CROSS-BORDER COOPERATION IN THE CONTEXT OF THE MOVEMENT TO THE "BLUE OCEAN" (CHALLENGES FOR UKRAINE)

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Abstract

The purpose of the study is substantiating the theoretical and methodological aspects for cross-border cooperation between countries on the eastern borders EU with Ukraine, as a tool for moving to the "blue ocean" of market space. For achieving the researches' goal, a methodology, which based on the comparison of the results of the sustainable development conditions of the border areas of neighbouring countries had been using. This approach, according to the authors, will help identify problems in the development of these areas and identify tasks to overcome them. On the example of development forecasting of Ukraine's' regions, the practical approach for the primary levers determining of influence on the factors of change in the conditions of development of border areas had been illustrating. The obtained results and the developed conclusions and proposals will contribute to the provision of adequate public administration for balanced and sustainable territories development.

Keywords: cross-border cooperation; balance of interests; instruments of influence; development strategy; management efficiency

Introduction

The development of EU countries is attracted by its results and encourages neighbours to strive for cooperation and membership. The EU, in turn, helps these countries reduce the level of development of EU member states. However, the existence of significant differences in the level of socio-economic development of the EU countries and the former USSR, their values, requires increasing EU attention to improving the tools to overcome imbalances between EU countries and their eastern neighbours.

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The EU is considered to be one of the most significant contributors to world development. It assists not only to its neighbours but also to countries in the developing world. Donation helps reduce the significant threat to society's future - poverty. It not only encourages people to migrate but also causes their health to deteriorate, reduce access to quality education, and reduce the quality of the country's human resources. Poverty requires large expenditures on social assistance. But these costs are not rational because they turn dependency into a livelihood, giving rise to a reluctance to work. The experience of the USA, Latvia and Germany is evidence of the transformation of social assistance abuse into a serious social problem. The formation of social maintenance is becoming widespread in Ukraine. Almost 60% of households in 2012 were covered by at least one social program (Libanova, 2013, p. 233). Therefore, it is worth shifting the focus from donation to partnership.

The European Neighbourhood and Partnership Instrument are of paramount importance among the assistance mechanisms for European countries. It identifies a separate TACIS program to finance countries of the former USSR. However, many countries need to ensure a significant change in democracy, security, social inequality. The events of recent years in Ukraine indicate that the country has to defend its right to European integration in fact in the war with Russia. The guarantor of Ukraine's independence and inviolability of its borders in the abandonment of nuclear weapons brazenly breaks its promises. Russia's ambitions extend to almost all of Ukraine. That is why Ukraine needs to change the emphasis in the traditional areas of assistance. At the same time, the active part of the Ukrainian population seeks not to be passive consumers of aid but the driving force behind positive changes in democratic, economic, and environmental processes.

Public regulation plays an essential role in making positive changes. One of the main instruments of state regulation is a perfect system of evaluation of achievements which will allow to identify weaknesses of each component of the socio-economic system and to form effective mechanisms of the motivation of development. Unfortunately, a sufficiently consistent system of sustainable development indicators for the regions is still lacking even at the international level. It is, therefore, vital to develop a system for evaluating the results of cross-border cooperation.

Given this, the purpose of the study is to substantiate the theoretical and methodological aspects of the use of cross-border cooperation by EU countries on the eastern borders with the former USSR republics as a tool for moving to the blue ocean of market space with a new demand.

For achieving a defined goal, it is necessary to form indicators of the desired state of sustainable development of neighbouring territories based on the coordinated use of regulatory and search forecasts. Further, the factors that influence the selected indicators and the degree of their dependence on the activity of public administration are needed. It is essential to justify the levers of influence on the factors of change in the state of development of the border areas, the necessary assistance from the EU.

1. Theoretical and methodological bases for involving cross-border cooperation in the formation of the "blue ocean" of market space

Cross-border cooperation is an integral part of managing sustainable development in global space. However, globally, the main challenges of sustainable development are poverty reduction, climate change mitigation, wartime prevention and other world-class problems.

The imbalance between developed countries and their neighbours with a much lower standard of living and other values necessitates building relationships that will reduce tension, migration to other countries, and create conditions for sustained growth in social and economic development on both sides. This step can be done through the transition from the "red ocean" of fierce competition to the cloudless market space of the "blue ocean". Success in the "Red Ocean" is a redistribution in favour of the existing economic pie[1]. "Blue Ocean" involves the identification of "not customers", the formation of new demand, the creation of employment for him. The success is to create a more excellent "economic pie" for all since identifying new values for consumers are out of competition[2].

The organization and management of cross-border cooperation require solving several problems related to the creation of an information base for creating a benchmarking opportunity to compare key regional development results, improving methods of developing a coherent development strategy; forming a system of balanced indicators for partners; implementation of state regulation of the development of cooperation, control and regulatory measures by the neighbouring countries. The main components of the model of cross-border cooperation with the market space of the "blue ocean" are presented in Figure 1.

The purpose of managing cross-border cooperation is to accelerate the sustainable development of neighbouring territories. After all, the gradual enlargement of the EU to the east leads to its entry into less developed countries. Initially, the countries of the former socialist camp that need to be "brought up" to the level of socio-economic development of EU founders. In turn, even less developed countries of the former Soviet Union, which in order to achieve a "breakthrough" in socio-economic development must implement a managerial revolution.

It is based primarily on a change in management philosophy. It is necessary to "squeeze out the last drops of a slave", to give up confidence in the hopeless backwardness. It is important to stop solving yesterday's problems to use the old rules. It is necessary to catch up with developed countries confidently, because geopolitical position, natural resource potential, motivation for a better life are the basis for successful development. Therefore, at the beginning of the new millennium,

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[1] Kim, W.Chan and Mauborgne, R. (2018), Perekhid do blakytnogho okeanu [Blue Ocean Shift]. Kharkiv, Ukraine: Klub simeinoho dozvillia.

[2] Kim, W.Chan and Mauborgne, R. (2019), Strateghija blakytnogho okeanu [Blue Ocean strategy]. Kharkiv, Ukraine: Klub simeinoho dozvillia.

it was proposed to form a new model of public administration in Ukraine "by purpose and results" (Budzan, 2001, p. 17, 191).

Figure 1. Scheme of transboundary cooperation with the market space of the "blue ocean"
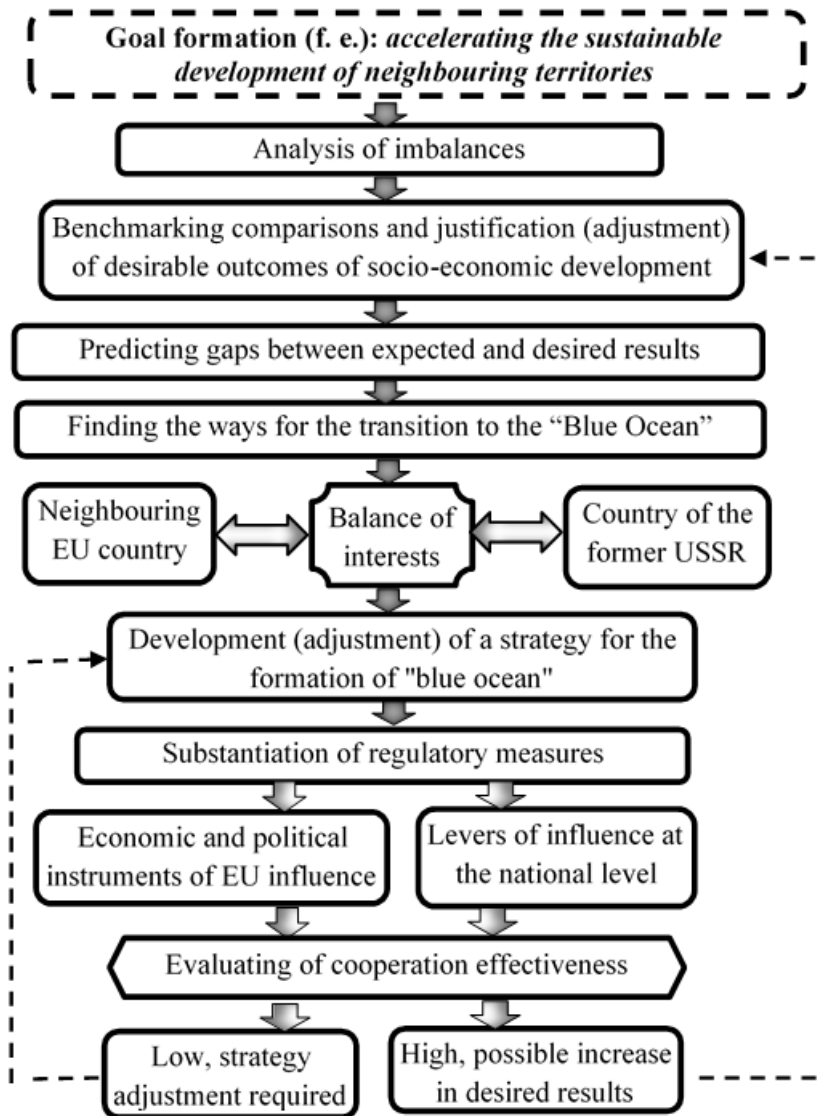
Source: author's representation

An analysis of the imbalance between developed countries and border areas should enable us to identify the range of problems that need immediate resolution and to produce the desired results of socio-economic development. They should be ambitious and long-term. Therefore, their achievement can be gradual, phased. Since the overall results of the development of the territory depend on the activities of economic entities, it is necessary to specify the tasks for individual activities, enterprises. For accomplishing this task, information is needed for benchmarking comparisons in the domestic and foreign markets.

The difficulty of forming an information base is that information on the results of the activity of enterprises is considered confidential and is not reflected in the statistical reporting. In the context of a planned economy, the line ministries sent to the local managers summarized annual reports based on the results of the activities of all enterprises in the sector. That reports contained detailing the best achievements of individual enterprises in various aspects of a business. Market transformations were accompanied by raids of successful enterprises and forced to conceal positive results. However, the presence of benchmarks in possible achievements allows to identify shortcomings in their work and leads to finding ways of significant positive changes, justification of the desired results.

In the management of economic development of regions, the primary attention should be paid to determining the prospects for the development of individual industries, the ability to meet the most critical social needs, identifying problems of regional development. An essential tool for substantiating development plans is forecasting. The construction of forecasts is based on the use of two methodological approaches to their development: search (research) and target (normative). They differ in the directions of forecasting. The search forecast is built from the past to the future and involves determining the future state while maintaining existing trends. However, it is impractical to limit the role of forecasting to the passive prediction of the future. Forecasting, as the necessary part of the decision-making process, should allow for active intervention in the course of events, the development of options for achieving goals.

In order to ensure significant changes in development to bring socio-economic results closer to the level of developed countries, it is necessary to attach particular importance to an active approach to forecasting, forming an idealized image of the region's economy and identifying ways to approach the desired results. The normative forecast is built by creating the desired future and analysing the current situation and answers the question: "which development option should be chosen to achieve the goal?". These approaches complement each other, and their coordination makes it possible to correctly define the goals of gradual development and ensure their achievement.

Statistical forecasting methods, together with expert techniques, make it possible to determine the expected results while maintaining existing trends and resource opportunities. The gaps between desired and expected results become the object of close attention and the search for ways to reduce them.

The search for ways to move to the "blue ocean" should begin with a detailed analysis of competition in the region. It is essential to identify the distinctive features of your products or services from similar products of competitors: for which factors the most influential competition is taking place, for which the most money spending. A particular functional cost analysis allows to reduce unnecessary costs, expand the range of consumers and go beyond the competition in the traditional market. An example of outstanding achievements in this sense is the Australian wine company Casella Wines, which has offered a means for the American wine industry to reduce competition and form a blue ocean. Until 2000, the domestic market was fiercely competitive not only among American wine producers but also suppliers from France, Italy, Spain, Chile, Australia, and Argentina. They offered exquisite wines of significant value, a wide range of all varieties of grapes, refined taste, high-quality ageing, beautiful packaging. The consumers of such products were mostly wealthy people. However, many people preferred beer, vodka, cocktails, because they did not perceive the peculiarities of the taste of bouquets of wines, for the achievement of which the most money was spent. Casella Wines has created a wine [yellow tail] that tasted like a fruit drink and did not require long ageing. Only two types of alcohol were proposed: white chardonnay and red shiraz. The image was completed by a bright but straightforward kangaroo label[3]. These products have attracted a large number of alcoholic beverages with their ease of selection and have ensured sales growth and business profitability.

It is interesting how the Ukrainian tennis player S. Stakhovsky started his way to the "blue ocean" on the wine market. He did not drink wine at all. He was perceived as a Ukrainian eccentric and at a party on the occasion of the French club championship was still persuaded to try wine. He liked the wine made in Bordeaux. He became acquainted with the culture of production and became interested in this business. In 2015, S. Stakhovsky leased 25 hectares of land with vineyards for ten years. He brought oak barrels for wine storage from France. Due to the decline in wine production in Ukraine, the well-known producer found unoccupied production facilities and warehouses used by Stakhovsky. The wine of 2018 acquired a quality that the French praised. The name of the wine has a tennis theme. The red wine already presented is called Ace by Stakhovsky, and the white wine will be called W by Stakhovsky. This passion of the tennis player opens the way to the formation of a unique niche of consumers who play tennis themselves or are his fans.

Thus, the strategic management of a particular area involves the development and implementation of strategic plans for its socio-economic development. The strategic plan should define the goals of growth, directions of mutually coordinated activity in various spheres which will promote the achievement of the set purposes. The strategy for the development of the border area is a guide for local authorities, businesses and residents of the region. It is the strategy of territorial progress that should become a tool for establishing partnerships between all actors in the area, a

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[3] Kim, W.Chan and Mauborgne, R. (2019), *Strateghija blakytnogho okeanu* [Blue Ocean strategy], Kharkiv, Ukraine: Klub simeinoho dozvillia, p. 44, 52.

mechanism for identifying and implementing effective strategic actions in all spheres of life.

Strategic plans should be formed, taking into account the peculiarities of the regional economy and cross-border cooperation. They consist in the fact that the economic interests of economic entities and their relations are realized in a defined territory, which covers a part of the regions of different countries. The properties of cross-border markets, the principles of their formation and functioning in most cases differ significantly from domestic and foreign markets. But it is the identification of these features, their use to create benefits, to obtain a synergistic effect is the key to the effectiveness of cross-border cooperation.

Well-known Ukrainian expert in the field of public administration, I. Rozputenko, noted that regional development should be considered not so much as a result, but mainly as a process. I.e. the transformation of the region's economy in a way that makes growth sustainable (self-sufficiency), while improving living standards for a resident of the region" (Rozputenko and Lesser, 2004, p. 359).

However, this transformation must be manageable. It will be necessary uniting the efforts of all economic entities and residents of the region based on proving the economic feasibility of specific changes to ensure sustainable development of the region, the formation of the main tasks in various aspects of an activity.

Defining tasks requires taking into account not only existing but also the future needs of the population, assessing the positive and negative consequences of specific changes in various areas of the region. An active approach to forecasting allows identifying not only future problems but also ways to overcome them, to use information about the future to guide people's activities to make positive changes.

When developing a strategy for the formation of the "blue ocean" in any industry, it is necessary to focus on identifying existing problems and identifying revolutionary approaches to solving them, creating new opportunities by identifying new issues and developing proposals for their solution. Innovative thinking leads to meeting needs that go beyond the traditional industry. Thus, the Cirque du Soleil opened a new market space that combines the attractiveness of the circus and theatre (Kim and Mauborgne, 2019, p. 34).

The success of developing a "blue ocean" strategy depends significantly on the selection of a team of specialists who will find a way to create a new type of market space. And it is not so much about belonging to specific categories of the profession and, above all, to certain behavioural groups. Among the approaches to the selection and characterization of different types of dominant human behaviour in recent years, the classification of Thomas Erickson is becoming increasingly popular. He divides people into four categories and marks them with different colours: blue (analytical), red (dominant), yellow (inspiring), green (stable) (Erikson, 2019, p. 18-19). The most creative thinking is inherent in the dominant or red type of people. There is nothing impossible for them. They are extroverts and feel comfortable in the risk zone, enjoy overcoming obstacles. They can generate ideas about ways to form the blue ocean for a particular industry, territory. The

optimistic and life-affirming properties of the yellows are essential for the team. They are not only able to find non-standard solutions that most people do not pay attention to, but also know how to persuade and inspire.

Territories need to create "blue oceans" in various industries. Then their combined action will allow the region as a whole to move from a harsh competitive environment to a calm blue ocean. However, in the context of cross-border cooperation, additional factors must be taken into account: maintaining a balance of interests and comprehensive assistance in the confrontation of the countries of the former Soviet Union with Russian aggression.

Given the need for a breakthrough in sustainable development, it is necessary to ensure a balance of interests of the parties in three aspects - economy, population, environment. Implemented projects should ensure the economic growth of all participants in cross-border cooperation. Deterioration of the ecological condition of the territory of any of the participants of collaboration is not allowed. Therefore, the strategic environmental assessment of projects should be mandatory. Particularly vulnerable is the balance of interests of the population, their employment, the level of wages. A group of representatives of all countries participating in cross-border cooperation should take care of ensuring the balance of interests. They must be representatives of the green (stable) type. Although these people are less interested in change, they are useful because they are prone to non-conflict. "Greens" are characterized by elements of behaviour and "red", and "yellow", and "blue". Still, their slowness, the desire to bring peace can balance the sharpest features of certain types, and they are team players, slow but reliable performers, carriers of peace in the team.

It is necessary to create an operational environment for the interest of participants in cross-border cooperation in the implementation of projects for the development of various industries and spheres of activity. Each country needs to support cross-border collaboration at the state level. However, given Russia's imperial ambitions, its aggressive behaviour toward the former Soviet republics, the EU has an extraordinary role to play. It is the European Union that inspires the movement of these countries to change their way of life, gives hope for the EU's support for positive changes, some protection against encroachments on territorial integrity and sovereignty. Therefore, the stage of developing levers of influence both at the state level of the countries participating in cross-border cooperation and by the European Union is essential.

The success of the implementation of strategic plans significantly depends on the quality of management at the regional and national levels. Achievements in the sustainable development of cross-border cooperation areas should be reflected in the relevant indicator, which based on a comparative assessment of indicators of different territories allows identifying positive and negative trends in cross-border cooperation management. It is necessary to identify the factors influencing the leading indicators and levers to regulate them. It is also expedient to substantiate the criteria for assessing the effectiveness of state regulation.

The results of the assessment affect the choice of the direction of corrective action. In case of insufficient effectiveness of cooperation, there is a need to adjust the strategy and system of regulatory levers. High efficiency indicates the possibility of accelerating development and increasing the level of desired results.

2. Practical approaches for forming a system of regulatory measures for cross-board regions development

The assessment of achievements in cross-border cooperation should be based on a comparison of the leading indicators that reflect the imbalance in the socio-economic development of the EU and the former Soviet republics. The most significant differences between countries are in the amount of GDP per capita and wage levels (see Table 1, 2).

Table 1. Dynamics of GDP per capita by country

Ukraine's neighbours countries - EU members							
GDP per capita, thousand USD (in terms of purchasing power of 2010)				Value to Ukraine			
Year	2005	2010	2014	2017	2005	2010	2014	2017
Country								
Ukraine	15,6	16,2	17,3	15,9	1,000	1,000	1,000	1,000
Ukraine's neighbour countries from the former USSR								
Belarus	18,5	26,7	29,4	28,4	1,186	1,648	1,699	1,786
Moldova	-	6,7	8,1	8,9	-	0,414	0,468	0,560
Ukraine's neighbour countries – EU members								
Romania								
15,4	18,6	21,1	24,9	0,987	1,148	1,220	1,566	
Hungary	20,8	20,8	22,4	24,9	1,333	1,284	1,295	1,566
France	33,1	33,5	34,2	35,4	2,122	2,068	1,977	2,226

Source: Verner, 2019, p.468-469[4].

Over the last decade, the countries of the former Soviet Union have failed to make a breakthrough in reducing the gap with European countries in terms of the main criterion of economic development (GDP per capita). Thus, in 2005, Ukraine was 2,3% ahead of Romania (which was not yet part of the EU) and lagged behind Poland was only 3,2%. In the post-crisis year of 2010 in Ukraine, this figure increased by 3,8%, but in other countries there was growth. In 2010, compared to 2005, GDP per capita increased: in Romania - by 20,8%; Poland – by 24,8%; Slovakia - 25,0%. The founding countries of the EU showed different results in the

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[4] Verner, I. (ed.) (2019), *Statystychnyi shchorichnyk Ukrajiny za 2018 rik [Statistical Yearbook of Ukraine for 2018]*, Kyiv: State Statistics Service of Ukraine (retrieved from: http://ukrstat.gov.ua/druk/publicat/kat_u/2019/zb/11/zb_yearbook_2018.pdf).

post-crisis year of 2010. France (1,2%), Belgium (3,3%), the Netherlands (5,1%) and Germany (7,6%) showed GDP per capita. Italy is the only country presented in Table 1 has a negative change in GDP per capita in the post-crisis period (-4,3%). However, in terms of GDP per capita, Italy is still almost twice as large as Ukraine.

From the other side, it should be noted that the level of this indicator is affected not only by GDP growth but also by population decline. Thus, according to 2014, the size of GDP in Ukraine increased by 57,0%. However, the population decreased by 16,2%, which had a positive effect on GDP per capita. For the regions, in the statistical reporting, usually give the indicators of the gross regional product (GRP). The differences between countries are substantial, especially in terms of wages. Therefore, it is not surprising that a significant proportion of Ukrainians seek to go abroad to earn money.

The aim of cross-border cooperation should be to improve the results of sustainable development of the cooperating region in comparison with other regions and to bring the level of crucial indicators closer to the EU countries. Therefore, we consider it appropriate to determine the rating of the region at the initial stage of cooperation and in subsequent years. The second indicator should characterize the effectiveness of the movement to the desired result by comparing the achieved results with the desired ones.

The indicators selected to characterize the positive changes in the sustainable development of territories should increase in the event of an increase in achievements. Therefore, for calculating indicators' value, in our opinion, you should use the relationship between the value of the analysed index and the maximum amount of the index for the regions (formula 1).

$$I_i = X_i / X_{max} \qquad (1)$$

Table 2. Dynamics of average wages by country

Ukraine's neighbours countries - EU members								
	Average wages, USD				Value to Ukraine			
Year	2005	2010	2014	2017	2005	2010	2014	2017
Country								
Ukraine	157,3	282,2	292,7	261,2	1,000	1,000	1,000	1,000
Ukraine's neighbour countries from the former USSR								
Belarus	104,7	240,3	291,4	302,0	0,666	0,852	0,996	1,156
Moldova	215,3	408,7	592	-	1,369	1,448	2,023	-
Ukraine's neighbour countries – EU members								
Romania								
331,9	609,5	705,6	819,4	2,110	2,160	2,411	3,137	
Hungary	947,4	1127,7	1095,6	1045,2	6,023	3,996	3,743	4,002
Poland	812	1124,0	1195,9	1122,5	5,162	3,983	4,086	4,297
Slovakia	831,9	1203,8	1321	1242,7	5,289	4,266	4,513	4,758
Founding countries of the EU								
Belgium	3615,3	4295,0	4742,5	4127,2	22,983	15,220	16,203	15,801
Italy	2581,1	3072,2	3168,8	2750,2	16,409	10,887	10,826	10,529

Netherlands	3888,2	4718,6	5012,4	4401,6	24,718	16,721	17,125	16,851
Germany	3159,0	3620,0	4048,8	3713,6	20,083	12,828	13,833	14,217
France	3086,8	3746,9	3990,3	3541,8	19,624	13,277	13,633	13,560

Source: Verner, 2019, p.462-463.

In our opinion, in a simplified form, the indicator of the region's achievements in economic development can consider as a half-sum of the indexes of gross regional product per capita and the average monthly wage, i.e. it can have the following structure:

$$I_{EcDev} = 0.5 I_{GRP} + 0.5 I_{AvWage} \qquad (2)$$

The results of the calculation of this indicator according to 2017 data are showing in table 3.

The lowest overall result is in Luhansk oblast, part of which is in the war zone. In this area, the lowest level of GRP per capita. Low level of all indicators in Chernivtsi region, low and below average in Zakarpattya and Ternopil regions, below the average in Ivano-Frankivsk region.

Three oblasts from the list of those with a rating below the average: Zakarpattya, Ivano-Frankivsk and Chernivtsi are part of the Carpathian Euroregion. The formation of euro regions is the most common form of cross-border cooperation (Cornea and Cornea, 2017, p. 138).

Table 3. The result of calculating the rating of the regions of Ukraine based on the indicator of economic development

Regions	I_{grp}	Group	I_{AvWage}	Group	I_{EcDev}	Group	Rating
Poltava	1,000	high	0,844	below the average	0,922	high	1
Kyiv	0,915	high	0,926	high	0,921	high	2
Dnipropetrovs	0,929	high	0,894	above the average	0,912	high	3
Zaporizhzhya	0,736	above the average	0,884	above the average	0,810	above the average	4
Kharkiv	0,704	above the average	0,804	below the average	0,754	average	5
Mikolayiv	0,617	average	0,864	average	0,741	average	6
Odesa	0,618	average	0,843	below the average	0,731	average	7
Donetsk	0,398	low	1,000	high	0,699	average	8
Cherkasy	0,592	average	0,778	below the average	0,685	average	9
Vinnytsya	0,575	average	0,788	below the average	0,682	average	10
Kirovohrad	0,585	average	0,746	low	0,666	average	11
Lviv	0,558	average	0,823	below the average	0,652	below the average	12
Sumy	0,514	below the average	0,766	below the average	0,640	below the average	13
Ivano-	0,465	below the average	0,782	below the average	0,624	below the average	14
Chernihiv	0,514	below the average	0,726	low	0,620	below the average	15
Khmelnytskiy	0,467	below the average	0,765	below the average	0,616	below the average	16
Zhytomyr	0,475	below the average	0,752	low	0,614	below the average	17

Kherson	0,451	below the average	0,752	low	0,602	below the average	18
Rivne	0,418	below the average	0,774	below the average	0,596	below the average	19
Volyn	0,423	below the average	0,753	low	0,588	below the average	20
Zakarpattya	0,317	low	0,818	below the average	0,568	below the average	21
Ternopil	0,36	low	0,715	low	0,538	below the average	22
Chernivtsi	0,288	low	0,724	low	0,506	low	23
Luhansk	0,176	low	0,755	low	0,466	low	24

Source: author's representation on Verner data, 2019b, p. 17[5].

Currently, the regions of Ukraine are part of ten Euroregions. But the first has been created in 1993, the Carpathian Euroregion, which included administrative-territorial units of countries such as Poland, Slovakia, Romania, Hungary, Ukraine. In addition to Ukraine, the following regions included other former republics of the USSR. Thus, in 1995 the Euroregion "Bug" has been created with the participation of Poland, Ukraine and Belarus. Two Euroregions created with the involvement of Romania, Moldova, and Ukraine: The Lower Danube in 1998 and the Upper Prut in 2000. The other six Euroregions have been created with the participation of Belarus, Moldova and Russia (Mykula and Tolkovanov, 2011, p. 147).

The best result of developed European countries can be the result of a dream for all participants in the Euroregion. But to achieve it requires some time and action. Therefore, in the short term, it is necessary to establish the results for which the foundation have been created. For different participants, the desired effect may be different. For example, for Zakarpattya, Ivano-Frankivsk and Chernivtsi regions, the first stage may be to achieve an average level of development among the areas of Ukraine. For the Lviv region, it is advisable to make the transition to a level above average. The task should be defining in absolutely and comparable indicators. For example, the desired level of GRP per capita and the level of average wages should be adjusted to a specific year and presented in a common currency.

The expected average result by GRP level per person in Ukraine can be determined using the following trend's equation:

$$Y_{GDP\_UA} = 215{,}74t^2 - 663{,}86\,t + 4752{,}6\,;\ R^2 = 0{,}9758 \tag{3}$$

Where: Y_{GDP_UA} – GRP per person on average in Ukraine, UAH; t – the ordinal number of the period; R^2 – the square of the correlation coefficient, which is a criterion for the reliability of the trend equation.

Based on the above trend equation, the projected level of the average GRP in Ukraine per capita for 2024 is UAH 113086,2 or USD 14250,5 at the 2010 exchange rate.

The given equations of trends (4–7) for determining the projected level of GRP per person in Zakarpattya region (Y_{Zak}), Ivano-Frankivsk (Y_{Iv-Fr}), Lviv (Y_{lv}),

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[5] Verner, I. (ed.). (2019b), *Statystychnyj zbirnyk Reghiony Ukrajiny* 2019 chastyna1 [Statistical publication Regions of Ukraine 2019, Part 1], Kyiv: State Statistics Service of Ukraine (retrieved from: http://ukrstat.gov.ua/druk/publicat/kat_u/ 2019/zb/12/zb_ru1 ch2019.pdf).

Chernivtsi ($Y_{Cherniv}$) show next results. While maintaining the existing trends until 2024 GRP per person will increase in the Zakarpattya region to UAH 57909,89 (USD 7293,40 at the exchange rate of 2010), Ivano-Frankivsk region – to UAH 77385,64 (USD 9746,30 at the exchange rate of 2010), Lviv – to UAH 97945,28 UAH (12335,68 USD at the rate of 2010), Chernivtsi – up to 48020,96 UAH (6047,98 USD at the rate of 2010) (calculated according to Verner, 2019a, p.219).

$$Y_{Zak} = 95,987\,t^2 – 1,8467t + 2665,7;\ R^2 = 0,9744; \tag{4}$$

$$Y_{Iv\text{-}fr} = 148,12\,t^2 – 474,22t + 3449,8;\ R^2 = 0,9682; \tag{5}$$

$$Y_{lv} = 215,18\,t^2 – 1310,7t + 5488,4;\ R^2 = 0,9717; \tag{6}$$

$$Y_{Cherniv} = 86,551\,t^2 – 175,06t + 4519,5;\ R^2 = 0,9691; \tag{7}$$

Thus, relative to the average in Ukraine, the achievements of Zakarpattya region will be 51,2%, Ivano-Frankivsk region – 68,43%, Lviv region – 86,61%, Chernivtsi region – only 42,46%. Therefore, all oblasts except Lviv need to develop and implement a "breakthrough" strategy that will provide significant positive changes.

It should be noted that the Lviv region already in 2014 had indicators within the range of the average value. Therefore, it is necessary to choose another amount of the desired level, above average. The benchmark can be the expected performance of a region with a high level of development, such as Dnipropetrovsk region. The equation of the trend for forecasting the level of GRP per person is as follows:

$$Y_{dnipro} = 278,93\,t^2 – 439,29\,t + 4519,5;\ R^2 = 0,9770; \tag{8}$$

The expected result in 2024 is UAH 156640,22 (USD 19728,0 at the rate of 2010) per person (calculated according to Werner, 2019a, p.219). When setting a more intense task, it will be necessary to act actively during the development and implementation of the strategy.

The effectiveness of public authorities (I_{PA_eff}) should be assessed by the ratio of actual achievements to the desired result. Similarly, it is possible to justify the task of raising wages. Thus, the second indicator of development success within cross-border cooperation will look like:

$$I_{PA\_eff} = (I_{GRPfact} / I_{GRPdis} + I_{Wage\_fact} / I_{Wage\_dis}) / 2\,; \tag{9}$$

where $I_{GRPfact}$ is the actual level of the gross regional product.

I_{GRPdis} – the desired level of the gross regional product.

I_{Wage_fact} – the actual level of the average wage in the region.

I_{Wage_dis} – the desired level of the average wage in the region.

The value of the indicator I_{PA_eff} more or equal to 1,0 indicates an excellent result, and the need to move to a higher level of the desired result.

The value of the indicator I_{PA_eff} less than 1,0 indicates a necessity for improving the strategy and levers of influence on business entities.

For European countries from the former socialist camp, tasks must define similarly based on an analysis of the achievements of the relevant group of countries. And for the leader of this group, the goals should be formed by comparison with the most developed European countries.

The goals of cross-border cooperation and approaches to regulating cooperation processes primarily depend on the type of borders. They are divided into

the boundaries of the European Union: internal and external, and boundaries between countries that are not part of the European Union. The purpose of cross-border cooperation between the countries of the European Union is the full integration of their space, the levelling of the barrier function of borders (European Commission, 2015). This feature increases its weight at the external borders. The purpose of cooperation with neighbouring countries is to form a certain level of security of the European Union. For doing this task, it is necessary to establish cultural, political, economic ties with border countries, to improve the living standards of their populations. Cross-border cooperation between non-EU countries should lay the groundwork for further EU enlargement through democratization in those countries (Del Bianco and Jackson, 2012; Stiglitz, 2000).

The interaction mechanism, between the countries of the European Union and with its neighbours, must be continuously developed and improved. This task is due not only to gaining experience but also to changes in the composition of countries in the European Union, the movement of external borders and the emergence of new neighbouring countries with a different (lower) level of socio-economic development, cultural characteristics.

Formed by Western European countries, the institute of cross-border cooperation has allowed the countries of the former socialist camp to successfully use its opportunities, adapt it to their institutional and cultural environment and achieve the goal of integration into the European Union. In Ukraine, the formation of the institution of cross-border cooperation is too slow, and its functions, which are inherent in developed countries, are difficult to adapt to the specific conditions of our country. Therefore, it is appropriate to use recommendations for "growing" their institutions, which can coexist with the institutions of other countries (European Commission, 2015; Del Bianco and Jackson, 2012). But for their formation, it is necessary to identify the reasons for the low efficiency of cross-border cooperation. This situation is incredibly real for the Carpathian Euro region, which covers five countries, but where Ukraine dominates in terms of population (71%) and territory (41%) (Mykula and Tolkovanov, 2011, p. 149). Therefore, it significantly affects the performance of this euro region as a whole.

The complexity of managing the Carpathian Euroregion is due to its features (European Commission, 2015; Mykula, 2013):
- peoples' quantity (covers about 16 million people).
- the difference in the administrative-territorial structure, which complicates the elections for the cooperation of structural units with the same powers.
- significant lag of Ukrainian regions from Polish, Slovenian, Hungarian, Romanian in the development of border infrastructure.
- Among the factors of negative impact on the economic efficiency of cross-border cooperation are the most important (European Commission, 2015; Terlouw, 2012):
- Giving preference to political, cultural, social areas of development.

- Low attention to the development of joint strategies to meet the concerted interests of cross-border regions and avoid competition between territories for resources.
- Insufficient attention to the involvement of business structures in cross-border cooperation.
- Lack of staffing of local governments with specialists capable of developing and implementing innovative projects for the development of cross-border areas.

It should be borning in mind that the policy of the European Union is aimed not only at reducing imbalances between countries but also overcoming inequalities in the development of regions of each country (Council of Europe, 1980). Therefore, it is necessary to reduce the lag in the development of the Ukrainian parts of the Carpathian Euro region from the other areas of Ukraine and bring their development closer to the level of foreign participants in the Carpathian Euro region.

At the state level, Ukraine needs to:
- Bring the border infrastructure in line with the state of European countries.
- Organize advanced training of leaders and leading specialists of local governments in the regions participating in cross-border cooperation to acquire the necessary knowledge and skills to develop and implement a strategy for the transition to a "blue ocean" market environment.
- Use targeted preferential taxation of business projects for the formation of the blue ocean of the market environment.

Mainly it should be borning in mind that among the countries of the former Soviet Union, not all seek European integration. Russia has its imperial ambitions and wants to involve Ukraine, Belarus and Moldova. Therefore, Russia is trying not to allow Ukraine to make a clear choice about European integration, even though military aggression. In such modern circumstances, the European Union's role in helping to reduce the imbalance between the development of European countries and border areas, as well as the security of its eastern borders.

The European Union's focus on supporting the transition to a blue ocean market environment will contribute not only to the rapid economic development of cross-border areas but also to improving relations between the populations of neighbouring countries. After all, the development of strategies involves taking into account the balance of interests of each party, and joint participation in its implementation, obtaining a synergistic effect from the use of resource opportunities of neighbouring countries will help to enjoy cooperation, reduce the basis for conflict.

Conclusions

For achieving positive changes in the management of cross-border cooperation, it is necessary to increase the effectiveness of state regulation of the development of Euroregions, which should be aiming at support for achieving the

results of the "blue ocean" strategy. That is the formation of new unique markets for the consumption of goods and services that are not competitors of existing ones.

For implementing this task, it is advisable to focus on:

- training of management staff for cross-border cooperation, able to identify possible growth points, reduce competition for resources by developing and implementing a strategy for the transition to the blue ocean of market space.
- ensuring the availability to the countries of the Euroregion of statistics of the relevant territorial units of each state (regions, voivodships, districts, etc.), necessary to assess the achievements in cross-border cooperation.
- coordination between neighbouring countries that develop and implement joint projects, levers of financial motivation.

A particular task for the regions of Ukraine bordering the countries of the European Union is the development of border infrastructure and participation in the financing of innovative development projects.

An essential role in improving the effectiveness of cross-border cooperation belongs to the use of methods for forecasting socio-economic development. Normative forecasts substantiate indicators of the desired state of socio-economic achievements. Search forecasts make it possible to assess the expected results of growth while maintaining existing trends.

The gaps between the desired and expected results become the basis for finding ways to reduce them and the formation of tasks at a particular stage of development. A useful tool for bringing the real situation closer to the normative one is the development of strategies for the transition to the blue ocean of the market environment. Comparisons of real achievements with normative ones make it possible to assess the effectiveness of the government in the management of cross-border cooperation.

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