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SOCIO-ECONOMIC DEVELOPMENT IN THE CONTEXT OF USING REASONABLE SPECIALIZATION IN THE ECONOMY OF UKRAINE

ABSTRACT

The article analyzes the uneven economic growth in the regions of Ukraine and proposes the development of regional policy based on the use of the smart specialization idea. As a tool for analysing the uneven economic development of regions, we used a method based on the comparison of regions by gross regional product per capita, which formed the basis for determining the funnel of backwardness of the region among others in terms of economic growth. The analysis was conducted for 2010 and 2020. The calculations made it possible to identify areas that differ significantly in development potential. It is proposed to use the ideas of the smart specialization concept as a new model of the Ukraine's regions economic development in order to equalize interregional disparities. Revealed the essence of this concept implementation on the example of the Carpathian region economy in 2020 is revealed. It is determined that the formation of educational, tourist and construction clusters in the region are the foundations that will form a long-term strategy for its development. The main measures for the introduction of construction and educational clusters are proposed. The components that determine the innovative development of Ukraine on the basis of the Global Indices of Competitiveness and Innovation are analysed. Proposed the formation of economic policy, which is aimed at solving strategic tasks of the regions socio-economic development – ensuring economic growth and guality of life in Ukraine. It is justified that the application of the smart specialization approach in long-term regional strategies will contribute to a synergistic effect for both human and innovative development, which is the goal of the new regional economic policy.

To solve the tasks used general and special research methods, namely: theoretical generalization to clarify the essence of smart specialization), statistical, comparative, comparative and strategic analysis (to calculate and build the dynamics of GRP per capita by region of Ukraine), graphical (for a visual representation of the results of the analysis). In addition, the visualization method was used to build the algorithm for forming the regional policy of Ukraine.

Keywords: smart specialization, cluster, innovation, region, development, economic growth, education, rates of economic development, economic policy

JEL Classification: O18, O31, R13, F29

INTRODUCTION

Today we live in an era of globalization, automation, digital technologies, increasing aggression of epidemics affecting all aspects of life: labour market, environment, economy, social sphere, society.

The current stage of implementation of state policy in Ukraine is associated with a new stage of development of regional strategies, which forecast the determination of strategic priorities for regional development. For Ukraine, ensuring the quality of growth is a key issue of development, the solution of which involves overcoming excessive social differentiation, solving poverty and reducing life expectancy, limiting the exploitation of the national economy natural potential, ensuring expanded reproduction of physical capital, transition to innovative development and institutional environment.

this development. According to the modern legal framework on strategic planning, should be based on the following approaches: integration, which involves a combination of sectoral, territorial (spatial) and management components of state regional policy; gender, which is based on the principle of gender equality with the involvement of representatives of regional development actors, which allow to take into account the interests of different groups in different spheres of life; smart specialization, which provides a reasoned definition of regional development actors in the regional strategy of certain strategic goals [1].

LITERATURE REVIEW

The work of many foreign and Ukrainian scientists is devoted to the issue of uneven development of regions and smart specialization. Thus, [2] emphasize that in today's world the growth of economies of highly developed countries is ensured mainly not by increasing factors of production, but by introducing advanced equipment, technologies, improving the quality of human capital. and the institutional environment, which indicates its predominantly intense nature. H. Saleem et al. [3] focus on the structural transformation of the economy. It is the basis for achieving a new quality of economic growth on the basis of an innovative model of development related to the information and communication environment, scientific knowledge, the introduction of advanced technologies. An important prerequisite for stable economic development and economic growth in the country, according to A. Khalid & A. Marasco [4] is high investment activity in priority sectors of the economy. Y. Bian et al. [5] note that economic growth should be considered as an important macroeconomic category, which is an indicator] not only of the absolute increase in social production, but also the ability of the economic growth is one of the main goals of society along with economic freedom, economic efficiency, etc.

Studies by scientists on the example of Chinese districts have shown that spatial differences in economic development have little effect on life satisfaction, as people living in different regions are unlikely to personally experience this change, but, on the other hand, short-term temporary changes in economic development have an impact, because the population of the area experiences these changes directly [7].

In turn, [8] concluded that faster GDP growth compared to neighboring countries causes positive trends in life satisfaction. Their conclusions are consistent with the predictions of the aspiration's theory and theories of comparative groups comparison.

As we can see, the above-mentioned scientists claim that economic growth in the country depend on a number of factors, is the development of the territory due to investment attractiveness and innovation activity of the population. A number of scholars went further to study the problems of disproportionate economic development through the use of new models of improving the effectiveness of regional economic policy. Thus, [9] noted the important place of the reasonable specialization idea in the discourse of EU regional policy. He points out that smart specialization will increase the efficiency of regional policy and intensify innovation processes in business in European regions. Empirical research of institutional changes in business on the example of some regions (Austria, Italy, Croatia and Slovenia) the author analyzes the effects of smart specialization and its impact on EU cohesion policy until 2020 [10].

Scientist M. Sotarauta [11] in his study considers smart specialization as a platform for coordinating the activities of several entities to stimulate regional economic development, argues that the necessary condition for smart specialization is close cooperation between objects and actors of regional development. In this way, different interests will be reconciled in European regions and new forms of leadership will be introduced. B. Biagi et al. [12] note that smart specialization involves moving away from stimulating only industries or sectors to support more the process of activity, namely specific technologies or technological complexes, specific (unique) opportunities, natural assets and more. In these circumstances, the main emphasis is on the focusing public resources on the priorities and needs of innovative development, intensifying private investment in research and attracting key stakeholders to make innovative decisions and identify areas of innovative development. D. D'Adda et al. [13] emphasize that the definition of technological areas in the implementation of the Smart Specialization Strategy, which have better quality characteristics contribute to smart specialization and diversification of the region's economy.

P. Vallance et al. [14] discuss the role of universities and other knowledge institutions as drivers of smart specialization in all regions, including regions with various scientific and innovative opportunities. Scientists emphasize that in the conditions of formation and implementation of smart specialization in Europe the role of universities.

An in-depth study of publications on the issues shows that the country's economic growth is an extremely important issue. At the same time, smart specialization is a fairly new concept for Ukraine, and therefore need further research, both

methodological and practical aspects of its use.

AIMS

The purpose of the article is to analyze the economic growth of regions through the comparison of gross regional product per capita and study the possibility of introducing smart specialization in order to develop a qualitatively new regional economic policy.

To study regional economic processes, we used the indicator of gross regional product per person (GRP) and a methodology based on the lag line. Its main indicator is the «funnel of backwardness», which, according to [15], reflects the mechanism of opportunities individual regions loss for development due to time lag and the need to resist the negative effects of globalization.

In order to study the uneven economic development in Ukraine and develop a regional policy, based on which the priority of development would be the benefits of a particular area, we used the ideas of the smart specialization concept. Based on the data of the Ukraine's State Statistics website on GDP per person, we will determine the economic growth (decline) of the regions in 2010 and 2020 in comparison with the average Ukrainian value. We will also determine the depth of backwardness, which leads to interregional disparities in economic development. Taken for research 2010 and 2020 on the grounds that the first was the beginning of the exit of European countries from the global financial crisis, and the last – the year of increasing macroeconomic instability in Ukraine.

RESULTS

Defining a new quality of economic growth in Ukraine raises the issue of finding ways to achieve it. It is time to develop a concept of economic growth quality, which is based on the processes of regional economic development intensification due to factors that will provide not only quantitative growth and qualitative changes in the structure of consumption, but also the social dimensions of regions. For backward regions, the issue of their development priorities and achieving sustainable long-term growth rates on a new innovation base is relevant.

The Ukrainian economy today is characterized by transformational changes and they are happening rather slowly. This is confirmed by the fact that Ukraine has not yet formed a system of measures that would ensure dynamic growth in combination with the structural transformations of the national economy. In addition, the economic growth of the state and achieving its sustainability takes a long time. Therefore, the issue of developing economic policy that could meet the challenges of globalization and at the same time turn the backward regions of Ukraine into successful ones is relevant.

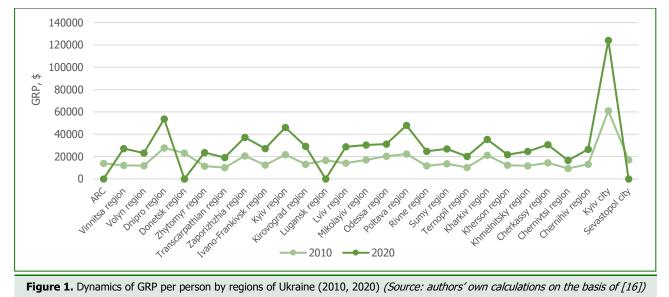
Analysing the economic growth (decline) in Ukraine, we can say that in 2010 among the regions that maintained their strong economic positions and did not find themselves outsiders were Kyiv, Dnipropetrovsk, Donetsk and Poltava regions. The rest of the regions found themselves in an environment characterized by a stable lag in GRP rates per capita compared to the same average in Ukraine and averaged 2–3 years, as indicated by the depth of the funnel. An even greater lag, four years, was observed in Transcarpathian, Ternopil and Chernivtsi oblasts, reducing their chances of economic growth in the short run (*Figure 1*). One of the reasons for this situation, among others, was the financial crisis of 2008–2009, which had a negative impact on the economy of Ukraine in general and its regions in particular.

2013 – early 2014 was characterized by the fact that the leaders in economic growth during this period were Kyiv, Dnipropetrovsk, Kyiv and Poltava regions. At the same time, the rate of backwardness for Rivne and Ternopil regions was 5 years, Chernivtsi – 6 years. This fact indicates significant interregional disparities in the economy of the regions, the lack of positive dynamics for growth and the inability to economic development.

In 2020, due to macroeconomic instability and the continuation of hostilities in eastern Ukraine, the situation became even worse. The economic downturn was recorded in almost all regions. The depth of backwardness at 6 years characterized the Transcarpathian, Ternopil, Kherson regions, for Chernivtsi region the figure was 8 years. The indicators in other regions of Ukraine have significantly deteriorated. The situation in Donetsk and Luhansk oblasts became critical due to the continuation of hostilities on their territories. This, in turn, exacerbated instability in the national economy and caused the economic crisis as a whole.

In addition, the main problems of regional development, which have pointed the degree of interregional differentiation and need immediate solution, include the low competitiveness of regional economies; structural disparities in the industrial complex of Ukraine, high energy intensity and capital intensity of production; low investment and innovation activity of the regions; slowdown in lending to the real economy from international financial institutions.

Quite an important factor in the disproportionate development of the regions was and remains the focus on cheap labour, underutilization of their own territories' potential. Of particular note is the significant variation in staffing of the regions, which is at odds with the effectiveness of economic development, hinders the progress of the regional economy based on knowledge. Chronic lag of some regions in development leads to almost irreversible loss of opportunities for further development due to the intensive outflow from the region of all types of resources in the form of labour migration, capital, natural resources as a non-renewable source of development, entrepreneurial capital in the form of brain drain.



The analysis confirms that Ukraine needs to develop new approaches to the formation of regional development priorities and the implementation of such policies that would minimize the risks of current global challenges; to turn regional differences into new opportunities for qualitative economic growth of the state; to ensure a high level of human life quality, regardless of the residence place, to promote the integration of regions in a single political, legal, informational and cultural space. Such a new tool of economic policy today is the concept of smart specialization, which provides for the identification of strengths and development of regions competitive advantages based on the existing structure of the regional economy and innovation. Of particular importance in this strategy is the range of research and innovation issues. Smart specialization combines local capabilities and the knowledge economy. By promoting a bottom-up approach as a core one, it brings together local authorities, academia, business and civil society, working on long-term growth strategies supported by EU funds. The organization of smart specialization should be based on certain principles that would allow for both planning and management of the organization's process at all levels, in all its subsystems. Such principles include the following:

- 1) a local approach, the essence of which means that it is based on assets and resources available to the regions;
- 2) formation of own strategy, which means to make a choice regarding investment priorities clearly defined for investments on the basis of knowledge and/or clusters;
- 3) focusing on competitive advantages and real growth potentials;
- 4) bottom up, which means determining the priorities of regional policy;
- 5) innovation, which means the strategy must cover a wide field of innovation, support technological, practical and social innovation;
- 6) monitoring and evaluation of the strategy, the essence of which is to conduct continuous monitoring and evaluation, as well as the formation of a review mechanism to update the strategic choice.

The development of the knowledge economy, as an integral attribute of smart specialization, requires increasing the innovation of all components of management. In general, as a rule, the development strategy of the region is fundamentally changing. The main resource and driving force in these conditions is the innovative potential of the region's residents, and the innovation system – the environment that ensures the transformation of the results of innovation in further development.

Summing up, we can say that, the practice of innovation in the regions of Ukraine is available, but the steps of its implementation require specific organizational content – from training to the practical implementation of large-scale innovation projects and programs. Thus, achieving a high level of production efficiency is possible only if you ensure a constant and intensive process of accumulation, increase and preservation of human capital in the form of professional knowledge, skills and abilities of employees. This, first of all, can be achieved through systematic training and professional development of employees, which will improve the use of their professional potential. The latter requires regional governments to focus on monitoring research on the state of the educational system development as a basis for the formation of a new economy. The basis of such knowledge centers should be an innovative model of the regional education system (RES). The key tool and condition for their effectiveness is the further decentralization of regional authorities' powers.

To date, the European Commission has identified four main challenges for smart specialization strategies. These include [17]:

- further reform of research and innovation systems in the regions;
- strengthening cooperation in innovative investments between regions;
- use of research and innovation in less developed and industrial transition regions;
- use of synergies and complementarities between EU policies and instruments.

It is known that the qualitative indicators of the intellectual perspective of a global state or individual territories is the share of GDP, which is directed to research and development (R&D). This raises the question of the sufficiency of domestic intellectual resources to meet globalization challenges. The analysis of allocated funds for scientific and scientific-technical activities during 2010–2020 showed that in Ukraine they are quite limited due to financial and economic problems, hostilities and the beginning of the coronavirus pandemic. Statistics show that in 2019 this figure for Ukraine was 0.63% by state order and within international scientific and technical cooperation 0.2%. The average global value of research and development expenditures in GDP was 2.23% in 2016, and the average in the European Union – 2.14% [18]. As we can see, on the one hand, Ukraine is trying to increase its innovation potential (the development of information technologies and «startup booms» plays an important role in this), on the other hand, Ukraine is lagging behind the world's leading economies. The problem lies in the fact that the main condition for the development of regions should be a long-term strategy of investing in their strategic development, where investment in human beings is an integral part of human development. Indicators of the country's development are The Global Innovation Index and the Global Competitiveness Index. According to The Global Innovation Index, as of 2019, Ukraine ranked only 47th in the world according to this indicator, receiving 37.4 points. At the same time, the leaders in the Global Innovation Index are Switzerland (67.69 points), Sweden (63.82 points), the Netherlands (63.36 points), the United States (61.40 points), and the United Kingdom (60.89 points). According to experts, the Global Innovation Index has shown that in Ukraine and its regions with a fairly high level of available resources and conditions for innovation, the scientific and practical results of innovation are small. This is largely due to the low level of the component «actual implementation of innovation potential in the process of practical activities» [19]. The situation regarding Ukraine's weak position in terms of innovation encourages a significant part of the population with high intellectual potential to emigrate in search of better working conditions. Under such circumstances, domestic business lacks qualified personnel prone to innovative activity, and the economy loses its attractiveness in the eyes of foreign investors. The above indicates the special role of the motivating factor that would encourage domestic intellectual resources to develop and implement high-tech products in various sectors of the economy. In 2019, Ukraine ranked 85th among 140 countries, receiving 4.0 points on the Global Competitiveness Index. The lowest scores on this index were «public procurement of high-tech products» (96th place), «spending of companies on research and development» (76th place) and «cooperation of universities and industry in research and development» (73). Demotivation of the business environment to innovation has led to a situation where exports of high-tech Ukrainian products account for only 7% of total exports of industrial goods; while lagging behind industrialized countries by more than nine times the gap [20]. As we can see, Ukraine's external competitive relations in terms of innovation are threatening. To reduce Ukraine's gap with other countries, the government, together with regional local authorities, must recognize the need for systematic work to find the competitive advantages of specific territories and create conditions for motivating staff to innovate. Only such steps will provide long-term prospects for the development of regions in conditions of global competition. In our opinion, ways out of this situation are possible with the creation of specialized innovation clusters, business incubators, high-tech industrial parks, technopolises, the main purpose of which is to solve problems to determine competitive advantages, including research aimed at creating and implementing innovations. In the economy of the region. In line with problem solving, smart specialization strategies are designed to play a vanguard role in the development of regions and to be a benchmark for local and regional governments. In this case, the use of smart specialization strategies allows regions to transform their needs, strengths and competitive advantages into market services. At the same time, it is possible to prioritize public investment in research and innovation through a bottom-up approach to their economic transformation.

Having analyzed the uneven economic growth of the regions of Ukraine and identified the prospects for the development, we will focus on the study of smart specialization individual components. Let's analyze its use on the example of the Carpathian region economy. Analysis of disproportionate development in the regions showed that the Carpathian region has every chance to become successful in terms of economic growth. An important role in this is given to the use of local advantages (tourism, cuisine, folk crafts, sheep, etc.). Analyzing the structure of the economy of Ivano-Frankivsk region by type of economic activity (*Figure 2*), we conclude that the largest volumes of products sold in the region give the industry (B + C + E + D), trade and repair of motor vehicles and of motorcycles (G). The third and fourth places are occupied by agriculture, forestry and fisheries (A) and construction (F), respectively. As we can see, the structure of the economy of the region belongs to the «traditional» type of economy with a significant influence of the trade component.

Regarding the analysis the structure of the Ivano-Frankivsk region economy, based on indicators of the specialization degree in terms of sales and employment, (then from (see *Figure 2*) we can conclude that none of the leading economic activities in the region is higher than the specialization rate of 1.5.

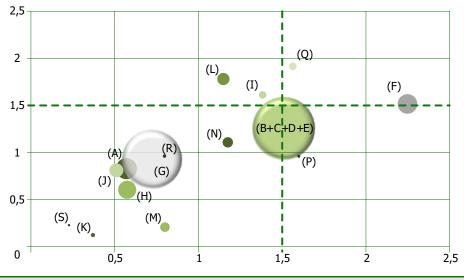


Figure 2. The structure of the Carpathian region economy by type of economic activity (sections) in 2020. (Source: formed by the authors according to [15])

The only industry in this sample is health care and social assistance (Q), and construction is also approaching (F). In *Figure 2* also presents the areas that may be closest to smart specialization, in particular: scientific and professional activities (M), telecommunications and information (J), financial activities (K). However, as we see from *Figure 2* level of specialization, below 1. Against this background, the field of art, sports, entertainment and recreation (R) stands out, the specialization of which exceeds one, both in terms of employment and in terms of sales.

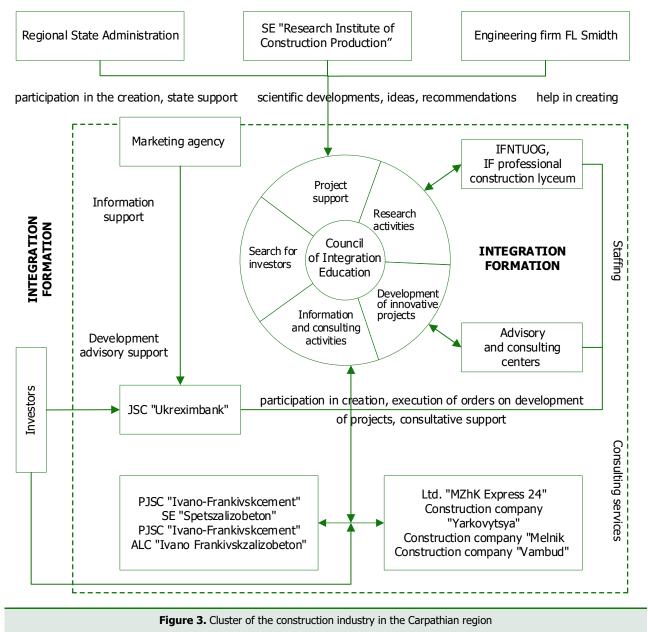
This structure of specialization of the Carpathian region is a confirmation that this region has high potential to increase the level of smart specialization. This requires close cooperation between local authorities, research institutions and business to conduct an effective regional policy, which should be aimed at expanding the smart specialization sector.

Analysis of the employment structure by type of economic activity showed that the leaders will be such industries as agriculture, trade, forestry and fisheries and repair of motor vehicles and motorcycles, construction [23]. Further positions are in industry [21; 22], education, health care and social assistance [24]. Given this, we can conclude that the organic industry and services are leading in the structure of the region's interest.

In addition, a significant proportion of employees are social sectors, which indicates an insufficient level of endogenous capacity of the region's economy, which will low the expansion of the principles of specialization in the formation of strategic support for the development of the Carpathian region. If we consider the growth rate of the industrial sector by type of economic activity, the highest levels of specialization show: construction [24]; furniture production and services (tourism). The enterprises of the construction sphere in the region have been occupying leading positions for more than one year, and therefore we propose to form a corresponding construction cluster in this area (*Figure 3*). One of the most difficult tasks in the formation of innovation and investment cluster is to create an effective organizational and production system of its self-organization and self-government. This is due to the fact that the voluntary cooperation of enterprises and organizations – members of the cluster while maintaining their legal, property and financial independence involves a

high level of efforts coordination of all members of the association [25; 26].

Therefore, there is a need to create a special centralized body – the coordinating council. Its main functions should be research, development and support of the project, search for investors, providing advisory support, constant monitoring of the market and research, updating information through cooperation with research institutions and international organizations, lobbying the interests of producers in state and local authorities, etc.



Analysis of innovative specialization of industry in Prykarpattia proved that the furniture sector and the construction industry for the analysed period have high indicators of 1.5 degrees of innovative specialization of the region's economy, as well as that the region is forming more powerful clusters in transport, tourism and recreation. Simultaneously with the positive trends in the region, we can note the unsatisfactory state of growth of innovative activities in industry. Thus, no type of industrial activity (except the above) had a growth rate that would exceed 1.5 times. One of the reasons is the demotivation of the workforce. When starting a business here, a foreign investor uses cheap labour without introducing real innovations in production and without investing in human capital. This is also facilitated by the imperfect legal framework, which does not ensure a full and safe business. This situation can serve as a significant disincentive to the development of smart specialization of the study region economy.

Currently, Ukraine is actively searching for systemic tools that would ensure economic growth. One of them, in our opinion, is the creation of an educational cluster, the purpose of which is to increase the competitiveness of the educational system

in general and regional in particular, as a basis for knowledge generation. The main indicator of such a cluster is the scientific component, and educational management becomes a link between educational institutions, research institutions and economic activities. Thus, the prospects of socio-economic development of the state and its regions, their innovative progress directly depends on the subsystems of generation and dissemination of knowledge, which form the professional competencies of highly educated professionals. The latter, in order to carry out qualitative socio-economic transformations in the country, must have not only skills that determine professional qualities (creative thinking, sociability, professional ethics), but also qualities of leadership (global thinking, effectiveness, cultural awareness), entrepreneurship and strategic thinking (identification of opportunities and alternatives, independence in decision-making, confidence, strategic planning skills, risk-taking, ingenuity, project approach, ability to turn knowledge into innovation), etc [26].

The activity of regions in development is usually associated with the functions of strategic planning and forecasting. The advantages of strategic planning over conventional are as follows: the strategic development plan created by the community, based on its interests and priorities, is more stable, as it is coordinated with the plan of cooperation of three sectors of the community – local government, business structures and public organizations. As a result, such phenomena as sponsorship of business structures, assistance of public organizations become widespread; the strategic plan is an organizing document that allows you to use the available financial and other resources of the region purposefully, i. e. more efficiently; strategic planning promotes community cohesion, increases political stability in society, develops social responsibility for decision-making before it; the strategic development plan provides the community with better access to credit resources or grants provided by Western financial and charitable organizations [26; 27].

One of the ideas of smart specialization is an interregional partnership based in particular on intellectual specialization. Here are some educational projects that were successfully implemented during 2010–2020 in the Carpathian region. Among them the most significant are: Project «TOP-Tripartite Partnership», «Restoration of Cultural Heritage of Ivano-Frankivsk», «Civil Society in the Eastern Neighborhood: Creating Change through Partnership», «Business Success within the Association of Ukrainian Cities», «EDIGISTARS Building» opportunities for digital entrepreneurship for the elderly through an innovative learning system, etc.

In the case of taking as a basis their own strategic planning based on the idea of smart specialization and implementation of the relevant strategy, the regions of Ukraine will receive [28; 29]: support for those types of economic activity that bring the greatest development, innovation and growth in the regional economy, as a result – the growth of GRP and the improvement of other socio-economic indicators [30]; increasing the investment attractiveness of the region by ensuring the formation of investors understanding, which areas are most effective for investment; expanding access to European programs [31; 32]; expanding external sources of development funding through access to EU structural fund programs; empowering the Euroregional partnership by identifying and establishing links with European regions with related specialization, joining European value chains; ensuring collegial development, adoption and implementation of strategic decisions through strengthening communication between regional stakeholders.

Thus, the urgent task for Ukraine today is to determine the qualimetric characteristics of regional development related to the need to overcome existing regional disparities, reduce barriers to effective state regulation of regional markets, the formation of civil society and the development of new strategic directions of regional policy. To solve these problems, the authors of the study propose the formation of a new regional economic policy, based on which – ensuring economic growth and quality of citizens life (*Figure 4*).

Regional economic policy	Directions	Strategic goals	Result
	 increasing the internal potential of socio-economic development of regions; based on competitive advantages; ensuring the economic growth of the regions through the formation of «growth poles» and creating conditions for their implementation in peripheral areas; resource provision of economic growth of territories. 	 increasing the efficiency of the regional and local development management system; improvement of mechanisms for stimulating economic development of regions in the conditions of decentralization; improvement of territories resource provision. 	 increasing the efficiency of local governments; reducing the asymmetry of socio-economic development; improving the quality of the population life; sustainable economic growth.

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Strategic directions should balance the promotion of the most promising vectors of territories economic development and introduce an effective mechanism aimed at overcoming economic and social disparities, promoting the integration of regions. They will contribute to the economic growth of Ukraine by accumulating, mobilizing and improving the efficiency of the available resource's usage, will improve the investment climate and form the infrastructure for the development of regions, etc.

CONCLUSION

The analysis of Ukraine's regions economic development and economic specialization allowed to identify problems and gaps that may arise in the formation and implementation of strategic development goals.

The latest tool for studying the economic development of the country is the idea of developing regional strategies based on the concept of smart specialization, which is considered on the example of the Carpathian region. It is substantiated that the research component of the Prykarpattia region economy, the enterprising creative potential of its inhabitants and local resources should provide a breakthrough in innovation and thus create competitive advantages of the region among other regions of Ukraine. The development of industry through the ideas of smart specialization (support of cluster initiatives, development of regional infrastructure, business projects and innovations) are able to meet globalization challenges and ensure sustainable growth of the regions of Ukraine.

It is justified that the application of the smart specialization approach in long-term regional strategies will contribute to a synergistic effect for both human and innovative development, which is the goal of the new regional economic policy.

Given the current trends in the economy of Ukraine and the general geosocial situation, the state of the above issue's elaboration in theory and in practice, we consider relevant and appropriate further study of the concept of smart specialization in the existing regional environment.

REFERENCES / ЛІТЕРАТУРА

- Opinion of the European Economic and Social Committee on «Regional policy contributing to smart growth in Europe 2020» COM. (2010). 553 final. Retrieved from <u>https://eur-lex.europa.eu/legal-</u> content/EN/TXT/PDF/?uri=CELEX:52011AE1167&gid =1548079030467&from=EN.
- Herrendorf, B., Rogerson, R., & Valentinyi, T. (2013). Growth and structural transformation. NBER Working Paper, 18996. https://doi.org/10.1016/B978-0-444-53540-5.00006-9.
- Saleem, H., Shahzad, M., Khan, M. B., & Khilji, B. A. (2019). Innovation, total factor productivity and economic growth in Pakistan: A policy perspective. Journal of Economic Structures, 8 (1). https://doi.org/10.1186/s40008-019-0134-6.
- Khalid, A. M., & Marasco, A. (2019). Do channels of financial integration matter for FDI's impact on growth? empirical evidence using a panel. Applied Economics, 51 (37), 4025–4045. https://doi.org/10.1080/00036846.2019.1588945.
- Bian, Y., Zhang, L., Yang, J., Guo, X., & Lei, M. (2015). Subjective wellbeing of chinese people: A multifaceted view. Social Indicators Research, 121 (1), 75–92. <u>https://doi.org/10.1007/s11205-014-0626-6</u>.

- Wang, F., & Ran, G. (2019). Excessive financial support, real estate development and macroeconomic growth: Evidence from China. Emerging Markets Finance and Trade, 55 (11), 2437–2447. https://doi.org/10.1080/1540496X.2018.1555463.
- Zhou, J., & Xie, Y. (2016). Does economic development affect life satisfaction? A Spatial-Temporal contextual analysis in China. Journal of Happiness Studies, 17 (2), 643–658. https://doi.org/10.1007/s10902-015-9612-1.
- Bjørnskov, C., Gupta, N. D., & Pedersen, P. J. (2008). Analysing trends in subjective well-being in 15 European countries, 1973–2002. Journal of Happiness Studies, 9 (2), 317–330. https://doi.org/10.1007/s10902-007-9055-4.
- Benner, M. (2014). From smart specialisation to smart experimentation building a new theoretical framework for regional policy of the European Union. Zeitschrift Fur Wirtschaftsgeographie, 58 (1), 33–49.
- Benner, M. (2019). Smart specialization and institutional context: The role of institutional discovery, change and leapfrogging. European Planning Studies, 27 (9), 1791–1810. https://doi.org/10.1080/09654313.2019.1643826.
- 11. Sotarauta, M. (2018). Smart specialization and place

leadership: Dreaming about shared visions, falling into policy traps? Regional Studies, Regional Science, 5 (1), 190–203. https://doi.org/10.1080/21681376.2018.1480902

https://doi.org/10.1080/21681376.2018.1480902.

- Biagi, B., Brandano, M. G., & Ortega-Argiles, R. (2021). Smart specialisation and tourism: Understanding the priority choices in EU regions. Socio-Economic Planning Sciences, 74. https://doi.org/10.1016/j.seps.2020.100883.
- D'Adda, D., Guzzini, E., Iacobucci, D., & Palloni, R. (2019). Is smart specialisation strategy coherent with regional innovative capabilities? Regional Studies, 53 (7), 1004–1016. https://doi.org/10.1080/00343404.2018.1523542.
- Vallance, P., Blažek, J., Edwards, J., & Květoň, V. (2018). Smart specialisation in regions with lessdeveloped research and innovation systems: A changing role for universities? Environment and Planning C: Politics and Space, 36 (2), 219–238. https://doi.org/10.1177/2399654417705137.
- Popkova, Ye. H. (2006). Nova yakist ekonomichnoho zrostannia ta «voronka vidstalosti» [New quality of economic growth and «funnel of backwardness»]. Informatsiina ekonomika ta kontseptsii suchasnoho menedzhmentu: materialy Mizhnarodnoi naukovopraktychnoi konferentsii «Innovatsiinyi menedzhment» – Information economics and concepts of modern management: materials of the International scientific-practical conference «Innovation Management», 178–190 [in Ukrainian].
- Derzhavna sluzhba statystyky Ukrainy. (n. d.). Ofitsiinyi sait [Official site]. Retrieved August 25, 2021, from <u>http://www.ukrstat.gov.ua</u> [in Ukrainian].
- Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions. A Budget for Europe 2020 – Part II: Policy fiches. COM (2011) 500 final. Retrieved from https://eurlex.europa.eu/resource.html?uri=cellar:d0e5c248-4e35-450f-8e30-3472afbc7a7e.0011.02/DOC_4&format=PDF.
- Simkiv, L., Shults, S., Lutskiv, O., & Andrusiv, U. (2021). Analysis of the dynamics of structural processes in the context of ensuring sustainable development. European Journal of Sustainable Development, 10 (1), 153–167. https://doi.org/10.14207/ejsd.2021.v10n1p153.
- Zelinska, H., Andrusiv, U., & Simkiv, L. (2020). Knowledge economy: trends in the world and analysis of Ukraine. Journal of Eastern European and Central Asian Research, 7 (1), 104–113.

https://doi.org/10.15549/jeecar.v7i1.325.

- Mandryk, O. M., Arkhypova, L. M., Pobigun, O. V., & Maniuk, O. R. (2016). Renewable energy sources for sustainable tourism in the Carpathian region. IOP Conference Series: Materials Science and Engineering, Vol. 144, 1.
- Kneysler, O., Andrusiv, U., Spasiv, N., Marynchak, L., & Kryvytska, O. (2020). Construction of economic models of ensuring Ukraine's energy resources economy. Paper presented at the 2020 10th International Conference on Advanced Computer Information Technologies, ACIT 2020 – Proceedings, 651–656.

https://doi.org/10.1109/ACIT49673.2020.9208813.

- Mandryk, O. M., Arkhypova, L. M., Pukish, A. V., Zelmanovych, A., & Yakovlyuk, K. (2017). Theoretical and methodological foundations of sustainable development of Geosystems. IOP Conference Series: Materials Science and Engineering, Vol. 200, 1.
- Andrusiv, U., & Galtsova, O. (2017). Evaluation of innovation activity of construction enterprises. Scientific bulletin of Polissia, 3 (11), 204–215. https://doi:10.25140/2410-9576-2017-1-3(11)-204-215.
- Zelinska, H., Andrusiv, U., Galtsova, O., & Dmytrechenko, M. (2021). Management of social risks and their impact on the spheres of human life in the conditions of sustainable development of Ukraine. Problemy Ekorozwoju, 16 (2), 116–124. https://doi.org/10.35784/pe.2021.2.12.
- 25. Orlovska, Y., Cherchata, A., & Kovalenko, O. (2021). Development of intellectual economy: some approaches for policy elaborating. Baltic Journal of Economic Studies, 6 (2), 116–124.
- Melnyk, M., Korcelli-Olejniczak, E., Chorna, N., & Popadynets, N. (2018). Development of Regional IT clusters in Ukraine: institutional and investment dimensions. Economic Annals-XXI, 173, 19–25.
- Popadinets, I., Andrusiv, U., Galtsova, O., Bahorka, M., & Yurchenko, N. (2021). Management of motivation of managers' work at the enterprises of Ukraine: Innovative aspects. Management Systems in Production Engineering, 29 (2), 120–131. https://doi.org/:10.2478/mspe-2021-0016.
- Mccan, P. Y., & Ortega-Argilés, R. (2017). Smart specialisation, regional growth and applications to EU Cohesion policy. Retrieved from http://www.tandfonline.com.
- 29. Popadynets, N., Shults, S., & Barna, M. (2017). Differences in consumer buying behaviour in consumer markets of the EU member states and

Ukraine. Economic annals-XXI, 166, 26-30.

- Cherchata, A., Popovychenko, I., Andrusiv, U., Gryn, V., Shevchenko, N., & Shkuropatskyi, O. (2022). Innovations in Logistics Management as a Direction for Improving the Logistics Activities of Enterprises. Management Systems in Production Engineering, 30 (1), 9–17. https://doi.org/10.2478/mspe-2022-0002.
- 31. European Commission's Reflection Paper on Harnessing Globalisation. COM. (2017). 240 final.

Retrieved from https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=COM%3A2017%3A240%3AFI N.

 Smart specialization tools will be used for the development of Ukrainian regions. (n. d.). Retrieved from http://www.uip.org.ua/https://decentralization.gov.u a/news/9614.

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СОЦІАЛЬНО-ЕКОНОМІЧНИЙ РОЗВИТОК УКРАЇНИ В КОНТЕКСТІ ВИКОРИСТАННЯ РОЗУМНОЇ СПЕЦІАЛІЗАЦІЇ В ЇЇ РЕГІОНАХ

Аналізується нерівномірність економічного зростання в регіонах України І пропонується розроблення регіональної політики на основі використання ідеї смарт-спеціалізації. Як інструментарій для аналізування нерівномірності економічного розвитку регіонів використано методику, в основі якої лежить порівняння регіонів за валовим регіональним продуктом на одну особу, що лягло в основу визначення воронки відсталості регіону з-поміж інших за темпами економічного зростання. Аналіз проведено за 2010 і 2020 роки. Розрахунки дали змогу визначити території, які значно різняться за потенціалом розвитку. Пропонується, з метою вирівнювання міжрегіональних диспропорцій, використати ідеї концепції смарт-спеціалізації як нової моделі економічного розвитку регіонів України. Розкрито суть упровадження цієї концепції на прикладі економіки Прикарпатського регіону за 2020 рік. Визначено, що формування освітніх, туристичних і будівельних кластерів у регіоні є тими підвалинами, які формуватимуть довгострокову стратегію його розвитку. Запропоновано основні заходи із упровадження будівельного та освітнього кластерів. Проаналізовано компоненти, які визначають інноваційний розвиток України на основі глобальних індексів конкурентоспроможності та інновацій. Запропоновано формування економічної політики, яка націлена на вирішення стратегічних завдань соціально-економічного розвитку регіонів – забезпечення економічного зростання та якості життя населення в Україні. Обґрунтовано, що застосування підходу смарт-спеціалізації у довгострокових регіональних стратегіях сприятиме отриманню синергетичного ефекту як для людського, так і для інноваційного розвитку, на що націлена нова регіональна економічна політика.

Для вирішення поставлених завдань використовуються загальні та спеціальні методи дослідження, а саме: теоретичне узагальнення для з'ясування сутності розумної спеціалізації), статистичний, порівняльний, порівняльний і стратегічний аналіз (для розрахунку та побудови динаміки ВРП на душу населення за регіонами України), графічний (для наочного представлення результатів аналізу). Крім того, метод візуалізації використано для побудови алгоритму формування регіональної політики України.

Ключові слова: смарт-спеціалізація, кластер, інновація, регіон, розвиток, економічне зростання, освіта, темпи економічного розвитку, економічна політика

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