romania, Slovakia and Slovenia); it has slightly increased in Bulgaria, Latvia, Lithuania; and in other countries on the contrary – decreased (Hungary, Kazakhstan, Ukraine) (Tab. 1).

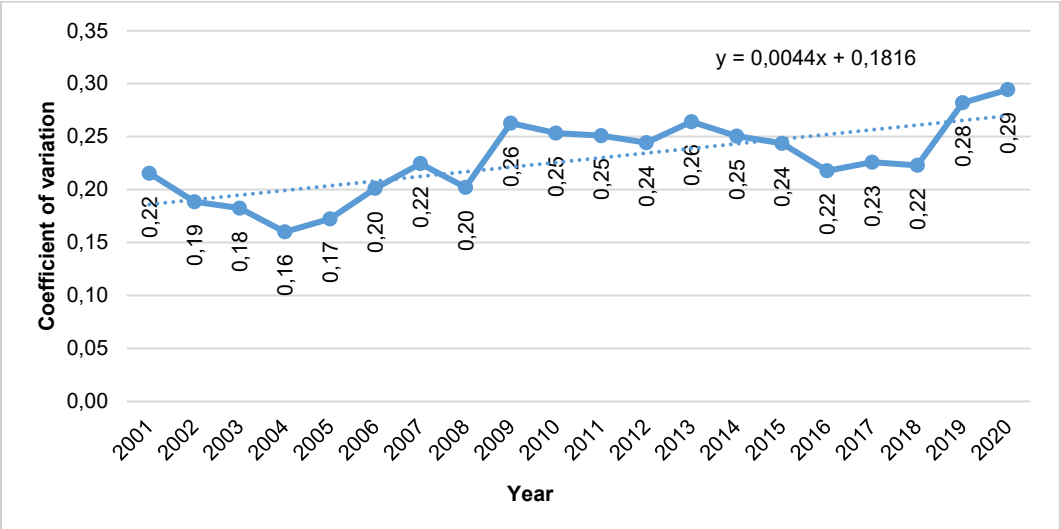

Figure 4. Dynamics of the value of the coefficient of variation calculated on the basis of the health care expenditures share in GDP of 14 post-socialist countries for the period 2001–2020

Source: Developed by the author on the basis of [26].

Figure 5 shows the results of taking into account the coefficient of variation based on the share of education costs in the GDP structure of the countries under consideration. It is important to note that the slope of the trend line is downward and equals $y = – 0.0033x + 0.2838$. At the same time, the coefficient value is less than 0.33 during almost the whole analyzed period, which indicates homogeneity of the population and strengthening of convergent trends. At the same time, from 2001 to 2009 there was an increase in this indicator, which indicates the build-up of divergent trends. However, the period 2009–2019 saw a significant drop in the coefficient of variation calculated on the basis of the share of education spending in GDP, which means that all the countries in the sample increased the amount of the expenditure on education, which reinforces the convergent processes in the analyzed population.

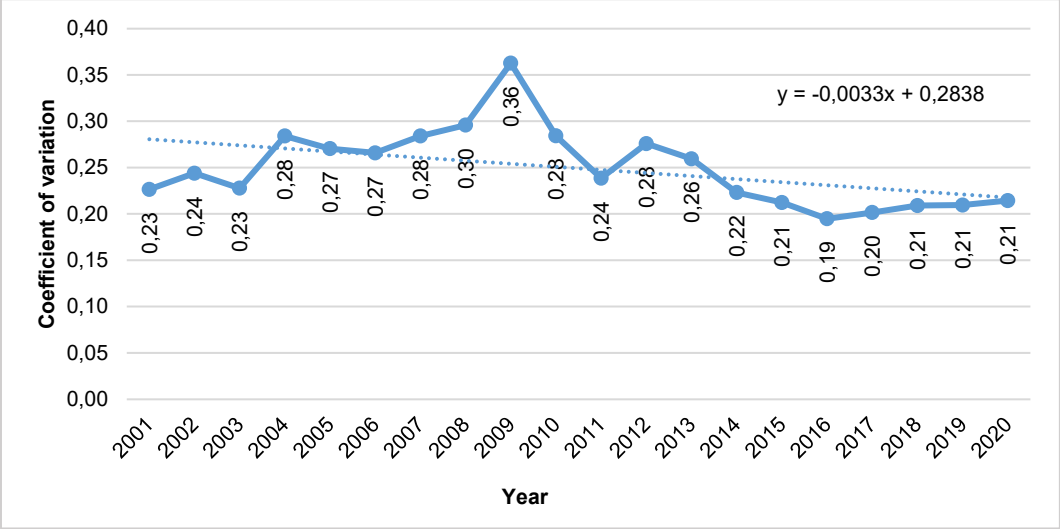

Figure 5. Dynamics of the value of the coefficient of variation calculated based on the expenditures on education share in GDP of 14 post-socialist countries for the period 2001–2020

Source: Developed by the author based on [26].

In order to divide the population of the countries in question into groups and to determine what indicators are used to combine the countries into clusters, we took the above sample of 14 countries of the post-socialist space and typologized the sample countries into groups using cluster analysis with the software environment SPSS. A significant advantage of cluster analysis is that it makes it possible to break down objects not by one parameter but by some features. For the gradation of the countries under study, we used the previously established indicators of their socio-economic development for the period 2001 and 2020:

- *var 1:* GDP per 1 person (dollars, according to the PPC),
- *var 2:* the share of spending on health care (% of GDP),
- *var 3:* the share of spending on education (% of GDP),
- *var 4:* unemployment rate (%).

The raw data for the analysis were obtained from the World Bank's indicator database. The summary statistics is presented in Table 1.

***Table* 1. Indicators of socio-economic development of post-socialist countries for the period 2020 and 2021**

Indicator / Year / Country	GDP per capita, $		Share of health expenditure, % of GDP		Share of education expenditure, % of GDP		Unemployment rate, %	
	2001	*2020*	*2001*	*2020*	*2001*	*2020*	*2001*	*2020*
Armenia	1547.25	4732.0	4.64	10.5	2.47	2.70	10.9	20.2
Bulgaria	4219.94	9058.73	6.85	7.45	3.38	4.28	19.92	5.71
Czech Republic	15399.89	24261.07	5.88	7.7	3.73	4.71	7.98	2.94
Estonia	10732.27	20851.17	4.77	6.71	5.22	5.04	13.13	6.46
Hungary	10932.09	17570.16	6.82	6.7	4.93	4.23	5.67	4.34
Kazakhstan	5106.63	11518.51	3.47	2.92	3.03	3.11	10.43	6.05
Latvia	7501.55	16713.07	5.78	6.19	5.85	3.83	13.81	8.18
Lithuania	7448.16	18561.14	6	6.56	5.45	5.06	16.84	8.43
Moldova	1538.31	3712.38	5.19	6.59	4.85	6.29	7.28	4.71
Poland	8655.38	17409.02	5.67	6.33	5.32	4.51	18.37	3.54
Romania	5227.25	12085.85	4.37	5.55	3.27	3.05	6.55	4.84
Slovakia	10675.97	20998.84	5.33	6.68	3.94	4.06	19.37	6.78
Slovenia	19088.88	27421.02	7.87	8.29	5.76	4.85	5.67	5.17
Ukraine	2006.26	3224.93	9.72	7.72	4.69	5.96	11.06	9.47

Source: Developed by the author on the basis of [26].

Clustering was performed using the single-relationship method or the nearest-neighbor method using Euclidean distance. Prior to cluster analysis, all variables were standardized to avoid variance. A dendrogram was plotted separately for each period to compare the results later.

The cluster analysis showed that in 2001 the countries were grouped as follows (Figure 6): the first cluster included Latvia, Poland, Lithuania, Estonia, and Slovakia (countries with an average level of GDP per person and a share of health care expenditures, but with high health care expenditure shares and high unemployment rates). The second cluster included Kazakhstan, Romania, and Armenia (countries with low GDP per capita, the lowest shares of health and education expenditures, but moderate unemployment rates (6–10 %)). Bulgaria, the Czech Republic, Hungary, Slovenia, Moldova, and Ukraine remained outside the clusters, which showed certain specifics of their socio-economic development in terms of the indicators under consideration. In particular, in 2001 Slovenia had the highest indicator of GDP volume per person ($19.088), Bulgaria had the highest unemployment rate (19.92 %), Slovenia had the lowest unemployment rate (5.67 %) among the countries under consideration.

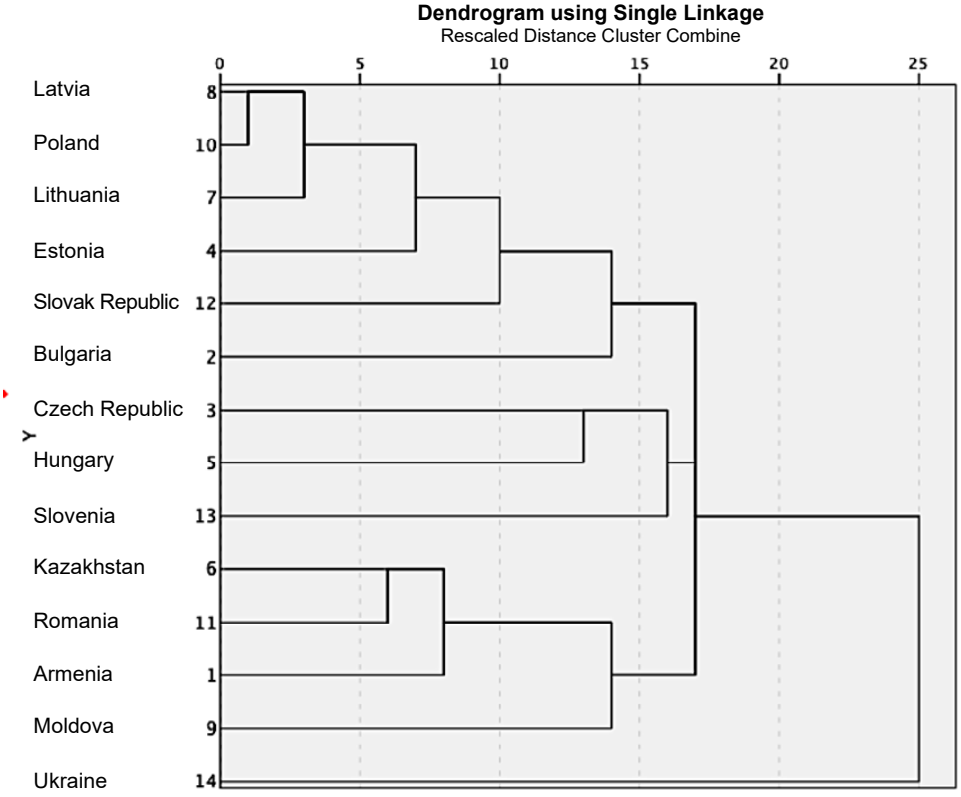

Figure 6. Results of clustering a sample of 14 post-socialist countries according to selected indicators, 2001

Source: Compiled by the author.

It is important to note that the socio-economic development of post-socialist countries after 2001 was influenced by some internal and external factors, including accession to the EU, in particular, in 2004 such countries from the analyzed sample as Estonia, Latvia, Lithuania, Poland, Slovakia, Slovenia, Hungary, and the Czech Republic, and in 2007 – Bulgaria and Romania. The impact of the global financial and economic crisis of 2008–2009 brightly highlighted the problems of the imperfect institutional ordering of the global economic environment, which contributed to the rethinking of the role and functions of national states and influential international organizations in ensuring sustainable development goals. To this should be added the strengthening of global integration, which reduced state control over domestic socio-economic processes, the loss of national governments' monopoly on the implementation of power functions, the shift in the balance of powers from the national to the transnational level, as well as the deployment of the global information and communication revolution [18, p. 198]. The coronavirus pandemic, which began in 2019, contributed to the intensification of crisis trends in the global economy in general and in the post-socialist countries in particular [1]. Currently, the global economy is experiencing a global systemic crisis caused by the Russian-Ukrainian war. It is generally recognized that this crisis is a global, civilizational, which will lead to a transition to qualitatively new world order. At the same time, the transition from the old system of institutional adjustment to the new order is characterized by an increased level of instability and unpredictability of possible scenarios of the development of post-socialist countries. Under these conditions, the problem of ensuring their stable and secure socio-economic development acquires particular weight [16, p. 58–59]. Given the limitations of statistical data, the author conducted a cluster analysis of a selected sample of countries in 2020 in the context of identifying convergent or divergent trends in their evolution.

As Figure 7 shows, in 2020, the countries were clustered as follows: the first cluster included Hungary, Poland, Lithuania, Slovakia, Estonia, Latvia, Bulgaria, Czech Republic, Slovenia (characterized by high GDP per capita ($ 9–27 thousand), approximately the same share of spending on health care (at about 6–8 %), a high share of

the expenditure on education (4–5 %) and low unemployment rate (up to 8.5 %). The second cluster included Kazakhstan and Romania, the countries with average GDP per capita (about $12,000), the lowest share of healthcare expenditures (up to 5.5 %) and low education expenditures in the GDP structure (up to 3.5 %), and low unemployment rates (4–6 %). A separate third cluster was formed by Moldova and Ukraine, which were grouped mainly due to the comparable volume of GDP per person (up to $ 3,700), approximately the same share of spending on health care (about 7 %), the highest share of spending on education (about 6 %) and a low level of unemployment (up to 9.5 %). During this period, only Armenia left out of the clusters with the highest share of health care spending (10.5 %) and simultaneously the lowest share of education spending (2.7 %), the highest unemployment rate (20.2 %) in 2020.

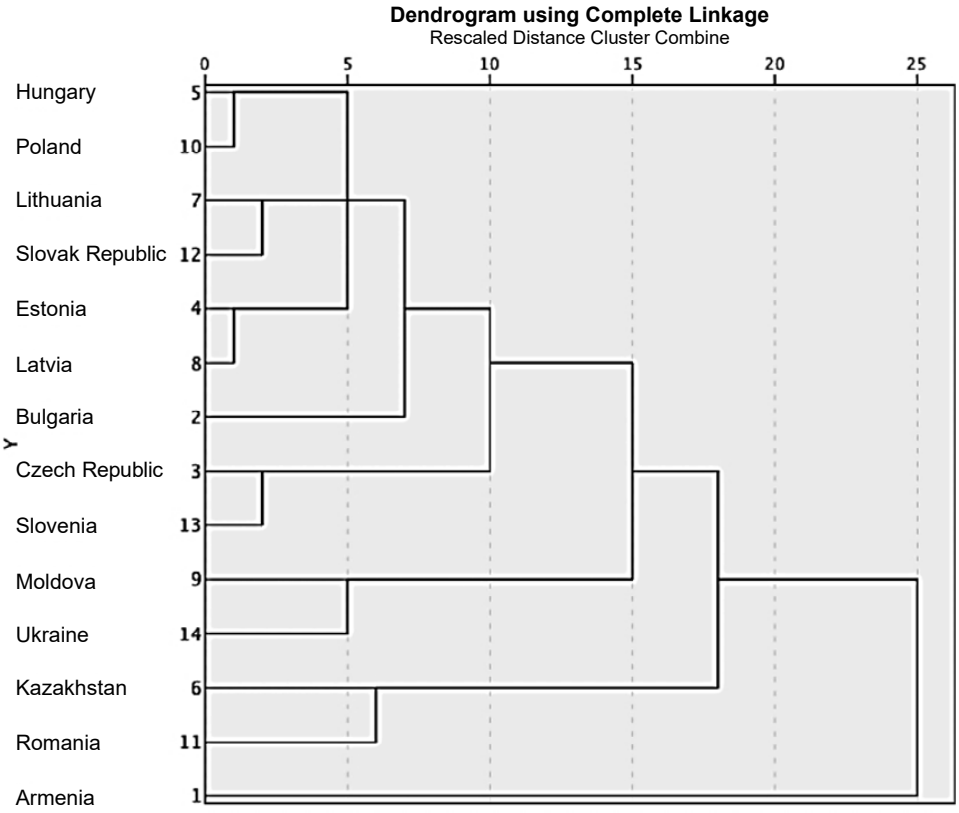

Figure 7. Results of clustering a sample of 14 post-socialist countries according to selected indicators, 2020.

Source: Compiled by the author

Thus, the clustering of post-socialist countries by the level of their socio-economic development for the period of 2001 and 2020 testified to the unevenness of this process and the presence of convergent-divergent trends in the spheres in question. We can conclude that over the 20 years of market transformations, specific shifts took place, as a result of which some countries became closer in terms of socio-economic development indicators, while others, on the contrary, were characterized by differences in the corresponding vectors of socio-economic dynamics. The results of clustering the selected sample of countries are summarized in Table 2.

It is important to note that a significant impact on the deployment of convergent, divergent trends in the development of the world countries in general and post-socialist countries, in particular, was made by the current acute phase of the Russian-Ukrainian war. According to scientists and practitioners, now for our country there is a turning point on the way of departure from the previous "Soviet" trajectory of evolution and reorientation to the "pro-European" vector of economic and social development. We are also talking about a significant strengthening of systemic concurrent trends in the development of the world, the driver of which is modern Ukraine, and the deployment of unprecedented divergent processes of development of the Russian Federation and the civilized world. At the same time, the world is experiencing significant negative consequences of the Russian invasion of Ukraine [6, 8, 13]. In particular, the experts of the National Institute of Economics and Social Research have built the econometric model NiGEM (National Institute Global Econometric Model), according to which it was predicted a decrease of the world GDP by 1 % by 2023, which is about $1 trillion view of the world GDP, and also the increase of the world inflation rate by about 3 % in 2022 and by 2 % in 2023 [12]. New world order is developing now, and countries are waiting for new opportunities for economic development, domestic political reforms, investment attraction, resolution of regional conflicts, etc. There are new initiatives and concepts within the EU, which provide great opportunities for Ukraine on the way to European integration, particularly the Associated Trio, the Trio 2030 Strategy, and

the Marshall Plan for Ukraine. Noting that the post-war reconstruction of Ukraine will have a Euro-integration direction, experts emphasize possible scenarios of Ukraine's development as an EU member: "quiet integration," which does not foresee the perspective of Ukraine's membership in the EU, but only economic cooperation; "Russian hegemony" which will put Ukraine under full control of the Russian Federation; 3) "cooperation between EU and Russia" which assumes their alliance against the global leadership of China, while countries of Eastern Europe will become part of the geopolitical and political system. At the same time, other analysts note that these scenarios are very abstract, as they do not take into account various regional and global trends, security issues, energy, economic dynamics, technological changes, demographic and social problems, which are impossible to predict and predict. In this context, institutional factors as a factor of convergent-divergent development of post-socialist countries, which will be aimed at resolving existing military-political conflicts, settling global imbalances, stabilizing the world economic development, acquire an important role [9, p. 149].

Table 2. **Results of the post-socialist countries clustering**

Country	Number of cluster		Comments
	2001	2020	
Estonia	1	1	The countries with high GDP per capita and the share of spending on education, with high indicators of the share of spending on health care, but also with a high level of unemployment. In 2020, the Czech Republic, Slovenia, Bulgaria, and Hungary joined them, mainly due to the reduction of unemployment in the cluster 1 countries.
Latvia	1	1	
Lithuania	1	1	
Poland	1	1	
Slovakia	1	1	
Czech Republic	-	1	Due to improved indicators of GDP per capita and expenditures in the field of health care and education, the country joined the cluster of leading European countries
Slovenia	-	1	Continued to show the best results of all analyzed indicators among the countries of the sample during the 20 years, but in 2020 entered the cluster 1 countries, in particular, due to their improved socio-economic development indicators
Hungary	-	1	Due to a significant increase in GDP per person, it moved into the cluster of leading European countries
Romania	2	2	Romania's place in the sample has not changed in 20 years, while there was a significant density of ties with Kazakhstan, particularly by the lowest share of health care spending and the low level of education spending in the GDP structure, as well as low unemployment rates.
Armenia	2	-	Out of cluster #2 and found itself outside of groupings due to the high unemployment rate among the entire sample
Bulgaria	-	1	Due to a significant decrease in the unemployment rate and a general improvement of other analyzed indicators, it caught up with cluster 1 countries and in 2020 was in the same group
Kazakhstan	2	2	Kazakhstan's place in the sample has not changed over 20 years, with a significant density of association with Romania, particularly in terms of the lowest share of health care spending and the low level of education spending in the GDP structure, as well as the low level of unemployment
Moldova	-	3	In 2020, there is a significant density of connections between Moldova and Ukraine, which united them into a separate cluster, in particular, by the volume of GDP per person among the analyzed set of countries, high volume of spending on health care and education and a moderate level of unemployment
Ukraine	-	3	

Source: Compiled by the author

Conclusions. The comparison of such indices of socio-economic development, such as GDP per capita, the share of expenditure on public health, the share of expenditure on education in the GDP structure, and the unemployment rate, for the period of 2001–2020 for 14 post-socialist countries, including Armenia, Bulgaria, Czech Republic, Estonia, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Poland, Romania, Slovakia, Slovenia, and Ukraine, let us state that despite approximately the same starting conditions at the beginning of market reforms, as of 2001 certain differences began to appear.

In particular, according to the calculation of the coefficient of variation of GDP per capita, the unemployment rate, the share of expenditures on health care, and the share of spending on education in the GDP structure for the period 2001-2020, it can be concluded that the indicator is cyclical, which means the simultaneous strengthening of both convergent and divergent tendencies. According to the results of clustering, it can be argued that the main "convergence club" among the post-socialist countries under consideration is formed by the EU member states, and it is them that are characterized by a high level of analyzed indicators.

Thus, despite approximately equal opportunities at the beginning of their independence and development of statehood, post-socialist countries have demonstrated different results of socio-economic development, which indicates the effectiveness of market reforms. The point is that there is not only convergence of the nations, but also strengthening of divergence. This is illustrated by the differentiation of indicators of socio-economic well-being, and therefore requires a more profound study, in particular, the study of the main tools and consequences of reforms in different countries, the study of their feasibility in Ukraine; on what socio-economic problems they can be directed.

Discussion. The conducted comparative analysis showed that the problem of convergent and divergent development of post-socialist countries is relevant and requires more in-depth research, in particular, to determine the influence of various global, political, national factors on the socio-economic development of the selected countries, the essence and consequences of the reforms conducted after the collapse of the Soviet Union, as well as to study the

dependence of economic development trajectory on history, cultural, religious features of the region, the institutional component. In particular, it should be noted the importance of conducting a re-study of the updated statistics, which will take into account the turning point for the whole world in 2022.

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Received: 24/04/2022
1st Revision: 17/05/2022
Accepted: 27/05/2022

Author's declaration on the sources of funding of research presented in the scientific article or of the preparation of the scientific article: budget of university's scientific project

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СОЦІАЛЬНО-ЕКОНОМІЧНИЙ РОЗВИТОК ПОСТСОЦІАЛІСТИЧНИХ КРАЇН: СУПЕРЕЧЛИВІ ТЕНДЕНЦІЇ ТА ВИКЛИКИ СУЧАСНОСТІ

Здійснено аналіз соціально-економічного розвитку 14 постсоціалістичних країн впродовж 2001–2020 рр. Висвітлення динаміки коефіцієнта варіації на основі показника ВВП на 1 особу, частки витрат на охорону здоров'я, частки витрат на освіту та рівня безробіття в зазначених країнах, а також їхнє кластерування уможливило висновок щодо суперечливого поєднання двох тенденцій еволюції цих країн, а саме: одночасного розгортання процесів дивергенції й асиметричності їхнього соціально-економічного розвитку та розгортання процесів конвергенції, формування окремих кластерів цих країн. Досліджено місце України серед аналізованих країн у період 2001–2020 рр. та за сучасних умов. Зроблено висновок, що показники соціально-економічного розвитку України демонструють циклічну динаміку під впливом глобальних чинників і потрясінь з урахуванням переломних для всього світу подій 2022 р. Зазначено, що нині відбувається розбудова нового світового порядку, з'являються нові ініціативи й концепції в межах ЄС, які надають Україні великі можливості на шляху до євроінтеграції. У цьому контексті важливої ролі набувають інституційні фактори як чинник ковергентно-дивергентного розвитку постсоціалістичних країн, що будуть спрямовані на залагодження наявних воєнно-політичних конфліктів, урегулювання глобальних дисбалансів, стабілізацію світового економічного розвитку.

Ключові слова: постсоціалістичні країни, глобалізація економіки, конвергенція соціально-економічного розвитку постсоціалістичних країн, дивергенція соціально-економічного розвитку постсоціалістичних країн, глобальні дисбаланси, глобальні потрясіння.