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# THE ROLE OF THE CONCEPT OF "GOOD GOVERNANCE" IN THE MANAGEMENT OF HROMADAS

Artem Ahekyan<sup>1</sup>, Lyubov Kvasnii<sup>2</sup>, Olesya Lobyk<sup>3</sup>

**Abstract.** The article emphasizes that decentralization is aimed at significantly improving the quality of services in territorial communities through the use of new management methods. It is substantiated that the following areas require additional support and initiatives: medicine (secondary and higher levels), education (support for basic educational institutions), economy (creation of industrial parks, scientific and technical laboratories, support for startups), housing and communal services (waste management system). The article substantiates the relevance of the work on the development of united territorial communities, based on the implementation of effective anti-corruption measures and modern principles of good governance in the daily practice of management, as these are the priorities set today for local governments. Special attention is paid to the system of "good governance" as the newest form of communication between the public and the authorities. The aspects of improving the governance system are identified. The main management approaches used by successful local governments are described. In order for territorial communities to achieve the results of their activities not only today, but also in the future, modern approaches and practices for the development of dynamic organizations based on trust in government, effective communication, continuous learning and openness to change are proposed. It is proved that in order to bring the system of organization and functioning of public sector institutions closer to business approaches, it is advisable to apply a more business-oriented paradigm of the New Public Management and the principles of good governance. The essence of "good governance" as the newest form of interaction between public authorities and civil society is revealed. Recommendations in the field of management of territorial communities in the light of the concept of good governance are proposed. The *aim* of the work is to study the role of the newest concept of public administration in the management of territorial communities through a comparative analysis of the postulates related to the process orientation of local government and recommendations for the functioning of public administration in the light of the concept of good governance. The article proposes the use of the good governance cycle and the creation of Project Offices, which can become the basis for formulating recommendations in the field of process orientation in the functioning of the local government apparatus.

**Key words:** management of territorial communities, good governance, process management, decentralization, cycle of good governance.

**JEL Classification:** M10, O10, R58

## 1. Introduction

Nowadays, the management of territorial communities declares itself as a new science. Practice shows that as a result of historical events, the knowledge accumulated in the system of managerial thought began to be systematized in the form of theories in the late 19th century. In the mid-20th century, society

began to face the problem of power relations – the classical model of politics, governance and power increasingly did not satisfy the actively developing society. The results of research and domestic practice show that the following areas require additional support and initiatives: medicine (secondary and higher level), education (support of basic educational

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institutions), economy (creation of industrial parks, scientific and technical laboratories, support of startups), housing and communal services (waste management system). Thus, the efforts of scientists have launched the era of modern management related to local governance. Various theories put forward in the modern period of management development can be classified as approaches to management based on such common positions as starting points, emphases, goals and changes. The widely recognized management approaches are classical management approaches, neoclassical management approaches, modern management approaches and postmodern management approaches. The study examines the adopted process approaches to the management of territorial communities in the period of decentralization, which is called the modern period of management.

## 2. Literature review

There are various studies in the economic literature that use new management methods. The problem of applying the process approach to public administration management has been present in the theory, law and practice of management since the first half of the 90s of the last century. The legality of its use in public administration is emphasized by such researchers as: T. R. Gullidge and R. A. Sommer (2002), T. Christensen, P. Læg Reid (2001), Jr. Gullidge, R. A. Sommer (2002). It should be noted that the issue of the process approach in public administration is extremely utilitarian. This leads to the fact that legislative decisions implemented in many countries force state institutions to apply elements of the process approach.

At the same time, it should be borne in mind that the recommendation to use the process approach in management is directly related to the postulates of the new public management, the concept of which is increasingly criticized, pointing to the excessive role of the market approach and the excessive role of the client's point of view, which can lead, firstly, to the inappropriate segmentation of consumers, and secondly, can lead hromada residents to believe that the actions of the authorities are aimed at their maximum satisfaction, and not at the participation of citizens in solving the problems of hromadas (Clarke J., 2005). T. Bezverhnyuk considers good governance through the possibility of transformation of the entire public sphere, understanding it as a mechanism for ensuring the functioning of society as an integral self-regulating system, a way of exercising public power, thanks to which the following aspects are achieved: compliance of public policy with the needs of social development; real participation of citizens in the development and implementation of public policy; combining the potential of all three

sectors (government, business, public); constant control of various segments of society by public authorities, etc. (Bezvernyuk, 2008).

Clarke J. (2005) defines good governance as a method of governance with public participation that is carried out in an accountable and transparent manner, based on the principles of efficiency, legitimacy and consensus, in order to promote the rights of individual citizens and the public interest. It means the political will to ensure the material well-being of society, sustainable development and social justice. Christensen T., Læg Reid P., Stiger I. M. (2006) notes that good governance means creating an effective policy framework that facilitates private economic activity through a stable system, the rule of law, effective public administration, coordinated administration with the will of democratically elected governments and a strong independent civil society. On the other hand, Rothstein and Teorell identify good governance with a way of exercising state power (legislation, policy implementation) in which leaders comply with the law (Rothstein, Teorell, 2008). B. Jessop argues that "good governance" is a response to the ineffectiveness of central (state) and market coordination mechanisms and we can perceive them as a theoretical paradigm associated with a self-reflexive, organizational, institutional and constitutional form (Jessop, 2007). Dunleavy P., Margetts H., Bastow S. and Tinkler J. (2016) explored governance in the digital age, namely feasibility and benefits electronic government. Uddin M., Haque C., Khan M. (2021) explored local governance and policy implementation to reduce potential risks: real, perceived and contested perspectives in territorial communities.

The world experience shows that the dynamic development of the market of goods and services, constant changes in the external environment and increasing competition necessitate the search for new tools and methods of managing territorial communities, taking into account the new information flows that arise between territorial communities and the external environment. Therefore, it is important to study the implementation of the concept of "good governance" through the application of a process approach to the management of territorial communities in Ukraine.

## 3. Methodology

The methodological basis of the study is the methods of comparative analysis to substantiate the postulates related to the process orientation of local government and recommendations for the functioning of public administration in the light of the concept of good governance; system-structural and dialectical methods to substantiate the essence of the transformation processes of the public sphere

and determine the role of the concept of "good governance" in the management of territorial communities; an integrated approach and system analysis to formulate recommendations in the field of process orientation in the functioning of the local self-government apparatus.

#### 4. Findings

Turning former industrial areas into creative spaces is a modern trend of urban revitalization (Roberts et al., 2017). The main tasks of the leadership of hromadas are to improve the regulatory and competition policy within the amalgamated hromada, the use of new online services based on open data by local governments, the implementation of programs to support entrepreneurship and local development projects. The State Strategy for Regional Development of Ukraine for the period of 2021–2027 (Resolution of the Cabinet of Ministers..., 2020) indicates that certain types of territories require special attention from the state and the use of special mechanisms and tools to stimulate their progress.

In addition, the process approach interprets governance as a series of direct interrelated actions. These actions ("management functions"), each of which is a process in itself, largely determine the success of the hromada. Therefore, according to the authors, "good governance" is an effective form of human participation in the exercise of public power

on the basis of a process approach, through the use of information technologies that ensure the establishment of interaction with the public at all stages of decision-making and the ability to control the activities of public authorities in order to defend the rights of individual citizens and solve public issues.

The Strategy for Regional Development of Ukraine (MinRegion, 2020) is dominated by Sustainable Development Goal 11, which provides for ensuring the openness, safety, livability and environmental sustainability of cities and other settlements of Ukraine. The authors believe that the strategy of "good governance" will play an important role in this.

Good governance can be seen as a concept that has been mainstreamed into public administration (Lynn, 2006). At the same time, attention should be paid to the possibility of operationalizing this concept, which is often the basis for creating sets of indicators that characterize the quality of governance at the level of states and regions.

Good governance is defined through the prism of core principles, namely: openness, participation, accountability, efficiency, effectiveness and consistency. A general understanding of the above principles is presented in the Table 1.

Taking into account the above and the defined principles, it is possible to formulate recommendations for local governments in the field of process management in accordance with the principles of independent governance and good governance.

Table 1

#### Principles of good governance

The principle of proper management	Definition of the principle
Openness and transparency	Ensuring public access to information and promoting understanding of the mechanism of local public activities.
Participation	Involvement of citizens and stakeholders in the activities of public institutions. This activity can be understood, for example, as the act of involving people in expressing their opinions; giving them the right to influence decisions that affect them and increasing their representation, which is expected to contribute to the efficiency of public service delivery.
Competence and capacity	Ensuring proper performance of their duties by local (elected) representatives and officials.
Approaching the goal	The degree of approaching the goal, and in the case of local self-government, the question of correctly setting the goal, that is, one that meets public needs, is additionally important.
Efficiency	Ensuring the achievement of objectives with the most optimal use of resources. Effective administration is therefore an administration that uses the best possible resources and seeks to optimise the costs incurred.
Innovation and openness to change	Ensuring benefits from new solutions and best practices.
Sustainable development and strategic (long-term) orientation	Taking into account the interests of future generations.
Accountability	The possibility of holding officials accountable for their decisions, which leads to the existence of a complex system of standards and external control. Accountability also means the establishment of criteria for assessing the performance of civil servants, which make it possible to objectively evaluate performance.
Cohesion	Internal consistency of the state policy (strategy) with the activities aimed at its implementation. In principle, the implementation of this principle serves to strengthen the strategic capacity of the administration, improve communication both internally and externally, reduce social inequalities and coordinate the policies of local authorities.

"Good governance" is a model of public administration that provides for decentralization of power relations, ensures an appropriate level of coordination and cooperation of such elements as state power, municipal power, economic power and people or community. Governance has a specific local dimension, because it is in a particular city, town, village that the life of each individual person takes place, their interests are realized, everyday problems are solved (Torres, Pina, Royo, 2005).

Article 3.1 of the European Charter of Local Self-Government states that good governance is essential for all levels of public administration (European Charter of Local Self-Government 2017).

The authors believe that this is especially important at the local level, as local governments are the level of government that is closest to the people and provides them with basic services. It is at this level that people can feel most involved in public activities. The scheme of the management cycle of territorial communities on the basis of management is presented in Figure 1.

In order to formulate specific recommendations for local governments, the authors made the following assumptions about the principles of good governance. First, these rules should not be considered

contradictory, as they follow a logical sequence where they can be seen as successive feedback phases.

The starting point for building the above operational cycle is the principles of cohesion and efficiency. Efficiency is the measure of achieving a goal, which depends on the ability to set goals correctly. According to the idea of good governance, proper goal setting is setting goals in accordance with the needs of the local hromada, and the way to achieve effectiveness in this sense is partnership, and the condition of partnership is openness of public administration.

Information plays an important role. No organization can carry out its activities without information. In the process of normal functioning of the hromada, its management, all its inhabitants, from a simple worker to the director, need different kinds of information. Therefore, it is important to correctly formulate the ways of information transfer. The ways of information transfer play an important role (Figure 2).

The second rule in the presented system, in addition to efficiency, is the principle of effective administration, which means maximizing the achieved effects while minimizing the costs of achieving them. The principle of accountability associated with civilian control

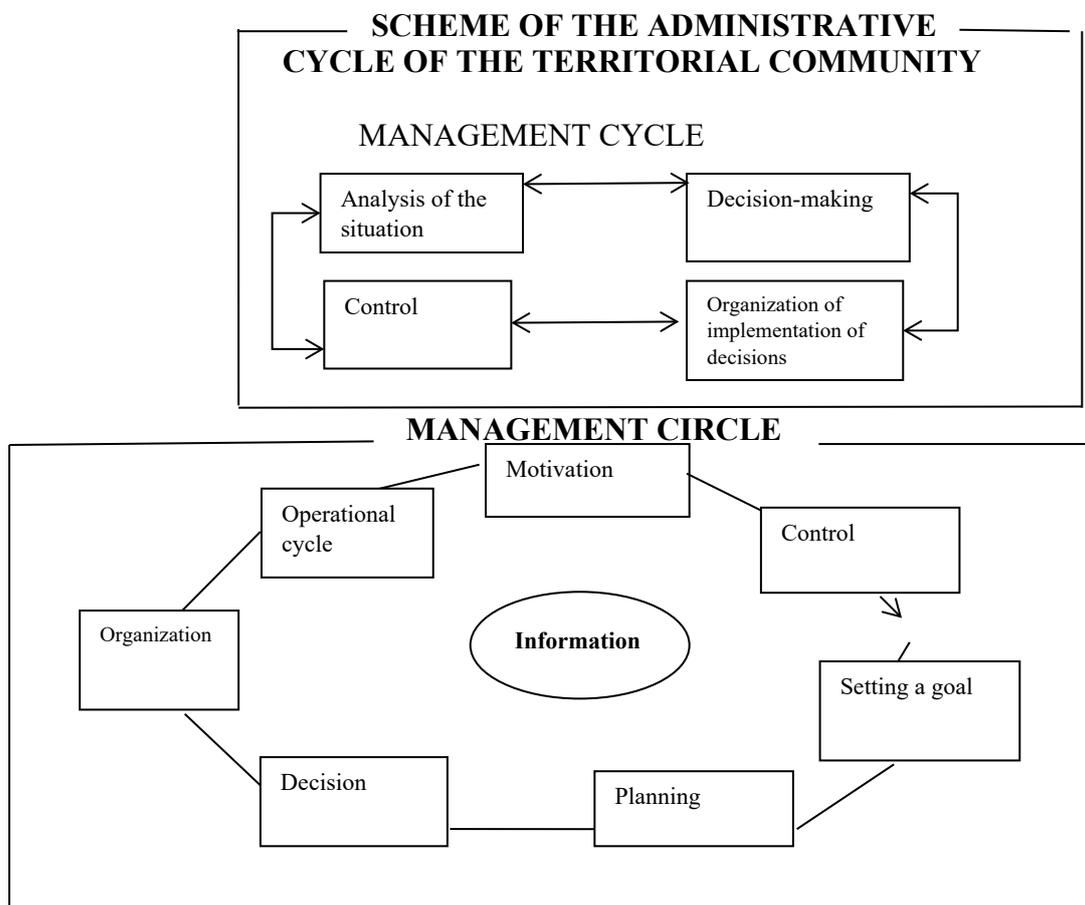


Figure 1. Scheme of the cycle of proper management

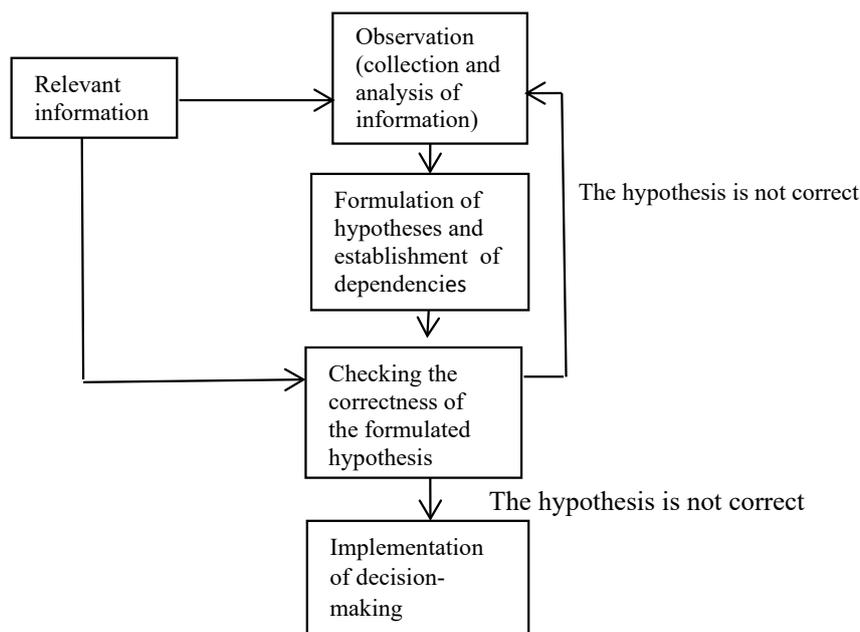


Figure 2. Ways of transmitting information

determines the assessment of the effectiveness of actions and the provision of information to the local population about the results of activities, the degree of achievement of the set goals, as well as the costs incurred and the responsibility of the administration in this regard. Thus, the authors return to the principle of openness of local self-government, closing a certain logically organized cycle of actions. In the proposed model, the principle of consistency complements it and can be considered in two meanings – as the consistency of the activities carried out by the hromada (related to the mutual coordination of actions and their compliance with the defined strategy) and as internal consistency, that is, the consistency of the management system in the local self-government apparatus.

Daily economic challenges in the state require expertise and prompt decisions not only from the central authorities, but also from the direct creators of decentralisation on the ground: local self-government bodies, representatives of the expert and scientific environment, business associations, and the public sector.

In this regard, within the framework of the implementation of the program activities, it is proposed to create platforms for dialogue between local and national leaders in the hromadas in order to develop proposals for changes in the state policy in the field of decentralization and effective management of each hromada in accordance with the current challenges. According to the Good Governance Program, an example is the creation of Project Offices (project management coordination centers)

at the economic policy departments of regional state administrations. The main tasks of the Project Offices should be to improve the regulatory and competition policy of amalgamated hromadas, create and launch new online services based on open data for use by local governments, and implement programs to support entrepreneurship and regional development projects.

The proposal for the cycle of good governance and the establishment of project offices can become the basis for formulating recommendations in the field of process orientation in the functioning of the local government apparatus for the effective management of hromadas. In this approach, process management includes both change management in the organizational system and continuous monitoring and control of processes. Thus, the management of the processes of functioning of the hromada includes:

- organization of design and implementation works;
- development of an implementation template, known as the execution process method and associated supporting processes;
- creation of conditions for the implementation of executive processes, known as the process implementation system, in accordance with the previously developed methodology;
- ensuring the effective implementation of the following specific processes, in accordance with the developed methodology, in the created implementation system.

When implementing recommendations on good governance in process management in hromadas, the starting point should be the full identification of

stakeholders within certain pre-defined processes. According to the principles of good governance, in particular the principle of openness and participation, this is a prerequisite for further activities in the field of process management, as these activities require interaction with stakeholders. First of all, it will be: informing specific stakeholders about the planned activities that are carried out within the framework of the processes implemented by the local self-government apparatus, and conducting activities aimed at activating the stakeholders of the hromada in order to obtain their opinion on the planned goals of the processes and ways of their implementation. The condition for participatory process management will be to take into account the opinions of stakeholders and employees when planning goals, implementation methods and process flows. After the description of the implementation model, the next step will be to provide stakeholders, primarily residents of the hromada, with information on the progress of the processes, which corresponds to the prerequisite of the principle of openness. In order to ensure the implementation of the principles of efficiency and effectiveness, it is necessary to implement such measures that can lead to the improvement of the process efficiency parameters. First of all, it will be the creation of a system for measuring efficiency and receiving proposals from stakeholders on the methods of performing tasks and customer service by local governments, as well as accounting by the executors of the processes of the achieved results, which can be reflected, for example, in the bonus system. In addition, systematic evaluation of the implemented processes and reporting on the results achieved to stakeholders will ensure the implementation of the accountability principle. These proposals on the processes to be implemented should be taken into account in order to continuously improve the methods of hromada management.

## 5. Conclusions

Good governance, being a peculiar pinnacle of the evolution of public administration, has absorbed all the best and most effective of the previous theoretical and practical achievements of democratic reforms in foreign European countries, and the implementation of the principles of good governance will contribute to the effective implementation of the provisions of the European Charter of Local Self-Government.

Leadership as a modern approach to ensuring the growth of the efficiency of hromada management based on the use of modern standards of work allows to respond to the challenges and needs of today.

In order to introduce the paradigm of good governance in the management of hromadas, it is advisable for the state authorities of Ukraine and its

local self-government bodies to provide, from the legal point of view and effective foreign practice of hromada management, regulation and legalization of the process of making managerial decisions, as well as their implementation with the joint participation of representatives of not only the authorities, but also business and the public; implementation of standards and principles of good governance in order to restore those hromadas that have suffered the devastating impact of Russian aggression in Ukraine and their further development.

Of course, the implementation of the principles of good governance does not exclude the procedural approach in the activities of administrative institutions. However, it can be concluded that the principles of good governance expand the scope of recommendations for local governments. Here it is necessary to emphasize the principles of openness, participation and accountability, which, of course, within the framework of the current legislation, require access to information in the framework of the implemented processes and taking into account the opinion of stakeholders in the planning and management processes. The main difference stems from different assumptions in the trends of new public management, and hence the application of the process approach in local and public administration. In the case of the process approach, the customer remains in the centre of attention, while the application of recommendations related to good governance changes this assumption, indicating that the starting point for process management is the identification and participation of stakeholders (not only residents or customers of the hromada). In the case of applying the principles of good governance to process management, the method of designing the process model also deserves attention. The process approach in itself does not imply any specific approach, but, if properly managed, involves stakeholders in the project work. This is due to the emphasis on openness and participation, not just on efficiency and effectiveness. It is worth paying attention to certain convergent elements of the process approach and good governance arising from different prerequisites. It is about creating a system for measuring the effectiveness of management processes in hromadas. In the case of process orientation, this serves (in addition to improving the efficiency of reconstruction and development of hromadas) to create a basis for continuous improvement, while in the case of recommendations on good governance, the main prerequisite is the implementation of the principle of accountability.

Thus, the concept of "good governance" as a new type of governance ensures a change in the nature of power relations, creates accessibility and openness of power, the possibility of its control, reduces the

expenditure of resources and funds from the state budget, establishes effective relations between the government and society, democratizes public power, makes the state attractive for investment, and

therefore economically viable. In a broad sense, the implementation of the "good governance" system is a way to modernize Ukraine, a new, but maximally adapted to modern requirements form of citizen participation.

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# ECONOMIC GROWTH AND TOTAL FACTOR PRODUCTIVITY IN CENTRAL AND EASTERN EUROPEAN COUNTRIES BETWEEN TWO GLOBAL CRISES AND BEYOND

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**Abstract.** The *aim* of the article is to assess the factors of economic growth of the CEE countries over the 30-year history, the productivity of capital and human resources, the resilience of these countries to the negative impact of the global financial crisis. *Methodology.* The Solow growth model was used to estimate the growth rates of capital, labor and total factor productivity (TFP). The impact of macroeconomic indicators on GDP and TFP growth is assessed. The group of Central and Eastern European countries that joined the European Union was chosen for the analysis: Bulgaria, Romania, Poland, Hungary, Czech Republic, Slovakia, Slovenia, Estonia, Lithuania, Latvia, as well as post-Soviet European countries: Ukraine, Belarus, Russia and Moldova and Albania in the period from 1991 to 2019. *Results.* TFP makes a significant contribution to the economic growth of CEE countries. During the period of market reforms, TFP significantly decreased, and during the boom of 2000–2008 it fully ensured the growth of the CEE economies, after the crisis of 2008, the contribution of TFP decreased by 2 times. In the conditions of recovery, TFP growth is positively influenced by inflation, negative CA balance, and unemployment reduction. In the post-crisis period, a decrease in inflation, a positive CA balance, and an increase in unemployment had a positive impact on TFP growth. During a depression, the influence of capital becomes dominant. Restrictive monetary policy contributes to the efficiency of CEE economies. In the short run, unemployment increases, but in the long run it decreases significantly due to the growth of investment and exports. *Practical implications.* The analysis makes it possible to identify effective macroeconomic policies to stimulate the productivity of the economies of Central and Eastern Europe during the period of economic recovery and depression. *Value/originality.* A long-term study of the economic performance of CEE countries using the Solow methodology has revealed the behavior of total factor productivity in different periods of modern economic history and its contribution to economic growth.

**Key words:** economic growth, total factor productivity, crisis, internal and external balance, CEE.

**JEL Classification:** O47, O57, F43

## 1. Introduction

The thirty-year development path of post-socialist countries requires serious reflection and new understanding of further movement in the conditions of economic and geopolitical turbulence observed on the European continent.

The struggle of economic models of development of states, their successes and failures, their potential in ensuring stable economic development are becoming decisive in the modern world economy.

The Soviet model of economy with its authoritarian-totalitarian institutional environment left a deep imprint on the economic life of the countries of Central and Eastern Europe, especially on the attitude

to the working person and the formation of value orientations. All this is very clearly projected on the social capabilities of the economy, its productivity. Resource-rich Russia, which has significant problems in economic efficiency and distribution of national wealth, wants to compensate for its backwardness in productivity with an aggressive war of aggression against Ukraine, terrifying the free peoples of Europe.

The global crisis of 2008, as well as the pandemic, had a significant impact on the economies of CEE countries, which is associated with significant capital outflows, volatility in world resource prices, and rising unemployment. In this analysis, an attempt will be made to assess the factors of economic growth

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in CEE countries over the 30-year history, how fully and efficiently capital and human resources are used, and how resilient these countries are to the negative impact of the global financial crisis. All this affects the future capacity of the countries to counter the pandemic, as well as geopolitical challenges.

The crisis of 2008 has certain common features with the crisis of the early 1930s, which ended with the Second World War, when European countries were economically weakened and the process of protectionism in international trade and the collapse of the Genoa Monetary Agreement began. Germany, which lost the First World War, wanted to take revenge and implement a new territorial division of Europe, which is very similar to the actions of Russia, which is trying to restore the collapsed Soviet Union, and even 6 years after the global financial crisis.

Productivity of the economy in the definition of such famous economists, Nobel laureates as R. Solow, P. Krugman, J. Stigler, who first introduced the concept of total productivity of production factors (Stigler, 1947), is a determining factor in the economic life of the country, which ensures long-term stability and prosperity.

So, P. Krugman in his book "The Age of Diminishing Expectations" wrote that "Productivity is not everything, but in the long run it is almost everything" (Krugman, 1997, p. 11).

The high productivity (efficiency) of the economy shows how much it has adapted, whether technological changes have taken place that have laid a stable foundation for sustainable economic growth, as well as the insulation of the economy from internal and external shocks.

In this study, the period of economic development of the CEE countries was divided into three stages: I stage – 1991–1999 – the stage of radical market reforms, liberalization of economic life; II stage – 2000–2008 – economic recovery, acceleration of economic growth rates, which were the highest in the world, huge inflow of foreign capital; III stage – 2009–2019 – the beginning of the crisis, recession, outflow of private foreign capital, high unemployment, the beginning of the Russian-Ukrainian war. In comparison of the last two periods the main economic trends of post-crisis development of the CEE countries are determined.

## 2. Analysis methodology

Growth accounting helps to explain economic growth by decomposing output growth into the contributions of capital, labour and residuals as a measure of improvements in the efficiency of capital and labour use. The residual is an estimate of changes in total factor productivity (TFP), which reflects a wide range of factors that affect the efficiency

of resource use. Labour productivity is affected by the level of education and work experience. Capital productivity is affected by the age of the equipment, the level of technology embodied in it, and whether the capital good is publicly or privately owned (Iradian, 2007).

In the twentieth century, the model formalization of the mechanism of economic growth was carried out in the works of Robert Solow (2, 3), written in 1956 and 1957, respectively. Using the Cobb-Douglas production function, the trajectory of economic growth is calculated:

$$Y = AK^\alpha L^{1-\alpha} \quad (1),$$

where  $Y$  is the total income of the economy,  $K$  is the amount of capital,  $L$  is the amount of labor,  $A$  is the level of technical progress or total factor productivity,  $\alpha$  is the parameter that determines the share of capital. The author decomposed this formula in a dynamic form, differentiating (2, 3):

$$\Delta Y = \Delta A + \alpha \Delta K + (1 - \alpha) \Delta L \quad (2)$$

$$\Delta A = \Delta Y - (\alpha \Delta K + (1 - \alpha) \Delta L) \quad (3)$$

Variable  $\Delta A$  (rate of growth of total factor productivity) is set externally or exogenously, and it is impossible to influence its value. The economy grows steadily up to a certain steady state of capital per capita, after which only technological progress is the main source of growth. This model is called the neoclassical theory of exogenous economic growth.

The group of Central and Eastern European countries that joined the European Union was chosen for the analysis: Bulgaria, Romania, Poland, Hungary, Czech Republic, Slovakia, Slovenia, Estonia, Lithuania, Latvia, as well as post-Soviet European countries: Ukraine, Belarus, Russia, Moldova and Albania and conducted a study of economic growth in the period from 1991 to 2019, which covers 420 observations.

The capital was calculated on the basis of the PIM method (perpetual inventory method) with a capital depreciation rate of 5%, and for the period from 1990 to 2019 in USD at constant 2005 PPP prices. The amount of capital for 1990 was estimated according to the capital to GDP ratio of 3. According to the PIM method (4), the amount of capital in a given year is equal to the amount of capital in the previous year plus investments minus depreciation for the year of the initial capital for the year.

$$K_{t+1} = K_t + I_t - \delta K_t \quad (4),$$

where  $K_{t+1}$  – the amount of capital,  $I_t$  – investment rate,  $\delta$  – rate of depreciation of capital. According to the PIM method, the amount of capital in a given year equals the amount of capital for the previous

year plus investments minus depreciation for the year of the initial capital for the year. The author collected share of capital  $\alpha$  from UN data national accounts (UNSD, 2021), using data on compensation of employees.

A preliminary analysis of capital per worker shows a significant increase in the new EU member states: Poland, Slovakia and the Baltic States more than doubled, in contrast to the post-Soviet European countries, where the growth of capital per worker does not exceed a few percent, and in Ukraine has not reached the levels of 1991, and given the significant reduction in employment in these countries, the total amount of capital in the economy has changed very little.

In general, it can be concluded that over the past thirty years the differentiation in the provision of post-socialist countries with physical capital has increased significantly.

Some authors have interpreted economic growth through direct effects of human and physical capital (sweat factors) and through TFP growth (inspiration). Inspired growth can raise the technological frontier, thereby increasing the maximum possible output with a given amount of human and physical capital; alternatively, it can increase the efficiency of human and physical capital, bringing output closer to the maximum possible given the existing technological frontiers (Van Leeuwen et al., 2015). Total factor productivity can be interpreted as technological improvement or factor efficiency improvements, as the acquisition and introduction of new technologies, structural reallocation or simply a shift to the efficient frontier, sustainable TFP growth is the key to long-term economic development (Burda & Severgnini, 2009).

The first accounting of economic growth was carried out by R. Solow, who found that the accumulation of physical capital accounted for about 12% of the increase in output per hour worked in the United States from 1900 to 1949, and the remaining 88% was due to the growth of TFP (Solow, 1957).

In more recent study for 145 countries Baier, S., Dwyer, G., & Tamura, R. found that weighted-average TFP growth is only about 8% of growth of output per worker. They attribute this decline in TFP to institutional regression and armed conflict. Their study of TFP growth shares for different regions shows the following results: 25% growth in output per worker for Western countries, 20% for Southern Europe and 18% for newly industrialized countries (Baier et al., 2002).

A new study by these authors in 2016 over a longer period of time and a new methodology for measuring human capital found that in the unweighted case, output per worker in a typical country had an annual growth rate of 1.32%, 0.90% for inputs and 0.42% for

TFP, with growth in inputs explaining almost 60% of the growth in output per worker, with a range from 55% for Asia to 94% for Central and Eastern Europe over the period 1970 to 2010, with negative growth rates in TFP (Tamura et al., 2016). With the new human capital measure, more than 90 percent of the variation in long-run growth can be explained by variation in the growth of expenditures per worker, and less than 10 percent by variation in TFP growth.

Furthermore, between 55% and 70% of the variation in the logarithm of output per worker can be explained by the variation in the logarithm of the level of inputs, and less than half of the variation in the logarithm of output per worker can be explained by the variation in the logarithm of TFP. These results are robust to different time periods and different values of human capital accumulation technology parameters. The longer the study period, the smaller the share of TFP growth in output per worker (Tamura et al., 2016).

For Central and Eastern European countries, special growth accounting studies have been conducted (Alam et al., 2000; Brada, Bah El-hadj, 2009; De Broek, Koen, 2000; Dobrinsky et al., 2006; Iradian, 2007; Schadler et al., 2006; Van Leeuwen et al., 2015; Levenko et al., 2017), in which TFP growth was measured for different periods.

### 3. Growth accounting for CEE and its explanation

In the Soviet economic model, economic growth was an imperative, but the introduction of an extensive rather than intensive growth strategy led to the collapse of the socialist system (Campos and Corricelli, 2002). Why did this happen? The answers are: low productivity and various rigidities in the economic structure, which are well reflected in the low elasticity of substitution between factors of production (Easterly and Fisher, 1995). During the last fifteen years of the Soviet Union (1978–1993), GDP growth was -1%, physical capital growth was 3%, and TFP growth was negative -4% (Van Leeuwen et al., 2015).

The beginning of market reforms, which was associated with price liberalization and small-scale privatization, as well as the creation of new independent states after the collapse of the Soviet Union, was accompanied by a significant decline in economic growth.

In fact, all countries showed a decline, except Poland and Slovenia, where it was short-lived. The dominant factor behind the fall in gross domestic product was a sharp decline in the efficiency or overall productivity of the factors of production. Capital degraded, labour was artificially delayed, and technology became obsolete, especially in large

industrial enterprises. According to the authors, the lack of structural adjustment led to low unemployment, which in turn increased inefficient employment.

In the first period, CEE countries showed a significant decline in economic growth, with the worst performance in the post-Soviet republics: Moldova, Russia, Ukraine, where the annual decline ranged from 5 to 7%. In the Baltic States, the decline was also significant – from 1.65 to 4.1%. The lowest rates of decline were observed in Albania, Czech Republic and Hungary. Economic growth was observed only in Poland, Slovenia and Estonia (Table 1).

Decomposition of economic growth indicators shows a significant drop in employment growth in all countries except Romania and Slovenia. The highest annual rate of employment decline was observed in Estonia -3.5%, on average this indicator was -0.83% (Table 1).

As for capital, its growth was observed during this period, as countries carried out technological reconstruction and formed the foundation for future economic growth (Table 1). Among the countries with high growth rates of physical capital are: Albania, Czech Republic, Poland, Slovakia, Slovenia.

A drop in capital accumulation was observed in Bulgaria, Latvia, Lithuania, Moldova and Ukraine. If to project this process to the aftermath of the 2008 crises, an interesting pattern emerges: the higher the rate of capital accumulation observed in 1991–1999, the lower the volatility of economic growth, measured by standard deviation, with a correlation coefficient of -0.75.

Thus, a high level of capital is the basis for the sustainability of economic growth and its low volatility.

The rate of decline in total factor productivity during this period was extremely high, especially in Moldova, Ukraine, Russia, Romania and Lithuania (Table 2). Only in Poland TFP grew by 3.24% during this period, indicating significant technical change. The analysis shows that the drop in economic growth was largely caused by a decline in economic efficiency. Although there is a rather interesting phenomenon, when in some countries (Czech Republic, Hungary, Slovakia, Slovenia) with a very significant loss of economic efficiency there was a parallel accumulation of capital. This is a wise economic policy aimed at future economic achievements and sustainable development of the state.

It was noted that the transformational recession has become a large-scale growth crisis in most countries of Eastern Europe and the CIS, in which two main factors of production and aggregate production efficiency have made a negative contribution to GDP growth (Dobrinsky et al., 2006). This period also accompanied by a sharp drop in TFP, largely reflecting the "disorganization effects" (Blanchard and Kremer, 1997).

The study (De Broeck and Koen, 2000) notes that the drop in output at the beginning of the transition period is explained by a decline in TFP growth, which indicates a rapid deterioration of the growth potential of the Soviet-style economy (Campos and Corricelli, 2002).

In general, during the transformation of the planned-administrative economy into a market economy, according to our estimates, the decline in GDP during this period is 96% explained by the fall in total factor productivity (Table 2).

Quite sporadic and chaotic moves to liberalize economic life in many CIS countries ended in the

Table 1

**Contribution of capital and employment to economic growth in CEE countries**

Country	Capital growth			Employment growth		
	1991–1999	2000–2008	2009–2019	1991–1999	2000–2008	2009–2019
Albania	3,01	14,60	4,46	-1,05	-0,38	0,77
Belarus	0,84	4,98	7,00	-1,09	1,44	0,28
Bulgaria	-0,34	5,66	2,61	-1,03	2,15	-0,66
Czech Republic	2,70	3,77	2,32	-0,30	0,73	0,71
Estonia	0,97	9,26	6,11	-3,50	1,51	0,12
Hungary	0,74	2,88	1,66	-0,37	0,12	1,61
Latvia	-1,86	4,87	1,84	-2,60	1,69	-1,28
Lithuania	-0,50	4,28	1,96	-0,86	0,09	-0,30
Moldova	-0,47	1,44	2,25	-1,19	-0,45	-0,48
Poland	2,07	4,13	3,88	-0,65	1,57	0,84
Romania	1,13	4,59	3,00	1,85	-2,44	-0,15
Russian Federation	0,40	1,48	1,95	-0,68	1,08	-0,15
Slovak Republic	3,37	3,04	2,26	-1,04	2,00	0,61
Slovenia	2,02	5,54	1,98	1,41	1,34	-0,06
Ukraine	-0,92	0,16	-1,27	-1,39	-0,06	-0,87
Average	0,88	4,71	2,80	-0,83	0,69	0,07

Source: author's assessment

1998 financial crisis (the so-called "Russian winter"), which was accompanied by a significant devaluation of national currencies and, in fact, the formation of an authoritarian regime in Russia, which is still in force today.

The recovery of growth in the 2000s, preparations for EU accession, and foreign capital inflows led to accelerated economic growth. Such a high dynamics of economic development was due to improved terms of trade, high quality of institutional reforms for the countries that integrated into the European Union, as well as export orientation and commodity boom in the world economy for the CIS countries.

The second stage of economic development covers the period 2000–2008. Since 2000, the economic growth of the CEE countries began to boom. GDP growth rates ranged from 5 to 11%. The highest rates of economic growth were in the Baltic countries, as well as in the European post-Soviet republics – Ukraine, Belarus and Russia.

Capital growth in all countries is positive, averaging 4.7% (Table 1), with the highest rates in Estonia and Albania, which have undergone a transition from agrarian to industrial economies. The lowest indicators were observed in the economies of Ukraine and Russia.

Common to this group of countries was rapid financial integration, increased inflow of foreign capital and dominance of foreign banks in the financial markets of post-socialist European countries. Analysis of investments and savings shows that Central and Eastern European countries have chosen the path of economic development at the expense of foreign capital and external savings. The gap between savings and investments in favor of the latter has increased significantly over the period 2002–2008.

Total foreign financing of Eastern European countries increased from 96 billion USD in December 2003 to a peak of 550 billion USD in September 2008. Foreign liabilities of the banking sector of the CIS countries increased nine times in five years and reached USD 280 billion. The Baltic countries are the most dependent on foreign banks (almost 50% of banks' liabilities belong to foreign creditors) (Flows to Eastern Europe, 2009).

The pace of economic reforms in general slowed down during this period, and high growth rates were based on a rapid increase in domestic demand, credit booms contributed to consumption growth and investments in construction and real estate. The flip side was the emergence of very large external imbalances as production capacity did not keep pace with demand.

Financial flows from the EU increased sharply after accession, from less than 1% of GDP on average before accession to almost 2.5% of GDP within three years in the form of structural funds, agricultural support and other subsidies (Roaf et al., 2014).

In general, it can be said that external debt has been growing in all Central and Eastern European countries during these years, especially after 2002. The average external debt of the Central and Eastern European countries in 2008 was USD 1165.3 billion.

EU membership spurred economic and financial integration, leading to rapid economic growth and large capital inflows. It also created a "halo effect", shielding some countries from paying more to borrow external funds in spite of growing vulnerabilities (Čihák, Mitra, 2009).

During this period, the growth rates in transition countries were significantly higher than in the euro

Table 2

**Contribution of total factor productivity to economic growth in CEE countries**

Country	1991–1999			2000–2008			2009–2019		
	GDP growth	TFP growth	TFP share	GDP growth	TFP growth	TFP share	GDP growth	TFP growth	TFP share
Albania	-0,01	-1,19	131,2	5,59	-2,27	-0,41	3,09	0,30	0,10
Belarus	-2,37	-2,12	0,89	11,03	7,68	0,70	1,83	-2,03	-1,11
Bulgaria	-2,42	-1,74	0,72	7,58	3,14	0,41	1,31	-0,02	-0,01
Czech Republic	-0,33	-1,46	4,45	4,95	2,49	0,50	2,19	0,54	0,25
Estonia	-1,65	0,33	-0,20	8,21	2,86	0,35	2,24	-1,01	-0,45
Hungary	-0,75	-0,79	1,06	3,73	2,20	0,59	1,58	-0,06	-0,04
Latvia	-4,10	-1,79	0,44	8,59	5,07	0,59	3,39	2,94	0,87
Lithuania	-3,68	-2,99	0,81	8,62	6,08	0,71	2,26	1,32	0,58
Moldova	-8,68	-7,80	0,90	7,98	7,29	0,91	3,79	2,69	0,71
Poland	3,96	3,24	0,82	4,94	1,77	0,36	3,99	1,26	0,31
Romania	-2,07	-3,50	1,70	7,22	5,38	0,75	1,84	-0,01	-0,01
Russian Federation	-5,26	-5,10	0,97	8,37	7,07	0,84	0,79	-0,16	-0,21
Slovak Republic	0,07	-0,70	-9,74	7,58	4,93	0,65	2,40	0,77	0,32
Slovenia	1,11	-0,48	-0,43	5,00	1,60	0,32	0,67	-0,27	-0,40
Ukraine	-7,38	-6,21	0,84	8,96	8,90	0,99	-1,28	-0,19	0,15
Average	-2,24	-2,15	0,96	7,22	4,28	0,59	2,01	0,40	0,20

Source: author's assessment

area and exceeded the world average. This is because they are middle-income countries that are catching up with more advanced economies in terms of both capital investment and knowledge acquisition. They grow faster because it is usually easier to imitate existing technologies that have been pioneered in other countries than to innovate (Aghion et al., 2010).

Employment in almost all countries, except Moldova and Romania, grew at an average annual rate of 0.69% (Table 1). During this period, extremely high growth rates of economic efficiency were observed. The growth due to technological progress was 59% (Table 2).

The same results were obtained in surveys (Dobrinisky et al., 2006; Iradian, 2007; Schadler et al., 2006). The most important factor contributing to the acceleration of the post-crisis recovery was the sharp increase in TFP in the later stages of transition. Moreover, in a number of countries the average annual TFP growth rates during 2000-2003 exceeded the corresponding average annual GDP growth rates. At the same time, capital accumulation during this period contributed to positive technological change as new investments were directed to modern and highly productive capital equipment. Thus, positive TFP growth likely reflected a combination of productivity gains and technological change (Dobrinisky et al., 2006).

TFP growth in the CEE region was almost twice as high as in other groups of emerging market countries. This is not surprising given the inefficiencies inherited from central planning, which left much room for improving management, freeing up labour and benefiting from intersectoral reallocation of resources (Schadler et al., 2006).

Burda, M. & Severgnini, B. using Solow-Törnqvist residuals estimated of total factor productivity (TFP) growth in a sample of 30 European economies for the period 1994–2004, they conclude that TFP growth was consistently higher in Central and Eastern relative to Western Europe.

Consider the economic consequences of the external shock caused by the global financial crisis of 2008. Between 2000 and 2008, CEE countries changed the structure of their capital account in favor of debt, the share of direct investment became smaller, but investment inflows are more stable than those that generate debt.

O. Blanchard emphasized that one of the channels through which the crisis moved from developed economies to emerging markets was the reduction of credit lines from financial institutions of developed countries to their foreign subsidiaries, which forced them, in turn, to sell assets or reduce lending to domestic borrowers.

Securitisation and globalisation have led to increased interconnectedness between financial

institutions both within and between countries. Foreign claims of banks from the five largest developed countries increased from USD 6.3 trillion in 2000 to USD 22 trillion in June 2008. In mid-2008, these banks' claims on emerging market countries alone exceeded \$4 trillion. Think about what this means if for some reason these banks decide to reduce their foreign investments, as is happening now (Blanchard, 2009).

Capital inflows can increase banks' risks, while capital outflows can have serious macroeconomic consequences if they lead to a domestic bank liquidity crisis. Research on country financial vulnerabilities in the context of financial integration shows that emerging market countries (Southeast Asia, Latin America, and Eastern Europe) are more susceptible to crises in the face of an unexpected reduction in capital inflows if their debt obligations (Lane, Milesi-Ferretti, 2006). Debts are denominated in foreign currency because the cost of debt servicing in national currency increases depending on the level of devaluation of the national currency. Thus, for the growth of the national economy it is more efficient to attract foreign capital in the form of foreign direct investment.

In contrast, most Central and Eastern European countries quickly accumulated large net external liabilities, but relied heavily on equity financing, which improves risk sharing by more closely linking the return on external liabilities to domestic economic performance. At the same time, increased international financial integration naturally increases vulnerability to external financial shocks (Lane, Milesi-Ferretti, 2006).

Debt flows are much more volatile, as they are cyclical and highly volatile and, in case of negative shocks, can have a negative impact on the economic growth of the borrowing country. Foreign capital in CEE countries has been used to finance non-tradable sectors of the economy and contributed to overheating of the economy, causing a boom in consumer demand and widening the current account deficit. The fixed currency regime contributed to the deepening of GDP decline with high external borrowing. The currency and financial crisis of 2008 is a clear example of such consequences for Ukraine, Hungary and Latvia.

The crisis of 2008 radically changed the economic situation, and in the following years the average economic growth rate in the EU member states decreased by about 3 times, in Russia – by 11 times, and in Belarus there was a six-fold drop. At the same time, the share of capital increased by 1.5-2 times, especially in rich EU countries.

After the crisis and until 2019, the average economic growth rate fell by more than 3.5 times, while the capital growth rate decreased by 1.6 times

and employment growth fell by 10 times (Table 1). Only Poland, Hungary, the Czech Republic and Slovakia have positive employment growth due to stable capital accumulation and moderate growth in total factor productivity (Table 2).

The conclusion is that the contribution of capital and labour has been gradually increasing, especially after the financial crisis of 2008 and the sharp decline in the impact of total factor productivity (efficiency loss) on economic growth in Central and Eastern Europe.

The growth rates of the total productivity of factors became negative in Belarus, Russia, Ukraine, Hungary, Estonia, Bulgaria, Slovenia, and Romania. The highest share of total factor productivity is observed in Latvia, Lithuania, Poland and Moldova, the efficiency of these economies has decreased, but not so radically, than in other Central European countries (Table 2).

Since 2009, CEE countries have been recovering from the crisis with varying degrees of success. Some have reached the pre-crisis level within 3-5 years, others are stagnating to this day, and economic and political conflicts have added to the economic turmoil and imbalance (CIS countries).

In times of crisis, the volatility of economic growth can increase significantly. In this paper, the volatility of economic growth and TFP growth is measured using standard deviation. Measurements were made for each country during the economic boom of 2000–2008 and after the crisis of 2009–2019.

The results show that, on average, the volatility of economic growth increased by 1.7 times and the volatility of TFP growth by 1.5 times.

There is a significant differentiation of these indicators between countries. The greatest volatility of economic growth indicators increased in the Baltic States, in particular, in Lithuania – 3 times, Latvia – 2 times. The most stable economies are Estonia, Poland and the Slovak Republic.

Where the highest TFP growth rates were during the economic upturn, after the crisis there is an extremely high volatility of economic growth rates. Thus, Latvia, Lithuania, Ukraine and Moldova demonstrated very high TFP growth rates (in the range of 5-8%). Instead, in countries where physical capital grew steadily and TFP grew moderately, the volatility of economic growth is stable and low.

It is interesting to determine the period that countries needed to restore the level of GDP per capita that was in the pre-crisis period. It should be noted that in Albania, Belarus and Poland there was no fall in GDP per capita. It took 3-4 years to restore the well-being of people in Bulgaria, Slovakia, Lithuania, Russia and Moldova; 6-7 years – in the Czech Republic, Estonia, Hungary and Latvia; 9 years – in Slovenia, while the Ukrainian economy has not yet recovered.

A significant jump in unemployment was observed in almost all CEE countries. Most countries overcame labour market imbalances in the first few years after the crisis. However, in the Baltic States, this process was delayed, so in Estonia and Latvia the pre-crisis level of employment was reached in 2018, in Albania – in 2019, in Latvia – in 2020.

#### **4. Internal and external balance and economic growth in CEE countries**

The economic boom of 2000–2008 was associated with significant internal and external imbalances (Table 3). Especially countries with high GDP and TFP growth rates experienced very high inflation (Belarus, Moldova, Romania, Russian Federation, Slovak Republic and Ukraine).

As economic growth was supported by a significant inflow of foreign capital in the form of debt, which caused a significant deterioration of the current account balance (in Albania -8.7%, Bulgaria -9.5%, Estonia -10.6%, Latvia -11.6%, Lithuania -8.5%, Romania -7.17%).

In countries with moderately growing economies, the budget deficit was quite high compared to countries with high GDP and TFP growth rates, but during the economic boom the consolidated fiscal deficit was about 2 times lower (Table 3).

After the financial crisis in these countries (Czech Republic, Hungary, Poland, Slovakia) the budget deficit decreased, while in the countries with fast-growing economies the budget deficit increased by 1.5 times.

Current account balances (CA) improved dramatically in all countries, especially in the Baltic States, but also in Hungary, Slovenia, the Czech Republic and Slovakia. Only in Albania, Belarus and Ukraine the CA balance deteriorated in the post-crisis period. On average, the CA deficit in all countries decreased by more than 3 times. The dominant feature of the economic development of CEE countries after the 2008 financial crisis was a significant increase in public debt. Public debt increased significantly in Belarus, Hungary, Ukraine, Slovenia and the Baltic States. On average, in the group of countries studied, public debt increased by more than 1.3 times. The influence of various macroeconomic factors on the growth of aggregate productivity of production factors is investigated.

The identification of macroeconomic factors, indicators of internal and external equilibrium that influenced economic growth after the 2008 crisis allows us to draw some conclusions. The impact of public debt on the CA balance and especially on the budget deficit is growing compared to the pre-crisis period. The correlation coefficient is -0.23 and -0.79 respectively, compared to -0.04 and -0.23 before the crisis. Growth of public debt reduces negative current account balance and budget deficit.

Table 3

**Internal and external balance before and after the global financial crisis of 2008, % of GDP (average)**

Country	Budget deficit, %		Current account, %		Government Debt, %		Inflation, %	
	2000–2008	2009–2019	2000–2008	2009–2019	2000–2008	2009–2019	2000–2008	2009–2019
Albania	-5,09	-3,67	-8,75	-10,0	58,86	66,90	2,73	2,18
Belarus	-7,69	-1,74	-3,87	-6,48	13,59	44,77	39,93	19,16
Bulgaria	1,23	-1,26	-9,56	0,49	40,32	20,02	7,22	1,26
Czech Republic	-3,61	-1,65	-3,87	-0,68	25,99	38,67	2,98	1,58
Estonia	0,97	-0,09	-10,6	1,38	4,82	8,59	4,83	2,44
Hungary	-6,12	-3,01	-7,26	1,96	59,79	76,55	6,35	2,64
Latvia	-1,51	-2,22	-11,6	-0,05	13,66	40,09	6,12	1,58
Lithuania	-1,93	-3,02	-8,59	-0,32	19,21	37,93	2,93	2,05
Moldova	-0,34	-2,02	-6,39	-6,20	36,97	25,40	13,31	5,29
Poland	-4,07	-3,78	-4,40	-2,34	43,37	52,09	3,52	1,72
Romania	-2,77	-3,37	-7,17	-3,25	20,49	35,66	17,57	3,00
Russian Federation	4,25	-1,52	8,89	3,63	25,26	13,52	14,23	7,34
Slovak Republic	-4,71	-3,57	-6,11	-1,70	38,52	48,53	5,73	1,48
Slovenia	-0,92	-4,34	-2,05	3,56	26,27	62,75	5,35	1,18
Ukraine	-2,46	-3,62	2,55	-3,69	25,94	55,78	12,87	12,88
Average	-2,32	-2,59	-5,26	-1,58	30,20	41,82	9,71	4,39

Source: author's calculations based on the IMF Economic Prospects database

Before the pandemic in 2020, the CEE economies achieved extremely high internal balance, low unemployment of 3-5% and low inflation, and, in turn, external balance: the current account balance became positive, and at most did not exceed -3%. In fact, the countries have achieved macroeconomic stabilization and very moderate economic growth: 2-3% per year, although the efficiency of the economy in the post-crisis period has decreased very significantly (11 times). Thus, the CEE economies approached the pandemic crisis in conditions of macroeconomic equilibrium.

The impact of various macroeconomic factors on the growth of aggregate factor productivity was investigated (Table 4).

As for the factors that influence TFP growth, the magnitude of their impact has changed significantly compared to the period of economic recovery. Thus, unemployment growth after the crisis has a positive impact on TFP growth, while in the previous period it was negative. The growth of TFP in 2000–2008 was associated with inflation. The post-crisis period demonstrates a significant reduction in the impact of the external debt and public debt. Rising inflation and budget deficit have a negative impact on TFP growth (Table 4).

The impact of TFP on GDP growth decreases from 0.76 to 0.57, capital growth from negative to positive from -0.17 to 0.46, the impact of employment increases by 2 times. It can be concluded that macroeconomic indicators in the post-crisis period begin to influence economic growth, as defined in classical economic theory.

To complete our study, we have developed a variance decomposition analysis of growth to assess the contribution of each factor of economic growth:

Table 4

**Correlations between changes in GDP, TFP and macroeconomic variables**

Types of interactions between variables	Coefficients of correlation	Coefficients of correlation
	2000–2008	2009–2019
TFP ↔ GDP	0,760	0,571
TFP ↔ Capital	-0,752	-0,420
TFP ↔ Labor	-0,095	-0,314
TFP ↔ Unemployment	-0,441	0,404
TFP ↔ Inflation	0,588	-0,495
TFP ↔ Budget Deficit	0,194	-0,175
TFP ↔ Current Account	0,406	-0,064
TFP ↔ Government Debt	-0,525	-0,024
GDP ↔ Capital	-0,179	0,465
GDP ↔ Labor	0,107	0,216

Source: author's assessment

factors of production and TFP growth. In essence, given a posteriori averages of growth parameters, this approach provides a systematic study of the distribution of configurations of fundamental determinants and their combined ability to explain differences in growth (Durlauf et al., 2008).

Express the decomposition of GDP growth variance, in terms of the partial contribution of each growth component; respectively, TFP growth –  $g_A$ , growth in physical capital –  $g_k$ , and growth in labor –  $g_l$ .

$$Var(g_y) = \frac{Cov(g_y, g_A)}{Var(g_y)} + \frac{Cov(g_y, \alpha g_k)}{Var(g_y)} + \frac{Cov(g_y, (1-\alpha)g_l)}{Var(g_y)} \quad (5)$$

The contribution of total factor productivity to economic growth was calculated using this methodology (5) for the two periods 2000–2008 and the

post-crisis period 2009–2019 (based on annual changes in TFP and GDP growth) and the following results were obtained: for the first period, the share of TFP was 89%, and for the second period – 43%. This means that the shock received by the CEE countries from the financial crisis has resulted in a decrease in economic productivity by more than half. In general, the whole world has suffered from this crisis, especially the European continent, which has a lower level of productivity compared to the United States.

N. Crafts views social capabilities as a key determinant of success or failure in productivity growth. Social capabilities can be seen as the incentive structures, such as regulation and taxation, that influence investment and innovation decisions that allow enterprises to effectively absorb technologies developed by leaders (e.g., the US) and eliminate inefficiencies. In service-oriented economies, the forces of creative destruction have been even more critical, replacing less efficient firms and old technologies with new and more efficient ones (Crafts, 2017).

The problem of slowing economic growth in CEE countries raises the question of whether TFP growth can be sustainable, and if not, what can replace it as a basis for rapid catch-up development (Schadler et al., 2006).

Recently, new growth theory has linked productivity growth to innovation. Innovations, in turn, are motivated by the prospect of excess returns that successful innovators can realize (Aghion et al., 2010). The theory suggests that innovation, and hence productivity growth, should always be facilitated by: better protection of intellectual property rights, financial development and macroeconomic stability. Thus, faster growth tends to imply higher firm turnover rates, as the process of creative destruction generates the entry of new innovators and the exit of old ones due to high levels of competition (Aghion & Howitt, 2006).

According to the author, the monetary and financial crisis has shown the vulnerability of the CEE economies to external shocks due to a significant dependence on external savings, so it is necessary to develop the domestic economy on the basis of an innovative paradigm, stimulate domestic investment and savings, introduce new energy-efficient technologies to isolate the economy from external shocks.

## 5. Conclusions

The analysis of thirty years of economic development of Central and Eastern European countries allows to draw certain conclusions about the efficiency of their economies, economic growth rates, internal and external balance.

For the study the methodology of growth accounting based on the classical model of economic growth

by R. Solow was used, which allowed to determine the contribution of capital, labor and total factor productivity to the economic growth of countries.

In the first phase – 1991–1999 – most CEE countries implemented radical market reforms and actively liberalized economic life, although with varying degrees of success. During this period, CEE countries demonstrated a significant decline in economic growth, with the worst performance in the post-Soviet republics: Moldova, Russia, Ukraine, where the annual decline ranged from 5 to 7%. In general, during the transformation of the planned-administrative economy into a market economy, 96% of the GDP decline was associated with a decrease in TFP.

The second stage, which covers the period from 2000 to 2008, can be defined as a period of rapid economic growth. The economic growth rates of CEE countries were the highest in the world compared to other regions.

Since 2000, the economic growth of CEE countries has been booming. GDP growth rates ranged from 5 to 11%. The highest rates of economic growth were in the Baltic countries, as well as in the European post-Soviet republics – Ukraine, Belarus and Russia. Capital growth in all countries is positive, averaging 4.7%. Employment in almost all countries, except Moldova and Romania, grew at an average annual rate of 0.69%. During this period, extremely high growth rates of economic efficiency were observed. The growth due to technological progress amounted to 59%.

The crisis of 2008 radically changed the situation, and in the following years the average economic growth rate fell by more than 3.5 times, while the capital growth rate decreased by 1.6 times and employment growth decreased by 10 times. Only in Poland, Hungary, Czech Republic and Slovak Republic there is a positive employment growth due to stable capital accumulation and moderate growth of total factor productivity.

The conclusion is that the contribution of capital and labour has been gradually increasing, especially after the financial crisis of 2008, i.e., a sharp decline in the impact of total factor productivity (efficiency loss) on economic growth in Central and Eastern Europe, with average TFP growth over this period of only 0.4% annually.

In times of crisis, the volatility of economic growth can increase significantly. Where the highest TFP growth rates were during the economic upturn, after the crisis there is an extremely high volatility of economic growth rates. Thus, Latvia, Lithuania, Ukraine and Moldova have demonstrated very high TFP growth rates (in the range of 5-8%). On the contrary, in countries where physical capital grew steadily and TFP grew moderately, the volatility of economic growth is stable and low. After the financial crisis in these countries (Czech Republic, Hungary, Poland, Slovakia, Czech Republic) the

budget deficit decreased, while in fast-growing economies the budget deficit increased by 1.5 times. Current account balances (CA) have improved dramatically in all countries, especially in the Baltic states, but also in Hungary, Slovenia, the Czech Republic and Slovakia. Only in Albania, Belarus and Ukraine did the CA balance deteriorate in the post-crisis period. On average, in all countries the negative CA balance decreased by more than 3 times. As for the factors that influence TFP growth, the magnitude of their impact has changed significantly compared to the period of economic recovery. Thus, unemployment growth after the crisis has a positive impact on TFP growth, while in the previous period it was negative. TFP growth in 2000–2008 was associated with inflation. The post-crisis period shows a significant reduction in the impact of CA and public debt. Rising inflation and budget deficit have a negative impact on TFP growth.

The impact of TFP on GDP growth decreases from 0.76 to 0.57, capital growth from negative to positive from -0.17 to 0.46, the impact of employment increases by 2 times. It can be concluded that macroeconomic indicators in the post-crisis period begin to influence economic growth, as defined in classical economic theory.

In this paper, the contribution of total factor productivity to economic growth was calculated

based on variance decomposition for two periods 2000–2008 and the post-crisis period 2009–2019 (based on annual changes in TFP and GDP growth) and the following results were obtained: for the first period the share of TFP was 89%, and for the second period – 43%.

Although there is a rather interesting phenomenon, when in some countries (Czech Republic, Hungary, Slovakia, Slovenia) with a very significant loss of economic efficiency there was a parallel accumulation of capital. If to project this process to the aftermath of the 2008 crises, an interesting pattern is observed: the higher the rate of capital accumulation observed in 1991–1999, the lower the volatility of economic growth, measured by standard deviation, with a correlation coefficient of -0.75. This is a wise economic policy aimed at future economic achievements and sustainable development of the state. Thus, a high level of capital is the foundation of sustainability of economic growth and its low volatility.

According to the author, the monetary and financial crisis has shown the vulnerability of the CEE economies to external shocks due to a significant dependence on foreign savings, so it is necessary to change the debt model to an innovative model of economic growth, stimulate domestic investment and savings, introduce new energy-efficient technologies to isolate the economy from external shocks.

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# ECONOMIC DIPLOMACY IN NEW PROJECTIONS OF ACTIVATION

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**Abstract.** The *purpose* of the article is to analyze the previous widely used approaches to the analysis of the phenomenon of economic diplomacy and to search for new approaches to its consideration in view of the new projection of the process of activation at the global level. Globalization and economic achievements of many countries in the field of international relations lead to the development of various models of diplomacy for an adequate response to challenges and threats. The *subject* of the study is the phenomenon of economic diplomacy in the context of a new projection of activation. Among these prerequisites were identified: international relations and international dialogue expand the range of functions of diplomacy in order to protect the interests of countries in the international arena; strengthen the format of consolidation of countries based on security systems; change the structure of negotiations, ensure the functioning of institutions and networks of cooperation. *Methodology.* The set of studies was based on the analysis of previous widely used approaches to the consideration of economic diplomacy. A new consideration is applied, where the new structure is considered through modern projections of activation associated with new internal features. It is in this context that economic diplomacy has the nature of an international phenomenon, which is associated with its new projections of activation, where the signs of status, integration, adaptability and mobility can radically change the perception of its potential and scope. *Results.* It is noted that the interpretation of the concept of "economic diplomacy" takes into account the interaction of different actors: state and non-state. Approaches to a deep understanding of the concept of "economic diplomacy" are presented in articles and studies of many modern scholars. However, the discourse of "economic diplomacy" is multidimensional and therefore needs to be developed on the basis of other scientific approaches, not only within the "systemic approach". When defining the essence of diplomacy, the following approaches should be taken into account: 1) activity; 2) communicative; 3) presentation; 4) image; 5) management; 6) environmental. *Practical implications.* In general, it is summarized that the availability of the above-mentioned approaches is due to the processes of modernization of the diplomatic systems of countries to form a qualitatively new line of international relations, positioning of the national economy and use of resources to ensure its full status in the geopolitical space. In modern trends of activation, it is globalization, digitalization and democratization that expand the professional boundaries of diplomacy, increase the number of alternative and independent diplomatic actors. It is summarized that the impact of the environmental factor on the competitive advantages of countries stimulates them to develop new forms of cooperation, including diplomatic. *Value/originality.* It was emphasized that in the current conditions economic diplomacy remains in line with the foreign policy of different countries, and, no doubt, the foreign policy of Ukraine as well. Ukraine's economic integration with the EU is deepening not only by strengthening trade and economic opportunities of the Association Agreement, but also by intensifying all spheres and levels of international relations and active diplomatic cooperation.

**Key words:** economic diplomacy, global challenges, foreign policy, progress, environmentalization, clusterization, integration dominant.

**JEL Classification:** F01, F02, F29, F42

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## 1. Introduction

The global space of human development of the XXI century transforms modern international relations, strengthens the links between politics, economics and ecology. The new millennium fundamentally changes the economic consciousness of mankind due to its ambitious and natural aspirations for progress, but at the same time reveals the contradictory and conflict nature of social actions. An important aspect that reflects these trends is the inclusion of countries in the projects "Agenda for Sustainable Development until 2030", "UN Global Compact". The achievements of countries in the dimensions of various systems of international positioning, ranking and image correlate with their ability to apply appropriate models of diplomacy to respond to the challenges and threats of globalization.

International dialogue expands the range of diplomacy functions in order to: represent and protect the interests of countries in the international arena; strengthen the format of consolidation of countries based on security systems; change the structure of negotiations, ensure the functioning of institutions and networks of cooperation; promote the protection of national interests; expand the scope of strategic partnership and international business. Diplomacy of the new era does not exclude risks, opportunities and chances in the field of multilateral international relations, transforming the forms of interaction between countries. However, geopolitical asymmetries complicate the answers of countries to the questions: the price of prosperity, balanced development, energy independence, environmental comfort, information security, civilizational realities, preservation of peace in the context of global interdependence.

Modern mechanisms of diplomacy have changed their classical image to a more strong-willed, pragmatic and aggressive one. The unification of diplomatic forces, resources and professionalism, as well as institutions, missions and associations in solving complex problems in the international arena requires more and more interest. Economic interests of even allied states can come into conflict and aggravate competition in world markets. To prevent political and military tensions between countries, trade and economic relations should be in an active phase of diversification.

In this context, economic diplomacy has the character of an international phenomenon, which is associated with its new projections of activation, where the signs of status, integration, adaptability and mobility can radically change the perception of its potential and scope. The new architecture of diplomacy is of increasing interest to scholars and practitioners, stimulates politicians and businessmen to constructiveness, consolidation and solidarity.

## 2. Innovative aspects of the scientific discourse of economic diplomacy

The trend of international economic relations is to deepen the relationship between domestic and foreign policy. Global challenges and threats to humanity are often generated by local conflicts, ambitious aspirations for hegemony of certain countries by any means to achieve them, which can pose a great threat to other countries. According to the World Economic Forum's Global Risk Perception Survey 2021–2022, the respondents who answered the question "How do you feel about the prospects for world development?" were as follows: 61% – concerned, 32% – worried; 12.1% – positive; 3.7% – optimistic. According to experts, the lack of optimism creates a vicious circle of frustration, social unrest and slow economic recovery. After contracting by 3.1% in 2020, global economic growth is expected to reach 5.9% in 2021 and slow to 4.9% in 2022. By 2024, the global economy is projected to be 2.3% smaller than it would have been without the pandemic. Risks to economic growth are significant (The Global Risks Report, 2022).

The COVID-19 crisis, economic, geopolitical and military conflicts have led to disagreements in international politics due to slow reactions, fixed perceptions and belated decisions of individual countries. Therefore, effective domestic and international actions depend on building trust in society, activation of national and world leaders in search of new opportunities for cooperation. Diplomacy is a central institution of community development and a basic element of the international order. The evolutionary vector of diplomacy development and critical understanding of its role in the world economy is associated with the expansion of the circle of participants and deepening of the content of their activities.

According to the International Trade Centre, economic diplomacy is defined as the process by which the internal and external efforts of countries contribute to maximizing national benefits in all areas of the economy. Therefore, economic diplomacy is an indispensable element of this process and refers to diplomatic missions to support a country's business sectors, trade, investment and other economically beneficial exchanges. The development of business ecosystems is relevant, which involves cooperation with logistics companies, chambers of commerce, industry associations, business unions, technology providers, banking institutions and other participants. Ecosystems enable commercial diplomats (representatives) to develop trade, investment and partnerships with companies in their home and host countries.

Studies of economic diplomacy are carried out in an interdisciplinary plane, which allows to identify

new signs of its functioning, transformation and diversification (Figure 1). The interpretation of the concept of "economic diplomacy" takes into account the interaction of different actors: state (economic and commercial diplomats), non-state (corporations, business, national and transnational diplomats). For example, approaches to the systematic understanding of this field of activity are reflected in scientific works: "Economic Diplomacy: Foundations, Problems and Prospects" (O. Sharov, 2019) – the symbiosis of science and practice within the framework of economic diplomacy as a political and economic category is considered; "The New Economic Diplomacy" (N. Bayne, St. Woolcock, 2019) – the basic principles of the functioning of economic diplomacy, given national and regional differences, are considered; "Economic Diplomacy and Foreign Policy-making" (Ch. Chatterjee, 2020) – the correlations of economic diplomacy and the system of foreign policy decision-making are analyzed) 4; "Modern Indices for International Economic Diplomacy" (V. Charles, A. Emrouznejad, 2022) 5 – attention is focused on expanding areas of postmodern diplomacy in the context of evaluating the progress and effectiveness of political dialogue, comparing the economic situation between countries and regions of the world; "Economic Diplomacy in the 21st Century: Principles and Challenges" (L. Yueh, 2020) 6 – shows the importance of diplomacy in renewing the global economic system, which will face more serious challenges in the field of international competition of powerful states in the new millennium.

It should be noted that indeed modern studies of the concept of "economic diplomacy", including

the above examples, reveal various aspects of this concept (categories and directions) mainly within the framework of a systematic approach.

However, the discourse of "economic diplomacy" is multidimensional and therefore needs to be developed on the basis of other scientific approaches, such as:

- historical (identification of points of intersection in the environment of subject studies of the history of politics, history of economics, history of diplomacy);
- evolutionary (determining the role of national and international politics in the birth and development of economic diplomacy in the countries of the world);
- institutional (the nature of the functioning of economic diplomacy, forms of interaction between its state and non-state institutions);
- security (development of models of economic diplomacy to improve the level of global, international, national economic security);
- strategic (inclusion of elements of diplomacy in the mechanisms of implementation of strategies of economic development of countries);
- progressive (economic diplomacy in aspects of the development of information and innovative technology).

In determining the essence of diplomacy, the following approaches are considered:

- 1) active (activities of heads of states, governments and special bodies in the implementation of the goals and foreign policy of countries, protection of the rights and interests of countries abroad);
- 2) communicative (application of special strategy, tactics and behavior in the implementation of official relations between governments; conducting

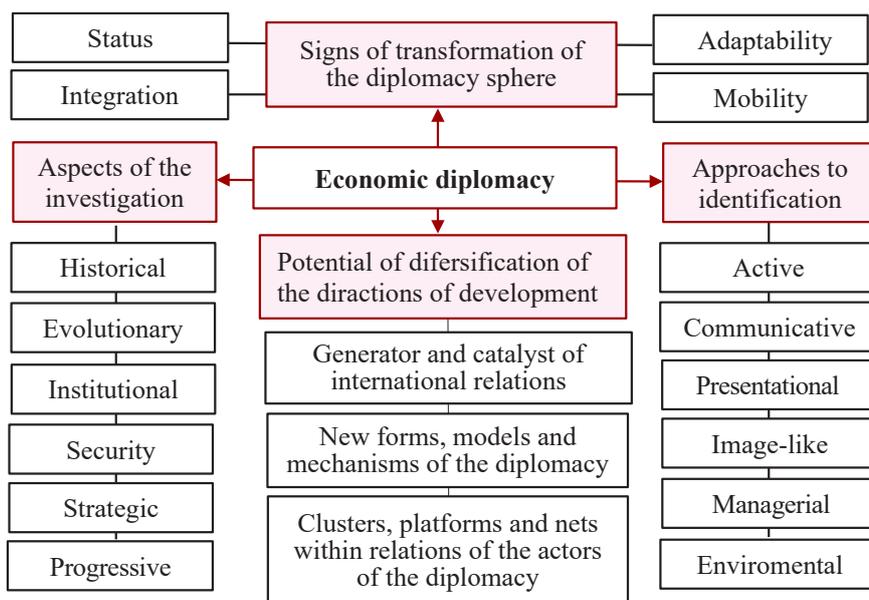


Figure 1. Peculiarities of economic diplomacy research

Source: designed by the authors

business between countries using peaceful means and negotiations);

3) presentational (a kind of expression of the normative logic widespread at the transnational level, which guides countries in their actions in the formation of international identity);

4) image (a dynamic area of international activity, which uses tools and mechanisms to enhance the authority, image and brand of the country);

5) managerial (a form of management of international relations);

6) environmental (synchronization of foreign economic policy and environmental responsibility).

The presence of the above-mentioned approaches is due to the processes of modernization of diplomatic systems of the countries for the formation of a qualitatively new line of international relations, positioning of the national economy and use of resources to ensure its full status in the geopolitical space.

### **3. The vector of ecologization in the international coordinate system of economic diplomacy**

Globalization, informatization and democratization are expanding the professional boundaries of diplomacy, increasing the number of alternative and independent diplomatic actors. Diplomacy as a profession has undergone changes in qualification requirements and expectations of what a diplomat should or should not do. For example, in the scientific work "International Economic Diplomacy: Mutations in Post-modern Times" (R. Saner, L. Yiu, 2003) identifies the following 7 tasks of "postmodern diplomats": 1) creation of conditions for international cooperation taking into account the needs and interests of individuals in the system "politics – economy – ecology"; 2) improvement of cooperation with the international regulatory body, whose decisions affect international trade and financial regulation; 3) prevention of conflicts with foreign governments, non-governmental organizations, participants of economic activity in order to minimize political risks; 4) use of international information channels to form the image of the country and "reputation capital" of enterprises; 5) maintaining the credibility and legitimacy of its representative bodies; 6) stimulating bilateral and multilateral negotiations, coordination of international campaigns, public relations; 7) expanding the functions of international cooperation based on new competencies of different types of diplomats.

However, postmodern economic diplomacy is specific due to the aggravation of global problems and a large number of conflicts since the creation of the UN. In his preface to "The Sustainable Development Goals Report 2022", António Guterres

(Secretary-General of the UN, 2022) noted: "The conflict in Ukraine has also caused soaring prices for food, fuel and fertilizers. This has further disrupted supply chains and global trade and caused a crisis in financial markets. According to current estimates, the war could reduce global economic growth by 0.9 percentage points in 2022. The situation will only worsen with climate change acting as a 'crisis multiplier' and the effects of which are already being felt around the world. Increasing heat waves, droughts and floods are affecting billions of people around the world, contributing to the further spread of poverty, hunger and instability. The COVID-19 pandemic and the war in Ukraine have further delayed the much-needed transition to a greener economy" (Figure 2).

The influence of the environmental factor on the competitive advantages of countries stimulates them to develop new forms of cooperation. Cluster formations, where relations between participants are built on the basis of cooperation, trust, synergy, transparency, long-term agreements, are becoming increasingly important. The terms "groupings", "networks", "clusters" are often used in multilateral diplomacy ("Manifesto of Clustering of EU Countries", "European Cluster Memorandum", "European Cluster Observatory"). For example, cluster analysis was used to study the relationship between economic diplomacy and export flows. It is proved that the positive effect varies depending on the groups of countries (L. Raneta, M. Kunychka, 2015).

In addition, clusters are used in the greening of economic diplomacy, which is focused on: cooperation between diplomatic missions of different countries on the implementation of environmental and economic initiatives (medial type of cluster); exchange of experience between diplomats on new models of contacts in international environmental and economic activities (lateral type of cluster). Activators of actions in these clusters can be national, regional and international actors. Concentration of cluster efforts involves the accumulation of capital, resources, investments, technologies, innovations, etc.

### **4. Integration dominant in the development of economic diplomacy of Ukraine**

In modern conditions economic diplomacy remains in line with the foreign policy of Ukraine and has been formalized in the state strategic documents (National Security Strategy of Ukraine, Economic Security Strategy of Ukraine, Foreign Policy Strategy of Ukraine, National Economic Strategy, Export Strategy, etc.). Deepening economic integration with the EU is taking place through strengthening trade and economic opportunities of the Association Agreement by updating its individual provisions, as

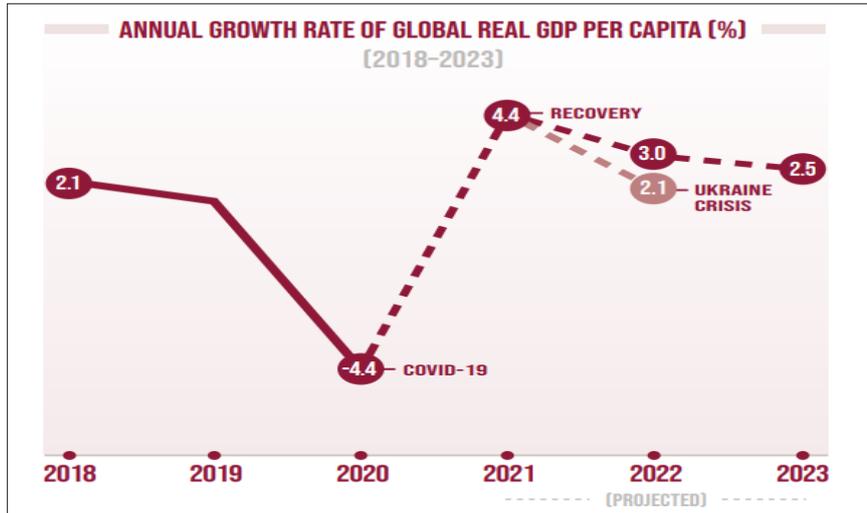


Figure 2. Global economic recovery is slowing down even more by the Ukrainian crisis

Source: The Sustainable Development Goals Report 2022

well as through active synchronization of Ukrainian legislation in accordance with EU legislation, especially after Ukraine officially acquires the status of "Candidate" (candidate status for EU accession) in June 2022. Interest in increasing trade, economic and investment cooperation can be traced in the activities of the country's political actors. In 2021, trade turnover increased compared to 2020 and amounted to USD 140.9 billion, of which exports amounted to USD 68.1 billion and imports to USD 72.8 billion. The positive dynamics of Ukrainian exports was ensured by the growth of demand and prices on the world markets of raw materials, metals and agricultural products. With the help of economic diplomacy, more than 200 Ukrainian companies entered new foreign markets.

The potential of economic diplomacy development is analyzed annually within the framework of the project "Ukrainian Prism: Foreign Policy", which

covers more than fifty areas and is assessed by five main indicators of the state of foreign policy implementation: 1) political interest; 2) institutional cooperation; 3) strategic vision; 4) activity; 5) results and achievements. Each of these indicators is assessed on a five-point scale, where 1 point is the minimum and 5 points is the maximum possible score. For each indicator, the normative and actual base is determined. For all indicators, the overall assessment of the direction is determined by the arithmetic mean. The overall assessment (rating) is indicated in the form of Latin letters (A, B, C, D, E) with arithmetic signs (+/-) depending on the value of the obtained indicator: A (5 points); A- (4.6-4.9); B+ (4.1-4.5); B (4); B- (3.6-3.9); C+ (3.1-3.5); C (3); C- (2.6-2.9); D+ (2.1-2.5); D (2); D- (1.6-1.9); E+ (1.1-1.5); E (1). Studies have shown that during 2015–2021 there were positive changes in the support of Ukrainian exports and stimulation of foreign

Table 1

**Achievements of economic diplomacy of Ukraine**

Success indicators						
2015	2016	2017	2018	2019	2020	2021
Political interest or involvement of actors in the economic diplomacy of Ukraine						
4	4	4	4	4	5	5
Effectiveness of interaction and coordination between Ukrainian institutions in the field of foreign policy						
3	3	4	3	3	4	4
A strategic vision in the implementation of tasks of economic diplomacy						
4	3	5	3	4	4	5
Specific activity in the field of development of economic diplomacy						
3	4	4	4	4	4	4
Results, achievements and successes of economic diplomacy						
2	4	4	3	4	4	4
Overall assessment						
C+	B-	B+	C+	B	B+	B+

Source: Ukrainian Prism. Foreign Policy Council 2016–2022 (11)

investment in Ukraine (Table 1). State support for exports, expansion of investment and innovation opportunities are among the priorities for ensuring economic security.

It is worth noting that one of the projections of the development of economic diplomacy is its public level due to the increase in public attention to foreign policy. For example, in 2021 the "New Europe" Center conducted a survey within the framework of the "Join!" Public Activity Promotion Program funded by the United States Agency for International Development (USAID) and implemented by Pact in Ukraine. When asked whether Ukraine's foreign policy should be guided by pragmatic interests or based on a value-based approach to the development of democracy, protection of human rights and the rule of law, the answers were as follows: 41.4% – it is necessary to find a balance between these two approaches; 33.6% – the priority should always be the protection of democracy, human rights and international law; 19.3% – exclusively pragmatic interests – to build relations with those countries with which it is most profitable to cooperate; 5.8% – difficult to answer, refused 12. This gives grounds to assert that economic diplomacy includes an element of transparency. In this regard, international actors, business and civil society are interested in promoting new areas of economic diplomacy based on networking.

## 5. Findings

The mechanisms of formation of new projections of economic diplomacy are associated with the great dynamics of foreign policy actions of countries and the nature of competition in the context of globalization. This affects the expansion of diplomacy functions, the need to strengthen the relationship between domestic and foreign policy, the formation of new levels of institutionalization, updating strategies of economic development, partnership and cooperation. Given the complexity of maintaining international order, diplomacy will continue to be its basic element, a driver of change in the world economy. The topics of modern studies, analyses, expert reviews, international reports on economic diplomacy mostly correlate with the issues of: security, progress, modernity, postmodernity, clustering, integration, ecologization.

## 6. Conclusions

Studies of economic diplomacy are carried out in an interdisciplinary plane, which allows to identify

new signs of its functioning, transformation and diversification. The interpretation of the concept of "economic diplomacy" takes into account the interaction of different actors: state and non-state. Approaches to a deep understanding of the concept of "economic diplomacy" are presented in articles and studies of many modern scholars. However, the logic of disclosing the concept of "economic diplomacy" is multidimensional and needs to be developed on the basis of other scientific approaches, and not only within the framework of the "system approach". When defining the essence of diplomacy, the following approaches should be taken into account: 1) activity; 2) communicative; 3) presentation; 4) image; 5) management; 6) environmental. In general, it is summarized that the availability of the above-mentioned approaches is due to the processes of modernization of the diplomatic systems of countries to form a qualitatively new line of international relations, positioning of the national economy and use of resources to ensure its full status in the geopolitical space. Globalization, digitalization and democratization expand the professional boundaries of diplomacy, increase the number of alternative and independent diplomatic actors. The impact of the environmental factor on the competitive advantages of countries stimulates them to develop new forms of cooperation, including diplomatic. In modern conditions, economic diplomacy remains in line with the foreign policy of different countries, and, no doubt, the foreign policy of Ukraine as well. Deepening of Ukraine's economic integration with the EU takes place not only through strengthening trade and economic opportunities of the Association Agreement and acquiring the status of a candidate for accession to the EU, but also through intensification of all spheres and levels of international relations and active diplomatic cooperation. For Ukraine, the development of economic diplomacy acquires strategic importance and special status in terms of opportunities: its own representation in the global economic space; increasing the level of competitiveness; generating new forms of international cooperation to strengthen food, energy and environmental security. Today, Ukrainian diplomacy is also at the epicenter of accumulation of financial and economic resources to counter military aggression. Constructive interaction between countries requires a serious awareness of global interdependence, existing threats and potential risks, the manifestations of which can either negate the achievements of civilization or promote peace, humanity, democracy and freedom.

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# LEGAL REGULATION OF CONTROL AND SUPERVISION OF NON-BANKING FINANCIAL INSTITUTIONS

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**Abstract.** *The purpose* of the article is to distinguish between the regulatory and legal approaches to the interpretation of the definitions of "supervision" and "control"; to establish the general purpose of control and supervision over the activities of non-bank financial institutions; to consider the methods of regulatory and legal regulation of verification and identification of the client when concluding a loan agreement. The scientific discussion on the problem of legal regulation of control and supervision over the activities of non-banking financial institutions is presented. It is established that the need to form an effective state regulation of the development of the national economy and economic institutions in a market environment leads to the creation of an effective system of financial control. The concepts of "financial control" and "control function of finance" are distinguished. It is determined that the basis of the control function of finance is the movement of financial resources, and through the implementation of financial control the possibility of influencing the process of production, accounting and consumption is realized. The conclusion is made that rating agencies and credit history bureaus should become necessary elements of the system of state regulation and supervision by the National Bank of Ukraine over the activities of non-state financial institutions, which should occupy a mandatory place in information stories related to the regulation of supervision and the use of other administrative and legal means of control over the activities of non-state financial institutions. *Results.* The concepts of control and supervision over the activities of non-banking financial institutions are distinguished; the peculiarities of the formation of rating agencies and ensuring the effective operation of credit history bureaus are established; indicative criteria for assessing the necessary degree of supervision over the activities of a credit company were determined, which include: the book value of assets; market share of the credit company; the number of previous violations of the law. It is established that the main control and supervisory functions of the National Bank of Ukraine are: protection of clients' rights, compliance with the standards of service provision and requirements for their advertising; ensuring transparency and disclosure of information; ensuring impeccable business reputation of owners and managers; counteracting anti-competitive activities; combating abuse and illegal activities; control over the exercise of their powers.

**Key words:** control, supervision, financial institutions, economy, financial monitoring.

**JEL Classification:** F38, G20

## 1. Introduction

In the context of economic and political changes, the issue of improving the process of legal regulation and supervision of non-banking financial institutions is of particular relevance, which will provide an opportunity to create an effective mechanism for responding to potential risks that may arise in this area. Today, control and supervision should be considered in the context of modern economic

transformations and the needs of Ukrainian society. In the field of domestic scientific research, the issues of improving the regulatory and legal regulation of control and supervision over the activities of financial institutions are devoted to the works of such researchers as: O. Lapko, K. Maslyayeva, O. Melnyk, L. Savchenko, M. Sayenko, Yu. Tustanovskiy, I. Fedorovych, and others are devoted.

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At the same time, the disclosure of a number of problematic issues requires special attention, which emphasizes the relevance of the topic of the article.

The purpose of the article is to distinguish between the regulatory and legal approaches to the interpretation of the definitions of "supervision" and "control"; to establish the general purpose of control and supervision over the activities of non-bank financial institutions; to consider the methods of regulatory and legal regulation of verification and identification of the client when concluding a loan agreement.

## **2. The essence and content of the categories "control" and "supervision"**

Non-banking financial institutions (hereinafter – NBFIs) operate in the financial services market, whose activities do not meet the licensing requirements. Thus, in 2015–2021, 658 NBFIs were excluded from the State Register of Financial Institutions, of which 221 (+9%) were excluded from the State Register of Financial Institutions only in 2021, of which 42 were excluded upon application, and 133 – for systematic violation of the requirements of the legislation in the field of financial services.

In turn, in order to prevent violations of the legislation in the financial services market and to protect consumer rights, the National Bank of Ukraine, based on the results of the control, applied 287 enforcement measures, including: 188 orders to eliminate violations in the provision of financial services and 99 decisions to revoke licenses; UAH 1,829,000 of fines were imposed in the credit market (Supervision of the market of non-banking financial services. Public report on the activities of the National Bank of Ukraine, 2021).

The categories of "supervision" and "control" are used in the legislation that regulates the activities of state bodies that regulate financial services markets, but, according to authors, in the Law of Ukraine "On Financial Services and State Regulation of Financial Services Markets" the legislator does not distinguish the content of these categories at all. Thus, Art. 27 of the said Law among the main tasks of the National Bank of Ukraine (hereinafter – the NBU) defines the implementation of state regulation and supervision over the provision of financial services and compliance with the legislation in this area. Control and supervision are one of the most important aspects of the management system in general and supervision of the non-state financial system (hereinafter – NFS) in particular. In addition, control and supervision activities provide an opportunity to properly improve the management system, adjust the plan, reduce and prevent offenses in this area. As it is known, the general purpose of control and supervision is to identify the actual state

of affairs in any process, compare the compliance of this state with the intended goals and, if necessary, apply corrective measures to bring the controlled object to the proper state. Naturally, the most effective is the organization of control and supervision activities, which contributes to the early detection of the causes of a particular offense. Of course, one of the main goals of control and supervisory activities is timely detection of various offenses and their perpetrators, but the ultimate goal of both control and supervision is still the correction and elimination of offenses. Control as a function of management is the observation and verification of compliance of the object of management with the adopted management decisions (laws, plans, norms, orders, instructions, orders, etc.). The most important task of control is to prevent possible omissions and errors, to stimulate officials to perform their duties in good faith, to promote personal responsibility of each person for the assigned area of work (Shestak, 2003). Thus, the need for effective state regulation of the development of the national economy and the formation of management institutions in a market environment determines the creation of an effective system of financial control. The strategic goal of which is to ensure the stability of the country's economic growth by preventing financial crimes and inefficient use of financial resources, in particular in the financial market. In recent years, there have been evolutionary transformations of the financial control system in the financial market.

## **3. Features of financial control**

Financial control consists in checking economic and financial transactions for their reliability, legality, expediency and efficiency. A. I. Berlach offers the following definition of financial control – it is the activity of authorized bodies of state and local self-government and non-governmental organizations, regulated by the norms of law, aimed at ensuring legality, financial discipline and rationality in the formation (mobilization), distribution and use of funds and related material assets of the state and local self-government for the most effective socio-economic development of society (Berlach, 2008). Close to this is the definition of O. V. Brechko: financial control is a purposeful activity of legislative and executive bodies of state power and non-governmental organizations to ensure legality, financial discipline and rationality in the process of formation, distribution and use of centralized and decentralized monetary funds for the most effective socio-economic development of all subjects of financial relations. Along with this, financial control contributes to the increase and accumulation of funds, the growth of profitability, the efficient use

of material and financial resources (Brechko, 2002). In turn, Yu. V. Vashchenko offers the following definition: "Financial control is an analysis performed by an authorized subject of the state of the financial system, cash flows and financial results of the object of control and bringing it to the parameters set by the state. The main feature of control is the real possibility of influence of the subject of control on its object, which must be formalized in the norms of law and be a constructive action" (Vashchenko, 2005). This definition seems to us quite concise and correct, except that the controlled parameters can be set not only by the state. Thus, if to talk about the internal financial control of the enterprise, according to the current legislation, it conducts its business activities at its own discretion, and financial control should analyze not only the compliance of the available indicators with state standards, but also their compliance with the plans approved by the management of the enterprise.

In addition, control is not always aimed at bringing the existing state of the controlled object to the proper one. As a rule, the subject of control controls only the process of bringing it to the standard, issuing an order to eliminate violations of the law and other shortcomings, and control over actions cannot be equated with the actions themselves. According to Professor O. P. Orlyuk, financial control is a purposeful activity of state authorities and local governments, enterprises, institutions and organizations, regardless of the forms of ownership, aimed at compliance with legality, that is, mobilization, distribution and use of centralized and decentralized funds for the purpose of fulfilling the tasks and functions of the state and effective social and economic development of all subjects of financial relations (Orlyuk, 2003). According to the authors, this definition overgeneralizes the financial activity of business entities, declaring it the financial activity of the state, while in financial relations the state acts as an independent participant in financial relations and the financial activity of individual business entities may not correspond to the state policy in the field of finance or even contradict it. State financial control is a type of financial control carried out by the relevant state financial control bodies. According to V. P. Dudko, it consists in establishing the actual state of affairs regarding compliance with the requirements of the current legislation on the object of control aimed at ensuring legality, financial discipline and rationality during the formation, distribution, possession, use and alienation of assets belonging to the state, as well as the use of funds remaining with the subject of financial relations in connection with the benefits provided for payments to budgets, state extra-budgetary funds and loans received under the guarantees of the Cabinet of Ministers of Ukraine (Dudko, 2005).

According to the authors, the state financial control is intended to control not the financial funds belonging to the state, but the compliance of the financial activities of business entities operating in the territory of this state with the norms and requirements established by it, that is, first of all, compliance with the current legislation. That is, the authors consider the state financial control as such, which is carried out by specially authorized state authorities over the subject of control over compliance with the rules of financial activity established by the state. Researchers confuse the state financial control, which is the control of the state over the financial activities of all economic entities operating in its territory, and the internal financial control of the state over the financial activities of its enterprises and the circulation of cash flows belonging to it. In the latter case, the state acts as the owner of the money it controls, and its control activity is not much different from the control activity of an enterprise that controls its own cash flows, or as an individual who, for example, monitors the spending of his donations to a charitable organization.

State financial control is one of the important functions of public administration, which is to facilitate the implementation of the financial policy of the state, to ensure the process of formation and effective use of financial resources to achieve the goals set by the state in the field of finance. Thus, the concepts of "financial control" and "control function of finances" are different, since the control function of finances is a manifestation of their social purpose and ensuring economic conditions for exercising control over the formation, distribution and use of funds, and financial control is the activity of relevant state bodies or non-governmental organizations that practically use the control nature of finances. The basis of the control function of finance is the movement of financial resources, and through financial control the possibility of influencing the process of production, accounting and consumption is realized.

Financial control is the result of the practical use of the control function of finance, that is, its ability to be a means of controlling the production, distribution and use of the aggregate social product and national income. It permeates all sectors of the economy, covers both production and non-production spheres, as finance performs its control function at all stages of reproduction.

#### **4. Formation of rating agencies and ensuring the effective work of credit history bureaus**

A necessary additional component of state control by the NBU is the formation of rating agencies and ensuring the effective work of credit history bureaus, while these organizations should be under the direct supervision of the NBU and receive and

contain information about both credit institutions and consumers and their services. (Savchuk, 2021). The activities of such bodies in the European Union (hereinafter – the EU) are regulated by a wide range of legal acts. The main one is Regulation (EC) No 1060/2009 "On Credit Rating Agencies", which lays down the conditions for assigning credit ratings, defines the rules of organization and policies of credit rating agencies and establishes a common regulatory approach to enhance the integrity, transparency, responsibility, good governance and reliability of credit rating activities. As for Ukraine, the main law regulating the activities of rating agencies is the Law of Ukraine "On State Regulation of Capital Markets and Organized Commodity Markets" (On State Regulation of Capital Markets and Organized Commodity Markets: Law of Ukraine dated 30.10.1996 No. 448/ 96-BP). The main set of powers for the implementation of the rating system rests on the National Commission for Securities and the Stock Market (hereinafter – the National Securities and Stock Market Commission), which is established by the mentioned law and the Decree of the President of Ukraine "On the National Commission for Securities and the Stock Market" (On the National Commission for Securities and the Stock Market The decree of the President of Ukraine dated November 23, 2011 No. 1063/2011). NKCPFR: issues to authorized rating agencies a Certificate of inclusion in the State Register of authorized rating agencies, determines the List of international rating agencies that have the right to determine legally binding rating assessments of issuers and securities; establishes the Management Procedure and maintains the State Register of the authorized rating agencies; establishes the Procedure for submission of information by the Rating Agency to the National Commission for Securities and the Stock Market, as well as performs other security and control functions. The national rating scale and the division of each group of levels into corresponding levels is approved by the Cabinet of Ministers of Ukraine (National rating scale Resolution of the Cabinet of Ministers of Ukraine dated April 26 2007 No. 665), while the rules for determining the rating assessment by the authorized rating agency according to the National rating scale are established by the National Commission for Securities and the Stock Market Agency. Cases in which the establishment of a credit rating or rating assessment is obligatory are provided for in the Laws of Ukraine "On Insurance" (On Insurance: Law of Ukraine dated 03/07/1996 No. 85/96-VR. Date of update: 08/03/2022) "On joint investment institutions (equity and corporate investment funds)", (On joint investment institutions: Law of Ukraine dated 07/05/2012 No. 5080-VI), "On non-state pension insurance" (On mandatory state

social insurance: Law of Ukraine dated September 23, 1999 No. 1105-XIV) and others. For a long time Ukraine could not adopt a law that would regulate the rules of credit rating agencies. Thus, in 2010 the Draft Law "On credit ratings and activities of credit rating agencies" (No. 7472) was submitted to the Verkhovna Rada of Ukraine, which was proposed to be adopted in 2013. In addition, in 2018, a draft law "On Rating" (No. 8007) was introduced, which has not yet been adopted. Regardless of the existence of a legislative definition of terms related to credit rating, they are focused on the assessment of securities market entities. At the same time, the National Rating Scale is a scale that is divided into certain groups of levels and levels that characterize the ability of the borrower to timely and fully pay the principal and interest on its debt obligations.

The national scale is used to assess the credit risk of a borrower – a local government body, a business entity and certain debt instruments – bonds, mortgage securities, loans. It provides for the possibility of assessing not only borrowers but also debt instruments. Individual rating agencies develop their own scales based on the one proposed by the Cabinet of Ministers of Ukraine. For example, "Rating scale for assessing the level of reliability of bank deposits" and "Rating scale for assessing the level of financial reliability (stability) of an insurance company". At the same time, the creditworthiness of an individual debtor is not assessed.

It is worth emphasizing the widespread services of rating agencies and the market of credit services. Legal and organizational principles of forming and maintaining credit histories, rights of subjects of credit histories and users of credit history bureaus, requirements for information protection that constitutes a credit history, as well as the procedure for the formation, operation and liquidation of credit history bureaus is established by the Law of Ukraine "On the Organization of the Formation and Circulation of Credit Histories" (2005) (On the Organization of the Formation and Circulation of Credit Histories: Law of Ukraine dated June 23, 2005 No. 2704-IV). According to Article 13 of this Law the subject of credit history has the right to get acquainted with the information contained in his credit history, namely with the credit report and information from the register of inquiries. This information is provided to him free of charge once during a calendar year, as well as in case of refusal to conclude a credit transaction. It is important to note that there is no unified information base of credit histories. According to part 1 of Article 5 of the Law, the sources of credit histories are the information provided by the User of the Bureau in accordance with the written consent of the subject of credit history, as well as information from state registers

and other databases open for public use. At the same time, information may be transferred or sold to another Bureau only in respect of information from open sources.

### **5. Features of supervision over the activities of financial institutions**

According to Art. 20 of the Law of Ukraine "On Financial Services and State Regulation of Financial Services Markets" among the forms of state regulation of financial services markets is mentioned supervision over the activities of financial institutions. Regarding the definition of the concept of administrative supervision in the legal literature, there are various options, which, as noted by L. V. Koval, create certain difficulties of a theoretical and practical nature in connection with the distinction between the concepts of supervision and control (Koval, 1996). Thus, I. P. Golosnichenko believes that administrative supervision is a systematic observation of the exact and consistent observance by officials and citizens of the rules and application of norms that protect the life, health, rights and freedoms of the citizens, regulate public order and safety with the aim of preventing termination of violations of these rules, identification of violators and bringing them to administrative responsibility, application of public influence measures to them (Golosnichenko, 1999). According to A. V. Denisova, supervision as a type of state activity can be defined as a set of continuous actions to monitor the observance of the law in relevant social relations, which are carried out by the competent authority using the powers granted to it by law (by-law) and aimed at preventing, detecting and suppressing offenses, as well as bringing offenders to justice (Denisova, 2013). According to D. P. Tsvigun, administrative supervision is a special type of state management activity carried out by special bodies of the executive power concerning to enterprises, institutions, organizations, officials and citizens that are not subordinated to the organization due to their implementation of special inter-branch norms, rules, requirements, using a complex of administrative means of influence for prevention, detection and termination of offenses, the restoration of the established legal relations and the prosecution of the guilty (Tsvihun, 2002). The large explanatory dictionary of the modern Ukrainian language gives the following definition of state supervision – it is the activity of special bodies of state administration on systematic control over compliance with the rules established by the state by enterprises, institutions, organizations, officials and individual citizens (Busel, 2005).

It is an undeniable fact that the definition of supervision as a way to ensure legality in public

administration, with further determination of the specifics of supervisory activities depending on the subject, the one who supervises the object, etc. is quite common. The NBU supervises activities in the non-banking financial services market in the form of on-site and off-site supervision (inspections). The key principles of supervision of activities in the market of non-banking financial services are proportionality and risk-oriented approach. Thus, the choice of the intensity of supervision is determined by assigning the activities of NBFIs to a certain risk category. Also, in supervising the activities in the non-banking financial services market, the NBU is gradually introducing early detection of potential risks and early intervention (before the relevant risks materialize and cause harm to consumers) for timely reporting or taking measures (Guide for non-banking financial institutions, 2020). The NBU considers it mandatory to carry out prudential supervision in the insurance segment, for credit unions and other credit institutions, financial institutions that provide money transfer services, as well as to establish a single prudential standard for compliance by financial companies with the minimum level of equity capital. Financial companies will maintain capital at the level of UAH 3 million in case of providing only lending services, or UAH 5 million if the financial company plans to provide two or more financial services. This requirement will ensure the sustainability of companies and help create conditions for them to attract financing. At the same time, it will make it impossible for insolvent companies to operate in the market.

### **6. Risk-oriented approach to supervision of financial institutions**

Another area of supervision is a risk-oriented approach to it, and the new law introduces such approaches. That is, the requirements and rules for supervising financial institutions will depend on their size, type of activity, importance and risks. This will ensure proportionality, when small non-risky financial institutions will receive minimal attention from the regulator. The law also introduces a new component – supervision of market behavior of institutions. It will be about strengthening control over the compliance of financial institutions with the requirements for consumer protection, disclosure of sufficient information to consumers, transparent ownership structure, proper business reputation of owners and managers, etc. Thus, ensuring public and private interests is to overcome the obstacles caused by the lack of transparency and public awareness of the activities of NBFIs, their solvency and liquidity. In paragraph 12 of Art. 29 of the Law of Ukraine "On Financial Services and State Regulation

of Financial Services Markets" (On Financial Services and State Regulation of Financial Services Markets: Law of Ukraine dated July 12, 2001 No. 2664-III). It is noted that supervision is based on a risk-oriented approach, taking into account the principles of proportionality, risk assessment and expediency. In modern conditions, credit risk can be considered as a criterion for the convergence of state regulation. Historically, the concept of "risk" was studied in the mathematical aspect as certain losses that may be incurred by a business entity in the process of making a decision. Later, the understanding of the category of "risk" became more and more widespread not only because of possible negative results, but also because of the probable profit of the entrepreneur in the process of carrying out his business activities. Thus, O. V. Dzyublyk, L. M. Priyduin offer a definition of "credit risk" in four meanings: as a consequence of making alternative decisions; as uncertainty regarding the occurrence of an undesirable event; as a risk to income and capital, changes in the counterparty's credit status; as the probability of deviation from the expected result, decrease in the value of assets, non-fulfillment of obligations, occurrence of losses (Dzyublyk, Priyduin, 2015). Taking into account the credit risk, according to the authors, becomes a criterion for the degree of regulation and influence on the activities of NBFIs, setting restrictions on their activities, and at the same time is a factor of convergence of all means of influence. The above allows us to note that the strengthening of risk-oriented supervision of financial institutions should be carried out with a comprehensive consideration of public and private interests and the presence of credit and other risks of NBFIs.

### **7. Financial monitoring as a means of preventing the use of financial companies aimed at legalization (laundering) of proceeds of crime / financing of terrorism**

Financial companies in accordance with the Law "On Prevention and Counteraction to Legalization (Laundering) of Proceeds of Crime, Financing of Terrorism and Financing of Proliferation of Weapons of Mass Destruction" (On Prevention and Counteraction to Legalization (Laundering) of the Proceeds of Crime, Financing of Terrorism and Financing of Proliferation of Weapons of Mass Destruction: Law of Ukraine of 06.12.2019 № 361-IX) are subjects of primary financial monitoring, whose activities are regulated and supervised by the NBU in the field of financial monitoring.

The main objective of the NBU in the area of financial monitoring is to prevent the use of financial institutions' services for money laundering or terrorist financing. When developing regulatory legal acts in

the field of financial monitoring, the NBU establishes requirements and expectations for building an adequate internal system to prevent the use of services of a credit institution aimed at legalization (laundering) of proceeds of crime or terrorist financing.

The regulations, in particular, contain risk criteria (areas of increased attention) that a financial company should take into account when building customer due diligence procedures, identifying suspicious transactions, etc.

Supervision in the area of financial monitoring will be risk-based. The NBU checks whether the system is able to properly detect, monitor and manage money laundering/terrorist financing risks, in particular, to ensure timely detection of suspicious customer transactions (future regulation of the lending market by financial companies, 2020).

Electronic identification and verification requires special attention. Currently, remote verification and identification of a client when concluding a loan agreement is carried out mainly through the BankID system using an electronic signature. As of today, 14 banks (the number of banks is constantly increasing) and many NBFIs are connected to the BankID system, which can also use the data obtained through the NBU BankID to verify their clients.

In addition to the existing systems, the NBU plans to regulate the issue of remote client identification and verification for NBFIs in accordance with the requirements of the Law. In particular, the NBU has developed a procedure for video verification, which is currently being discussed with the banking community and will be proposed to NBFIs in the future.

The main control and supervisory functions of the NBU are: protection of customers' rights, compliance with the standards of service provision and requirements for their advertising; ensuring transparency and disclosure of information; ensuring impeccable business reputation of owners and managers; counteracting anti-competitive activities; counteracting abuses and illegal activities; control over the exercise of its powers.

The National Bank supervises the activities of non-bank financial institutions in the form of on-site supervision and inspections. To this end, the NBU has developed a procedure for supervising the activities of NBFIs, which provides for the procedure of on-site supervision, as well as scheduled and unscheduled inspections based on a risk-based approach.

In particular, inspections are carried out on demand (ad hoc) if there are reasonable grounds, taking into account the risk-oriented approach, which takes into account the materiality (importance) and systematic nature of the risk, shortcomings in the company's activities, corporate governance, risk management and internal control systems. Depending

on the degree of risk, the NBU determines the intensity of supervisory measures.

Indicative criteria for assessing the necessary degree of supervision over the activities of a credit company include, in particular: the book value of assets; the share of the credit company in the market; the number of previous violations of the law.

The NBU initiates unscheduled inspections, in particular, based on the results of the analysis of customer complaints about violations of their rights, in case of failure to submit reports in due time, if there are facts indicating an increase in risk from the activities carried out.

The category "control" in its content is much broader than the category "supervision", which is a component of control. In the exercise of control between the subject and the object there is a relationship of subordination, the controlling body has the right to interfere in the operational activities of the controlled object, to apply legal sanctions for violations of the law.

Supervision over the activities of NBFIs is a component of public administration, an independent specific type of activity of authorized supervisory entities with a special status to monitor, analyze and verify compliance of the state and activities of NBFIs with the requirements of the legislation, compliance with the criteria and standards of activity established by it, compliance with the rules for the provision of financial services in order to prevent, detect or eliminate violations, as a rule, without direct interference in their activities.

The main purpose of supervising the activities of NBFIs is to ensure the stability and security of their functioning, to protect the interests of consumers of financial services markets, to create favorable conditions for the development and effective functioning of financial services markets.

Therefore, such supervision is a type of state control over the activities of NBFIs and differs directly from it by a smaller amount of management burden in these relations, is determined by the entity that checks the compliance of NBFIs, which is not organizationally subordinated to the

supervisory authority, with the requirements of legislation, special norms and rules, but does not directly interfere in the administrative, economic, financial or other activities of NBFIs, does not apply legal sanctions. This is the main difference between control and supervision.

## 8. Conclusions

Thus, Ukraine currently has a multiple system of supervisory bodies in the financial sector, structured by type of financial institution, such as the National Bank of Ukraine, the National Securities and Stock Market Commission and the Antimonopoly Committee, which differ significantly in status, level of independence, as well as institutional capacity, rules and procedures applied in the course of their activities.

It should be admitted that the NBU is sufficiently resourced to carry out state regulation of non-banking financial activities, but the institutional capacity of others does not meet the challenges that exist in the markets under their supervision. Therefore, the achievement of the goal of supervision over the activities of NBFIs means ensuring stability and safety of their functioning, protecting the interests of the consumers of financial services markets, creating favorable conditions for the development and effective functioning of financial services markets, involving, if necessary, the application of measures of influence on NBFIs (Paragraph 4 of Article 20 of the Law of Ukraine "On Financial Services and State Regulation of Financial Services Markets"), that violate the legislation on financial services, commit illegal actions that entail legal liability. At the same time, rating agencies and credit bureaus should become necessary elements of the system of state regulation and supervision by the NBU over the activities of NBFIs. These organizations should occupy a mandatory place in information stories related to the regulation of supervision and application of other administrative and legal means of control over the activities of NBFIs.

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## DEFINITION OF CRIMINAL AND ILLEGAL ACTIVITIES IN THE ECONOMIC SPHERE

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**Abstract.** *The purpose* of the article is to define the essence of criminal and illegal activities in the field of economy; to clarify its determinants; to highlight the features of national prevention of socially dangerous acts that threaten the economic security of the state. The scientific discussion is presented, which highlights the problem of determining the markers of illegal activity in the field of economy. Such markers include: 1) the investigated criminal offenses always create a platform for the "shadow" economy; 2) criminal offenses in the field of economy are interconnected with corruption, which simplify such illegal activities (the subjects of criminal offenses in the field of economy are usually officials); 3) the presence of intent to obtain economic benefits; 4) the presence of only direct intent; 5) illegal actions are committed by all possible criminal means. The causes and conditions of criminal and illegal activities in the sphere of economy are determined. The groups of factors of criminal and illegal activities in the sphere of economy are considered. It is noted that mistakes in economic planning inevitably result in artificial (often unintentional) formation of conditions conducive to the commission of illegal acts. Socio-economic causes are retrospective in nature, i.e., they are historically conditioned phenomena associated with economic changes, the latter occurring over the past fifty years. Some national means of preventing socially dangerous acts in the economic sphere are proposed. *Results.* The author's approach to the concept of criminal illegal activity in the field of economy is proposed. The complex of reasons and conditions of criminal and illegal activity in the sphere of economy is developed, which include 1) insufficient level of social protection of the population; 2) unsatisfactory level of economic development of the state; 3) inconsistency of the mentality of the society with the social values recognized at the highest state level; 4) the presence of "dead" zones in the labor market; 5) insecurity of small and medium-sized businesses in the state, etc. It is found that the measures and means of national prevention of criminal illegal activities in the sphere of economy should include 1) stabilization of the political situation in the country; 2) solving the problems of small and medium-sized businesses; 3) identification of gaps in economic planning and forecasting of economic measures for the next years; 4) development of the labor market, including the creation of "dead" zones, the continuation of a number of state-owned enterprises; 5) increase the level of social protection of vulnerable categories of the population (elderly people, people with special needs, people raising children on their own, etc.); 6) improve the social package provided to employees; 7) increase the level of average wages, etc.

**Key words:** criminal offence, economy, economic security, determiners, economic sphere, prevention, 'shadow' economy, labor market.

**JEL Classification:** K14, F52

### 1. Introduction

Today, criminal illegal activities in the economic sphere constitute a significant part of the total number of criminal offenses. According to statistics published on the website of the Prosecutor General's Office, in 2016, 6940 criminal offenses were committed in the field of economic activity (12% of the total number

of illegal acts), in 2017 – 6297 cases (1.2% of the total number of illegal acts), in 2018 – 6334 cases (1.3% of the total), in 2019 – 5947 cases (1.3%), in 2020 – 5342 cases (i.e. 1.5%), as of October 2021, the number of violations in the field of economic activity was 5308 (1.8% of the total number of illegal acts) (official statistics of the Prosecutor General's

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Office). This indicates the presence of a number of determinants, the impact of which on the economic security of Ukraine is negative.

The peculiarities of criminological influence on the determination of economic illegal activity were studied by a number of scientists, including A. M. Boiko, N. O. Gutorova, V. M. Driomin, O. O. Dudorov, O. G. Kalman, V. P. Korzh, I. V. Ozersky, V. M. Popovich, Ye. L. Streltsov, V. Ya. Tatsiy, etc. However, identifying the specifics of determining the determinants of criminal offenses in the field of economic activity requires additional attention, which emphasizes the *relevance* of the topic of the article.

**The purpose of the article** is to clarify the essence of criminal unlawful activity in the economic sphere, to characterize its determinants; to highlight the peculiarities of national prevention of socially dangerous acts that threaten the economic security of the state.

## 2. The essence of criminal unlawful activity in the sphere of the state economy

In the conditions of modern technological and information development of the national economy, economic crime is gaining dangerous proportions. Committing crimes in the sphere of economy is a real danger for the state and individual citizens, as the development of the economy ensures the existence and development of society. The scientific interest in the problem of economic crime and the difficulties of overcoming it is caused by the fact that in the national literature there is a differentiated approach to the definition of crimes in the field of economy. In many scientific works, one can find various interpretations of this phenomenon, in particular, "crimes in the field of economy", "economic crimes", "shadow economy", "criminal economy", etc. These concepts are often identified, but there are attempts to prove the different nature of these phenomena. In particular, O. Yakovlev defined economic crime as property and mercenary crime, as well as crime in the sphere of economy; the author notes that economic crime is characterized by a combination of mercenary encroachment on property, the order of economic management, committed by persons who occupy a certain social position in the structure of the economy (Skakun, 2018). The distinction between the concepts of "economic criminal offense" and "economic offense" has the right to exist, since from a phenomenological point of view these are really different definitions. In a broader context, this study is focused on economic offences that have a negative impact on economic security as a component of the national security of the state. Economic crime is characterized

by its scale, which is mainly due to the encroachment on certain social relations, the improper functioning of which destabilizes the process of public administration.

As S. Kravchuk notes, all these concepts have a different range of illegal acts. Thus, crimes in the sphere of economy, according to the author, are mainly economic crimes; economic crime involves the commission of crimes in the sphere of economic activity, including the use of official position. S. Kravchuk classifies acts related to causing material damage or obtaining material benefits as crimes of a material nature (Kravchuk, 2009). Identifying the features of economic crime from the point of view of criminology is associated with the peculiarities of the concept of economic crime as a negative phenomenon. The founder of the theory of economic crime is considered to be E. Sutherland, who first introduced the concept of economic crime and called it "white-collar". The most important feature of the former is the abuse of power for the purpose of enrichment. Investigating the official position and social status of the offender, Sutherland defined "white-collar" crime as "anti-social, enrichment-oriented behavior of people who occupy a prestigious position in society and behave in such a way that, simultaneously with the law-abiding behavior of the rest of the people, they abuse the social trust enjoyed by another group" (Kharko, 2010). In the context of the doctrine of economic and legal sciences, economic criminal activity in some aspects is associated with corruption. At the same time, it should be noted that corruption as an institution should be considered as an independent phenomenon, which is the main risk to the economic security of the state, and relates mainly to the service sector, not to the economic sphere.

S. Kravchuk argues that economic crimes are crimes committed in the economic sphere with the use of legal technical, accounting, financial and accounting, control and administrative rights and powers. The scientist identifies eight essential features inherent in economic crime:

- has a continuing nature;
- is characterized by high latency;
- consists of criminal acts committed by state actors;
- violates the order of economic management;
- committed by legal entities (which can be explained by the fact that according to the criminal law, only a legal entity can be the subject of a crime);
- has a close connection with organized crime, corruption, "shadow" economic activity;
- forms a semi-criminal mentality among the citizens of the state (Kravchuk, 2009).

The above features seem to be reasonable, but the authors have a slightly different approach, according to which the signs of criminal activity in

the field of economy should include the following: 1) the investigated criminal acts are always a platform for the formation of the "shadow economy"; 2) criminal acts in the economic sphere are interconnected with corruption acts that facilitate such illegal activities (the subjects of criminal offenses are often officials); 3) the presence of intent to obtain economic benefits; 4) the presence of only direct intent; 5) the commission of an illegal act is committed by all possible criminal prohibited methods.

D. M. Harko in his work "Criminological problems of defining the concept and signs of modern economic crime as a factor of shadowing of the economy of Ukraine" identifies the following signs of economic crime:

- it is a type of crime that has a predominantly mass character and, accordingly, causes massive damage;
- covers various abuses of economic power;
- is committed in the course of professional activities of a manager;
- has multiple episodes of committing a crime;
- is performed by both individuals and legal entities;
- is a more complex socio-economic phenomenon than traditional crime;
- has a latent nature;
- causes significant economic damage to the interests of the state (Harko, 2010).

Summarizing the different views of scientists on the signs and features of economic crime, scientists offer the following definition of economic crime: "economic crime is an unlawful act committed in the sphere of economy with the use of official position, violating the order of economic management, and aimed at obtaining economic benefits." Given this definition, the following features of economic crime can be distinguished:

- characterized by abuse of power;
- has a property character;
- has a latent character;
- is characterized by the use of legal and illegal economic activities.

The development of the crisis situation in the economy is a factor that attracts criminals to commit economic crimes, in addition, it should be borne in mind the struggle for economic power, which makes it possible to expand the number of ways to seize power, as well as to commit illegal actions in the economic sphere (Sakun, 2018). According to the authors, *criminal unlawful activity in the field of economy is a set of socially dangerous and illegal acts that encroach on the economic security of the state, the established procedure for the functioning of economic institutions of the state, the procedure for the exercise by business entities of their powers and management functions.*

### 3. The notion of causes and conditions of illegal criminal activity in the economic sphere

Criminal illegal activity in any sphere is determined by a number of reasons, which, first of all, have a national, social nature. However, there are reasons and conditions that allow differentiating criminal offenses depending on the catalysts that cause them. The causes and conditions of criminal offenses in the sphere of economic activity should be understood as negative social and economic phenomena and processes that have different determinative value, including accidental, but, interacting, create, promote, modify and determine the existence and manifestations of economic crime. Based on the analysis of socio-psychological factors, it should be noted that new conditions have emerged for the formation of social tension in connection with the sharp stratification of society by the level and quality of material security. Values have changed in society. Material well-being, regardless of the methods of its achievement, began to dominate more than work. A sharp increase in the welfare of a narrow circle of people generates not only envy, but also the desire to get the same, or a surrogate of the same benefit. Benefit shapes and determines the behavior of many segments of the population (Moiseyenko, 2020). Profit and violence are the "core" of any type of criminal offense, which remains unchanged for a long period of time. However, the gradual change of mentality and social needs transforms criminal actions, giving them new forms while maintaining the old intentions. Thus, it can be confidently stated that the main reason for committing criminal offenses is the satisfaction of material needs at a level sufficient for a certain stratum of the population.

Analyzing the determinants of criminal offenses in the field of economic activity, one should pay attention not only to short-term (current) factors, but also to long-term and medium-term factors that determine the development of this phenomenon. These are factors that arise and operate in Ukraine and are related to the primary accumulation of capital and redistribution of property. In 1997 and 2008, the negative consequences of the global economic crisis became apparent, and medium-term factors are acting at a certain stage of society transformation. These stages last about forty years, during which there are significant changes in the functioning of the economy. Long-term factors of the existence of criminal offenses in the sphere of economic activity are rooted in socio-economic contradictions of society development, in the change of forms of ownership, in the problems of the country's integration into the world market, in the traditions of economic life, in the nature of legal and information support of entrepreneurial activity, etc.

At the same time, the possibilities of forecasting crime in the sphere of economic activity in general are limited. Accounting of open criminal proceedings carried out by the prosecutor's office does not allow to see the regional peculiarities of criminal offenses of this category, as well as other types of criminal offenses. On the one hand, there is a decrease in the official statistics on the number of detected offenses and criminal proceedings opened on them, on the other hand, surveys and interviews with law enforcement officers and businessmen indicate the opposite (Moiseyenko, 2020). Thus, one can say that the causes and conditions of criminal activity in the economic sphere are as follows:

- 1) *insufficient level of social protection of the population;*
- 2) *unsatisfactory level of economic development of the state;*
- 3) *inconsistency of the mentality of society with social values recognized at the highest level of the state;*
- 4) *the presence of "dead" zones in the labor market;*
- 5) *vulnerability of small and medium-sized businesses in the state.*

The current system of recording criminal offences is based on the number of open criminal proceedings and their movement. However, it does not take into account other criteria for comparison that would allow to analyze certain issues. This is, for example, the number of persons who have committed the same crime and their criminal legal characteristics (criminal record, type of subject and social status), form and type of complicity, type of repetition, scope of the criminal offense, type and amount of damage, amount of compensation, the presence of aggravating and mitigating circumstances and their number in each criminal offense, types and geography of the criminal offense, etc. Thus, the system of accounting of criminal offenses does not allow to separate from the array of realizations such offenses that are committed in the field of economy. Also, the authors are unable to distinguish between criminal offences committed in complicity by the same officials who are employees of a business entity (legal entity), as well as those who do not work at this enterprise. The existing system of registration of criminal offences does not allow to identify those persons who have committed criminal offences repeatedly. Records are kept only on persons who have committed criminal offences repeatedly. Moreover, it is impossible to determine what types of repetition are in question: general, special or recidivism. Similar cases with statistical data that determine such qualifying features of criminal offenses of officials as the amount of damage caused by the crime (Moiseyenko, 2020). According to the authors, *the causes and conditions of committing criminal offenses in the field of economy should be understood as a complex set of socially prohibited, socially dangerous phenomena and processes that determine economic*

*criminal activity by creating unsatisfactory living conditions for citizens of the country.*

#### **4. Groups of factors of criminal illegal activity in the sphere of economy**

The determinative complex of criminal offenses in the field of economy includes a fairly large number of reasons that are associated with the mechanism of criminal unlawful activity. Scientists point out that according to the latter, they should be divided into general (indirect impact) and special (factors of direct action). General factors affect the criminal situation in general. According to it, criminologists distinguish the following groups of factors: socio-economic; regulatory and legal and organizational-managerial. Socio-economic factors in the system of criminological determinants of economic crime are decisive, since they determine the criminal behavior of not only an individual, but also the criminogenic situation in society as a whole. Socio-economic factors are a complex of historically variable negative phenomena in the economic life of society, which, on the one hand, form a certain level of economic and legal consciousness of people, and on the other hand, create conditions in the sphere of production, distribution and exchange of material wealth for the realization of their vital needs for material support by criminal means. At the same time, mistakes in economic planning inevitably result in artificial (often unintentional) creation of conditions favorable for committing illegal actions. It is also interesting that socio-economic factors are retrospective, that is, they are historically conditioned phenomenon associated with a number of economic transformations that have taken place in the country over the past fifty years. The shadow economy, which began to develop even before Ukraine gained independence, laid a solid platform for the formation of forms of economic theft, which has been transforming from year to year and has already acquired its final form in the current criminal legislation.

The intensification of criminogenic economic factors in the late 90s of the twentieth century was caused by the formation of monopoly associations and the granting of privileges by state officials in financing; illegal transfer of state resources to non-state economic entities; distortions in pricing. The general economic crisis that gripped Ukraine during this period was characterized by a decline in production, imbalance of the economy, falling living standards, inflation and hyperinflation, declining labor productivity, etc. This finally aggravated the crime situation in the country, creating ideal conditions for the intensification of criminal offenses in the field of economic activity and further criminalization of society. Shadowing processes

covered, first of all, the sphere of legal production, ordinary entrepreneurship associated with concealment of additional profits from accounting. At the level of a particular business entity, the boundary between official and hidden economic activity has virtually disappeared, which has given rise to the circulation of shadow and legal capital, driven by business expediency. The concentration of criminal capital led to the replacement of leaders of the underground trade union format with oligarchic leaders of financial and industrial groups. The criminal scheme of connections between financial and industrial groups, corrupt officials and shadow business has become a reflection of the official system of governance (Moiseyenko, 2020). Today in Ukraine there is no well-established system of money circulation, imperfect tax system, there is a number of debts that will not be "closed" in the near future, and all available funds are mostly spent on solving urgent economic needs of the state. In this context, the development of criminal activity in all spheres is inevitable. Criminalization of any prohibited act is always socially conditioned and, almost always, the first reason for this is the unsatisfactory material condition of citizens, lack of stability in the political and economic sphere, etc. Thus, the number of cases of tax evasion, engagement in prohibited activities, and so on begins to grow.

Pseudo-economic shadow relations are reproduced according to their own laws, creating the material basis for organized crime and corruption. The latter becomes a norm, an effective regulator of distribution and redistribution of shadow profits and excess profits at the level of individuals, social groups (corporations) included in this system, and the state as a whole. The causes of criminal offenses in the field of economic activity are both objective and subjective in nature. In order to understand this type of crime, it is important to identify the circumstances that not only give rise to it, but also support it both at the macro level and in a specific area of organizational and economic activity, as well as at the individual level of life of people in solving personal economic problems. The objective socio-economic determinants of economic (commercial) crime include the socio-economic crisis in the state, the loss of historical traditions and moral norms based on respect for private property, honest earnings, honest financial business, a fairly high tax burden, a high level of the shadow economy, the passive attitude of the state to the existence of the criminal "elite", a significant level of corruption, lack of transparency and fair competition (Zhuzha, Chernei, 2020). In this way, there is a redistribution of values and moral needs of citizens, in the absence of sufficient resources for normal existence, materialism in its purest form comes to the fore. The symbiosis

of social and economic issues in the framework of the considered illegal activity is due to the nihilism of the state, the lability of law enforcement agencies and the gradual transformation of the mentality of Ukrainian society. The same reasons, in fact, underlie corruption. Unfortunately, modern society will have to go a long way to learn to live without corruption, and the legislator urgently needs to develop a modern mechanism to counter such actions, which will include not only repression, but also appropriate ways to raise living standards to a higher level.

Regulatory and legal determinants. Shortcomings of legal regulation of economic relations are one of the leading factors of sustainable criminal development of the economy. These include, first of all, the imperfection of the legislative framework and other regulations governing both the activities of business entities and the activities of law enforcement and regulatory authorities. Legal measures to regulate economic relations, if they do not meet the objectives of socio-economic development of society and the requirements of objective economic laws, have a great negative impact on the criminogenic situation. From the criminological point of view, this is crucial for explaining the legal factors of determination of criminal offenses in the field of economic activity. One of the shortcomings of the regulatory and legal nature, which affects the level of criminal offenses in the field of economic activity, is the lack of clear specialization of law enforcement and regulatory authorities at the legislative level, which, in fact, gives rise to duplication of functions by their various structural units. Another problem is legal conflicts in the mechanism of obtaining by law enforcement agencies of information constituting commercial or banking secrets or data that became known in connection with the performance of control functions by state regulators. Quite often in practice there are cases of unjustified refusal to provide such information to the initiators of the request. As a result, the latency of criminal offenses increases, the effectiveness of preventive work decreases. No less difficult task during the investigation of criminal offenses in the field of economic activity is the search by the pre-trial investigation authorities for legal grounds to involve specialists of regulatory or other specialized bodies as specialists (Moiseyenko, 2020). It should be emphasized that the unstable regulatory situation caused by constant changes in the criminalization of certain illegal acts, decriminalization of a number of economic criminal offenses, as well as the narrowing of the subject composition of abuse of power or abuse of authority only to law enforcement officers, gave a new impetus to the commission of socially dangerous acts in the field of economy.

Organizational and managerial determinants. The growth of negative trends in the economy of the transition period was facilitated by the destruction of the management system that developed within the administrative command system. Partial reduction of the specialized control and audit apparatus and then its complete liquidation (simultaneously with the disbanding of state control bodies at all levels) created unlimited opportunities for various financial frauds. The control and audit apparatus was unprepared for the new economic conditions. It was not mentioned in any of the economic programs for the transition to market relations. In fact, the activities of officials in such important areas as, in particular, the formation and use of the budget, privatization, licensing of certain types of economic activity, foreign economic activity, etc. remained outside the control of the state (Zhuzha, Chernei, 2020). Another manifestation of organizational and managerial determinants of criminal offenses in the field of economic activity is the shortcomings in the activities of law enforcement agencies. First, there is no clear mechanism for interaction between law enforcement agencies, as well as with regulatory authorities and business entities. Second, law enforcement officers often face problems in their activities due to lack of funds to ensure audits, inspections, engagement of specialists, etc. Third, in practice there are cases when employees, whose main task is to detect criminal offenses in the field of economic activity, are assigned with functions that are not typical for them (for instance, of a different nature) (Moiseyenko, 2020). Therefore, taking into account the determinants, measures, means and methods of nationwide prevention of criminal and illegal activities in the economic

sphere, which were discussed above, should include 1) stabilization of the political situation in the country; 2) addressing the problems of small and medium-sized businesses caused by the events of recent years; 3) identifying gaps in economic planning and forecasting economic activities for the coming years; 4) development of the labor market, including the creation of "dead" zones, expansion of the number of state-owned enterprises; 5) increasing the level of social protection of vulnerable categories of the population (elderly people, people with special needs, people raising children on their own, and so forth); 6) improvement of the social package provided to employees; 7) increase of the minimum wage, etc.

## 5. Conclusions

Thus, the study has led to the conclusion that criminal illegal activities in the economic sphere is quite common, which is due to a number of state transformations. The absence of an established social base for the realization of the basic needs of the population, the lack of a clear system of economic planning and forecasting, regular (not always positive) revision of criminal legislation and regulations governing economic relations – all these are the main reasons that negatively affect the criminological picture in terms of criminal offenses in the field of economy.

A positive change in this situation is possible only through the creation of a unified economic and legal mechanism for the protection of the state and citizens through the integration into modern practice of a number of criminological measures and means of prevention, which should be implemented at all levels: from the national to the social.

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# ABOUT DATA PROTECTION STANDARDS AND INTELLECTUAL PROPERTY REGULATION IN THE DIGITAL ECONOMY: KEY ISSUES FOR UKRAINE

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**Abstract.** Changes that are constantly taking place in the digital economy cause increasing instability of legislation in the field of data protection and security. For example, in Ukraine, under martial law, there is an urgent need to adapt the legal regulation to European data protection standards (in terms of personal data processing). First of all, the correlation between EU law, national law of the EU Member States and national legislation of the EU candidate countries results in the principle of direct effect of EU law. In addition, EU data protection law has become an essential source for EU Member States in regulating artificial intelligence (AI), e-commerce and the Internet of Things (IoT). The article considers the specific topic of the conditions of approximation of international norms and legislation of Ukraine to EU law, trying to answer the questions of personal data protection in the conditions of martial law that have arisen. This work is based on a comparative analysis of the General Data Protection Regulation 2016/679 and internal data protection rules in Ukraine. At present, the research purpose of the article is to reveal the fact that data protection is a specific category of procedural law based on the principles of intellectual property law regarding data access rights and data ownership rights in the digital economy.

**Key words:** data protection standards, digital economy, General Data Protection Regulation, information security, intellectual property (IP), personal data.

**JEL Classification:** G14, O34

## 1. Introduction

At present, the research purpose of the article is to reveal the fact that data protection is a specific category of procedural law based on the principles of intellectual property law regarding data access rights and data ownership rights in the digital economy.

In his futuristic opinion Guido Noto la Diega states that: "One may naively believe that your own phone is your own property. It is not. The phone belongs to the copyright holders for the code that runs in it, the manufacturers for its design, the patents for how it works, and the trademarks not only for the logos but also for things like the way it "swipes". What happens when embedded software and other IP-protected digital content is no longer an exclusive feature of computers and phones? What happens when patented things and closed systems are everywhere:

in the bedroom, in the bathroom, in the body? Our behaviour becomes severely constrained by the de facto, legal and technical control that IoT companies retain over their Things – and which we consequently lose. We have become digital tenants, not owning or controlling any of the objects around us and the data about us. To the point where we can say that we no longer own: we are owned." (Guido Noto la Diega, 2022)

One way or another, it can be argued that we are still the owners of personal data. Although data protection legislation is very young, many data protection rules are universal and based on common values.

Florent Thouvenin and Aurelia Tamò-Larrieux note that "the literature on data ownership as a property right is divided: While some authors argue

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that the existing regulatory system is inadequate to protect individuals in the digital economy, others consider it adequate (or adequate enough) and therefore discourage the establishment of data ownership rights. The first group of authors highlights the potential threats of big data and global trade to the protection of fundamental rights and freedoms of European citizens. In their view, data ownership can help mitigate some of the negative effects of the digital economy." (Florent Thouvenin, Aurelia Tamò-Larrieux)

Thor Berger and Carl Benedikt Frey noted that "digital transformation has impacted society on various levels, mainly on the economic level. The automation of various business operations, such as increasing production, reducing costs and improving operational structures, has given businesses a huge advantage in terms of sustainability. The digital economy has offered new opportunities for business and the labour market. The wide and diverse range of services offered by the digital economy has created numerous new jobs, which has impacted both the business and labour markets. The digital economy uses vast amounts of data and information for its operational structure, which has helped to deliver the same public services such as healthcare and education more efficiently. A sustainable digital economy has also impacted social governance mechanisms by improving the quality of interaction between governments and citizens." (Thor Berger, Carl Benedikt Frey, 2017)

It is noteworthy that the regulatory framework for the digital economy has begun to influence and replace national legislation, which raises some concerns.

The application of the General Data Protection Regulation 2016/679<sup>1</sup> (hereinafter – GDPR) by the EU Member States and candidate countries for accession to the EU can be considered a problematic issue of procedural law.

In the EU, the procedural rules for the protection of personal data are set out in the following documents:

- Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation)<sup>2</sup>;
- Regulation (EU) 2016/794 of the European Parliament and of the Council of 11 May 2016 on the European Union Agency for Law Enforcement Cooperation (Europol) replacing and repealing Council Decisions 2009/371/JHA, 2009/934/JHA,

2009/935/JHA, 2009/936/JHA and 2009/968/JHA (Regulation (EU) 2016/794);

- Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (Regulation (EU) 2018/1725);

- Regulation (EU) 2018/1727 of the European Parliament and of the Council of 14 November 2018 on the European Union Agency for Criminal Justice Cooperation (Eurojust) replacing and repealing Council Decision 2002/187/JHA (Directive (EU) 2016/680);

- Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the prevention, investigation, detection or prosecution of criminal offences or for the execution of criminal penalties, and on the free movement of such data and repealing Council Framework Decision 2008/977/JHA (Directive (EU) 2016/680);
- Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 on the processing of personal data and on the protection of privacy in the electronic communications sector (Privacy and Electronic Communications Directive) (Directive 2002/58/EC), etc.

It is striking that in the regulations and directives the data protection provisions mainly concern the control of the transposition of Member States' legislation.

## 2. European Digital Single Market and legal mechanisms of data protection in the EU and Ukraine

In this study, the authors agree with Endre Gyöző Szabó, Vice President of the National Authority for Data Protection and Freedom of Information of Hungary, that "GDPR, as a legal act of the European Union aimed at the highest level of harmonization, requires Member States to establish independent data protection authorities to protect the rights of individuals and ensure the free flow of personal data within the Union." (Endre Gyöző Szabó, 2018)

Under the GDPR, a person has following rights:

- a) the right of access to stored personal data, art. 15 GDPR;

<sup>1</sup> The GDPR came into force on the 25<sup>th</sup> of May, 2018 and repealed the Data Protection Directive 95/46/EC. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679>

<sup>2</sup> Ibid.

- b) if incorrect personal data are processed, there is a right to rectification, Art. 16 GDPR;
- c) under legal conditions, there is a right to demand erasure or restriction of processing and the right to object to processing, Art. 17, 18, 21 GDPR;
- d) in case of consenting to data processing or signing a data processing contract and the data processing is carried out by automated means, there is a right to data portability, Art. 20 GDPR;
- e) the right to lodge a complaint with the competent state officer for data protection, Art. 77 GDPR<sup>3</sup>.

The revocation does not affect the lawfulness of data processing carried out on the basis of contracts or letters of consent before the revocation.

By Florent Thouvenin, Aurelia Tamò-Larriex "While the GDPR certainly facilitates the free flow of personal data within the EU by establishing a (relatively 16) uniform regime across all EU Member States, it also imposes significant restrictions on the processing of personal data and thereby limits the free development and introduction of digital goods and services. Although innovation remains possible, the GDPR has at least increased its cost, sometimes to a level that makes the introduction of innovative digital goods and services economically unfeasible. There are many flexible provisions in the GDPR that allow Member States to "introduce national provisions to further clarify the application of the rules" of the GDPR, to introduce "sectoral laws in areas requiring more specific provisions", or to "clarify the rules, including for the processing of special categories of data."<sup>4</sup>

For comparison, these rights are also contained in the provisions of Ukrainian laws related to the right to privacy. The legal basis for data protection in Ukraine is determined by the national norms establishing the right to information.

The right to information is a constitutional principle and is based on international documents: Universal Declaration of Human Rights of the United Nations (1948), International Covenant on Civil and Political Rights, Convention for the Protection of Human Rights and Fundamental Freedoms (1950).

The Constitution of Ukraine of 28 June, 1996<sup>5</sup> guarantees the right to information in provisions of these articles and following its provisions the right to information includes the right to open data and information on public administration activities and the right to information about the status of environmental security, etc.

As it is known, "the Digital Single Market strategy aims to provide better access for consumers and businesses to online goods and services across Europe, for example, by removing barriers to cross-border e-commerce and access to online content, while enhancing consumer protection". An environment in which digital networks and services can thrive The Digital Single Market aims to create the right environment for digital networks and services by providing high-speed, secure and reliable infrastructure and services, supported by an appropriate regulatory environment. Key issues are cybersecurity, data protection/e-privacy, and fairness and transparency of online platforms. The Digital Single Market Strategy aims to maximise the growth potential of the European digital economy so that every European can fully benefit from it – in particular by developing digital skills, which are essential for an inclusive digital society."<sup>6</sup>

Similarly, Thomas Cottier and Michelangelo Temmerman write: "The elevation of intellectual property to the realm of international law, in an attempt to coordinate and even harmonize different legal orders in order to serve a transnational and increasingly globalized economy, has resulted in transparency taking on additional features that go beyond the classic principles of publicity and accessibility of the law." (Cottier, Thomas, Temmerman, Michelangelo, 2010)

The basic law on personal data protection is the Law of Ukraine "On Personal Data Protection" No. 2297-VI dated June 1, 2010 (hereinafter – the PDP Law) and three by-laws approved by the Order of the Ukrainian Parliament Commissioner for Human Rights No. 1/02-14 dated January 8, 2014 "On Approval of Documents in the Field of Personal Data Protection"<sup>7</sup>:

- typical procedure for personal data processing;
- the procedure for the Human Rights Commissioner of the Verkhovna Rada of Ukraine to monitor compliance with the legislation on the protection of personal data;
- the procedure for notifying the Ukrainian Parliament Commissioner for Human Rights about the processing of personal data that poses a particular risk to the rights and freedoms of personal data subjects, about the structural unit or responsible person who organizes the work related to the protection of personal data during their processing, as well as the publication of this information.

<sup>3</sup> Op cit.

<sup>4</sup> Op cit, p. 320

<sup>5</sup> Constitution of Ukraine. Available at: <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text>

<sup>6</sup> For more about the Digital Single Market see the Report of the Directorate-General 'Communications Networks, Content and Technology. Available at: <https://ec.europa.eu/digital-singlemarket/en/digital-single-market>

<sup>7</sup> The Decree of the Commissioner of the Verkhovna Rada of Ukraine for Human Rights "On approval of documents in the field of personal data protection. Available at: [https://zakon.rada.gov.ua/laws/show/v1\\_02715-14#Text](https://zakon.rada.gov.ua/laws/show/v1_02715-14#Text)

The Law of Ukraine "On Personal Data Protection" regulates legal relations related to the protection and processing of personal data. The Law regulates legal relations related to the protection and processing of personal data, aims to protect the fundamental rights and freedoms of man and citizen, in particular the right to privacy, in connection with the processing of personal data.

The PDP Law applies to the processing of personal data, which is carried out in whole or in part by automated means, as well as to the processing of personal data contained in the file or intended to be included in the file, using non-automated means.

1. The subjects of relations related to personal data are:

- the subject of personal data;
- owner of personal data;
- personal data administrator;
- third party;
- Commissioner of the Verkhovna Rada of Ukraine on human rights.

2. The owner or administrator of personal data may be enterprises, institutions and organizations of all forms of ownership, public authorities or local self-government bodies, individual entrepreneurs who process personal data in accordance with the law.

3. The administrator of personal data, the owner of which is a public authority or local self-government body, except for these bodies, can only be an enterprise of state or communal ownership.

4. The personal data owner may entrust the processing of personal data to the personal data controller in accordance with the agreement concluded in writing.

5. The personal data controller may process personal data only for the purpose and to the extent specified in the contract.

It should be noted that the GDPR and the PDP Law have many similarities in principles:

- lawfulness;
- fairness;
- transparency;
- data minimization;
- purpose limitations;
- accountability;
- storage limitations;
- data integrity;
- confidentiality, etc.

The next similarities with GDPR and the PDP Law, that need to be mentioned in this paper, are:

- legal grounds of data processing and of "legitimate interests";
- unified and extended GDPR-like terminology;
- updated concept of sensitive data with a comprehensive list of legal grounds for processing such data;

- data protection rules about video surveillance;
- data protection rules concerning the use of tracking technologies in electronic communications;
- requirements for data processing agreements, etc.

Comparing the GDPR and the Law of Ukraine "On Personal Data Protection", it should be noted that the objects of protection in both documents are personal data.<sup>8</sup>

In parallel and in comparison to the GDPR, the PDP Law starts with the definition of personal data, while the GDPR mostly indicates the relationship between data subjects and data.

In the PDP Law, "personal data" may be referred to as confidential information about a person by law or by the person concerned. Personal data related to the exercise of official or official powers by a person authorized to perform the functions of the state or local self-government is not confidential information.

The Ukrainian act provides for a specific qualification of personal data specified in the declaration of a person authorized to perform the functions of the state or local self-government, which is submitted in the form determined in accordance with the Law of Ukraine "On Prevention of Corruption", does not belong to information with restricted access, except for information specified by the Law of Ukraine "On Prevention of Corruption".

Supplement Article 2 of the PDP Law with instructions that:

- personal data base – a named set of ordered personal data in electronic form and/or in the form of personal data files;
- the owner of personal data is a natural or legal person who determines the purpose of processing personal data, establishes the composition of these data and procedures for their processing, unless otherwise provided by law;
- consent of the subject of personal data is a voluntary expression of will of an individual (subject to his/her awareness) to grant permission to process his/her personal data in accordance with the specified purpose of their processing, expressed in writing or in a form that allows to conclude that it has been granted.

The key issue of this provision is that "in the field of e-commerce, the consent of the personal data subject may be provided during registration in the information and communication system of the e-commerce entity by marking the consent to the processing of his personal data in accordance with the stated purpose of their processing, provided that such system does not create opportunities for processing personal data before the marking":

- depersonalization of personal data – deletion of information that can directly or indirectly identify a person;

<sup>8</sup> For additional information about GDPR. Available at: <https://www.itgovernance.co.uk/articles-of-the-gdpr>

- file – any structured personal data accessible according to certain criteria, regardless of whether such data is centralized, decentralized or separated by functional or geographical principle;
- processing of personal data – any action or set of actions, such as collection, registration, accumulation, storage, adaptation, modification, updating, use and dissemination (distribution, sale, transfer), depersonalization, destruction of personal data, in particular with the use of information (automated) systems;
- the recipient is a natural or legal person to whom personal data is provided, in particular a third party;
- personal data – information or a set of information about a natural person who is identified or can be specifically identified;
- personal data manager – a natural or legal person who is authorized by the owner of personal data or by law to process this data on behalf of the owner;
- the subject of personal data is a natural person whose personal data is processed;
- third party – any person, except for the subject of personal data, the owner or manager of personal data and the Ukrainian Parliament Commissioner for Human Rights, to whom the owner or manager of personal data transfers personal data.

Data subjects are data processors and controllers, organizations that have the right to possess and process personal data, which are obliged to keep records of the personal data they possess, as well as their processing activities.

The data controller is a natural or legal person who, alone or jointly with others, determines the purposes or means of processing personal data (e.g., names, e-mail addresses, etc.). The controller also checks whether the legal conditions for protecting the rights of data subjects are met.

Unlike the Ukrainian law, the notification of the personal data subject about the fact of data processing is regulated in detail in the GDPR.

Although the GDPR understands that the required level of expertise should be determined, in particular, in light of the data processing operations carried out and the protection required for the controller.

The data controller is a natural or legal person who, alone or jointly with others, determines the purposes or means of processing personal data (e.g., names, e-mail addresses, etc.). The controller checks whether the legal conditions for protecting the rights of data subjects are met. Data processors are required to keep records of the personal data they hold and their processing activities.

At the same time, Ukraine lacks a system of justice in the field of personal data protection that would demonstrate how court decisions are made in the digital era. In contrast, in the EU, the sphere of data protection regulation is associated with well-known data protection cases. For example, in the Facebook/WhatsApp merger case, the European Commission decided for the first time in its history to impose fines on a company for providing incorrect or misleading information since the Merger Regulation of 2004 entered into force.<sup>9</sup> The Commission's previous decisions on this matter were taken under the 1989 Merger Regulation in accordance with other fining rules.<sup>10</sup>

The case *Weltimmo s. r. o. vs. Nemzeti Adatvédelmi és Információszabadság Hatóság*, Case C 230/14<sup>11</sup>, shows that companies should take into consideration that in case of doing business in multiple EU Member States, data protection legislation could be closer to the targeting customers. The request for the preliminary ruling has been made in proceedings between *Weltimmo s. r. o.* ('Weltimmo'), a company which has its registered office in Slovakia, and the *Nemzeti Adatvédelmi és Információszabadság Hatóság* (national data protection and freedom of information authority; "Hungarian data protection authority") concerning a fine imposed by the latter for infringement of Law CXII of 2011 on the right to self-determination as regards information and freedom of information (az információs önrendelkezési jogról és az információszabadságról szóló 2011. évi CXII. törvény; the Law "On Information"), which transposed Directive 95/46 into Hungarian law. When considering collecting personal data in a new jurisdiction, it is worth considering conducting a privacy impact assessment, as recommended in the proposed EU Data Protection Regulation, to ensure that local rights are not infringed; but if there is significant presence in any EU Member State or a particular nationality is targeted by your activities, local consultation should be taken. In its judgment (case C-230/14 of 1 October 2015), the European Court of Justice demonstrated the ability of the national regulators of the EU Member States in the field of personal data protection to resolve issues related to organizations located outside their borders.

### 3. Rights of access to data, possession of personal data and their processing

According to the Law PDP, "It is prohibited to collect, store, use and disseminate confidential information about a person without his/her consent,

<sup>9</sup> Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation). Available at: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32004R0139>

<sup>10</sup> For more see [https://ec.europa.eu/commission/presscorner/detail/pl/IP\\_17\\_1369](https://ec.europa.eu/commission/presscorner/detail/pl/IP_17_1369)

<sup>11</sup> Case C 230/14, REQUEST for a preliminary ruling under Article 267 TFEU from the Kúria (Hungary), made by decision of 22 April 2014, received at the Court on 12 May 2014, in the proceedings *Weltimmo s. r. o. vs. Nemzeti Adatvédelmi és Információszabadság Hatóság*.

except in cases determined by law, and only in the interests of national security, economic welfare and human rights (Article 32 of the Constitution of Ukraine). Confidential information about an individual includes, in particular, data on his/her nationality, education, marital status, religious beliefs, health status, as well as address, date and place of birth (Article 11 of the Law of Ukraine No. 2657-XII "On Information" dated 2 October 1992)." (The Law of Ukraine "On information")

Information about an individual (personal data) – information or a set of information about an individual who is identified or can be specifically identified. Article 32 of the Constitution of Ukraine stipulates that it is not allowed to collect, store, use and disseminate confidential information about a person without his/her consent, except in cases determined by law, and only in the interests of national security, economic welfare and human rights.

Information on the receipt by an individual of budget funds, state or municipal property in any form, structure, principles of formation and amount of remuneration, remuneration, additional benefits of the head, deputy head of a legal entity of public law, manager, deputy does not belong to information with restricted access. Head, member of the supervisory board of a state or municipal enterprise or a state or municipal organization aimed at making a profit, a person who permanently or temporarily holds the position of a member of the executive body or is a member of the supervisory board of an economic entity in the authorized capital of which more than 50 percent of shares (stakes, shares) directly or indirectly belong to the state and/or territorial community, except as provided for in Article 6 of the Law of Ukraine "On Access to Public Information". (The Law of Ukraine "On Access to Public Information")

The consent of the subject to the processing of his personal data must be voluntary and informed. The consent may be given by the subject in written or electronic form, which makes it possible to conclude that it has been given. Documents (information) confirming the consent of the subject to the processing of his personal data are stored by the owner during the processing of such data:

- in the absence of consent, the transfer of personal data is allowed provided that it is provided for in part 16 of Article 2297 of the Law No 2297 and is conditioned by the interests of national security, economic welfare and human rights;
- the procedure for access of third parties to personal data is determined by the terms of the consent of the personal data subject provided by the owner of personal data to the processing of this data, or

in accordance with the requirements of the law (Article 16 of Law No 2297);

– personal data are objects of protection (Article 5 of Law No 2297), information or their aggregate about a natural person who is identified or can be specifically identified (Article 2 of Law No 2297). Information about a natural person is confidential, and access to confidential information is limited.

It is noteworthy that in the conditions of martial law, according to the authors, there are several exceptions to the above rules concerning the activities of state military administrations and other legal entities, namely:

- limits of the right to information in times of martial law;
- limits for the sake of national security, sovereignty and territorial integrity;
- limits for the sake of the necessity to respect individual and public interest;
- limits in criticism and opinion expression;
- limits in interference in the work of public authorities.

In the European Union, the processing of personal data (collection, storage and transfer to third parties) is carried out exclusively on the basis of the express consent of the legal representative or the subject of personal data, that is, in accordance with Art. 6 Paragraph 1 Letters a-f GDPR, which defines it as:

"1. Processing shall be lawful only if and to the extent that at least one of the following applies:

- (a) the data subject has given consent to the processing of his or her personal data for one or more specific purposes;
- (b) the processing is necessary for the performance of a contract to which the data subject is a party, or in order to take steps at the request of the data subject prior to the conclusion of the contract;
- (c) the processing is necessary for compliance with a legal obligation to which the controller is subject;
- (d) the processing is necessary for the protection of the vital interests of the data subject or another natural person;
- (e) the processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller;
- (f) the processing is necessary for the purposes of the legitimate interests pursued by the controller or a third party, unless such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require the protection of the personal data, in particular where the data subject is a child.

Point (f) of the first subparagraph shall not apply to processing carried out by public authorities in the performance of their tasks."<sup>12</sup>

<sup>12</sup> Op cit.

Ukrainian legislative acts describe these situations in a slightly different way.

According to the Decision of the Constitutional Court of Ukraine No. 2-рп/2012 dated January 20, 2012, information about personal and family life of a person (personal data about him/her) is any information or a set of information about an individual who is identified or can be specifically identified, namely: nationality, education, marital status, religious beliefs, health status, property status, address, date and place of birth, place of residence and stay, etc. data on personal property and non-property relations of this person with other persons, including family members, as well as information on events and phenomena that have taken place or are taking place in everyday, intimate, social, professional, business and other spheres of a person's life, except for information related to the exercise of powers by a person who holds a position related to the performance of functions of the state or local self-government bodies.

Such information about a person and his/her family members is confidential and may be disseminated only with his/her consent, except in cases specified by law, and only in the interests of national security, economic welfare and human rights.

The list of personal data recognized as confidential information is not exhaustive.

In the Law "On Personal Data Protection" the processing of personal data means any action or set of actions, such as collection, registration, accumulation, storage, adaptation, modification, updating, use and dissemination (distribution, sale, transfer), depersonalization, destruction of personal data, including with the use of information (automated) systems.

The processing of personal data is carried out in an open and transparent manner, using means and in a manner consistent with the defined purposes of such processing.

Accordingly, the subjects of relations related to personal data are:

- subject of personal data is a natural person whose personal data is processed;
- the owner of personal data is a natural or legal person who determines the purpose of personal data processing, establishes the composition of this data and the procedures for their processing, unless otherwise specified by law;
- personal data controller – a natural or legal person who is authorized by the controller of personal data or by law to process this data on behalf of the controller;
- third party – any person, except for the subject of personal data, the owner or manager of personal data and the Ukrainian Parliament Commissioner for Human Rights, to whom the owner or manager of personal data transfers personal data;

The Verkhovna Rada Commissioner for Human Rights is an official who, independently of other state bodies and officials, exercises parliamentary control over the observance of constitutional rights and freedoms of man and citizen.

The owner or administrator of personal data may be enterprises, institutions and organizations of all forms of ownership, public authorities or local governments, individual entrepreneurs who process personal data in accordance with the law (public authority, bank within the framework of contractual relations, supermarket, if a cone card is issued, etc.).

For this purpose, the grounds for processing personal data are defined:

- consent of the personal data subject to the processing of his personal data;
- permission to process personal data granted to the owner of personal data in accordance with the law solely for the exercise of his powers;
- conclusion and execution of a transaction to which the subject of personal data is a party or which is concluded in the interests of the subject of personal data or for the implementation of measures preceding the conclusion of a transaction at the request of the subject of personal data;
- protection of the vital interests of the subject of personal data;
- the need to fulfill the obligation of the owner of personal data, which is provided by law;
- the need to protect the legitimate interests of the personal data controller or a third party to whom the personal data is transferred, unless the need to protect the fundamental rights and freedoms of the personal data subject in connection with the processing of his/her data prevails over such interests.

It is important to clarify how GDPR affects businesses in terms of regulating the protection, storage and disposal of sensitive digital documents.

At the same time, the GDPR adds several additional requirements to the existing requirements for the protection of personal data against unauthorized or unlawful processing and/or accidental loss and damage.

According to the GDPR, everyone whose personal data is stored by an organization has the right to be forgotten, the right to data portability and the right to object.<sup>13</sup>

An individual should know:

- responsibilities when it comes to hard copy personal data processing, storage and destruction;
- rights under GDPR (incl. demands to report GDPR breaches to the regulator, requirements on demonstrating compliance to the regulator).

According to the article 11 of the PDP Law "the subject of personal data has the right to:

<sup>13</sup> For more see <https://gdpr-info.eu/>

- know about the sources of collection, location of their personal data, the purpose of their processing, location or place of residence (stay) of the owner or administrator of personal data or to give an appropriate order to obtain this information to authorized persons, except in cases established by law;
- receive information about the conditions for granting access to personal data, in particular information about third parties to whom his personal data is transferred;
- access to his/her personal data;
- receive no later than thirty calendar days from the date of receipt of the request, except in cases provided by law, a response on whether his personal data are processed, as well as to receive the content of these personal data;
- submit a motivated request to the personal data controller with an objection to the processing of their personal data;
- make a reasoned request to change or destroy their personal data by any owner and administrator of personal data, if these data are processed illegally or are unreliable;
- protect his/her personal data from illegal processing and accidental loss, destruction, damage due to intentional concealment, failure to provide or untimely provision of data, as well as protection from providing information that is unreliable or dishonors the honor, dignity and business reputation of a physical person individuals;
- file complaints about the processing of his/her personal data with the Commissioner or the Court;
- apply legal remedies in case of violation of the legislation on the protection of personal data;
- enter a reservation regarding the limitation of the right to process his/her personal data when giving consent;
- withdraw consent to the processing of personal data;
- know the mechanism of automatic processing of personal data;
- protect against an automated decision that has legal consequences for him."

It is noteworthy that there are no additional procedural rules related to the protection of data protection rights. On the contrary, the fines for violations of these provisions differ in the laws depending on the type of violation and the severity of the violation. The PDP Law proposes to establish the following fines: for individuals – from UAH 10,000 to UAH 300,000, and for legal entities – from UAH 30,000 or 0.05 percent of the total annual turnover to 5 percent of the total annual turnover (but not less than UAH 300,000).<sup>14</sup>

This is provided by Article 8 of the Law of Ukraine "On Personal Data Protection":

"The subject of personal data has the right to receive any information about himself/herself from any subject of relations related to personal data, subject to the provision of information about the surname, name and patronymic, place of residence (place of stay) and details of the document certifying the individual who submits the request, except in cases established by law. The subject of personal data has the right to submit a reasoned request to the owner of personal data to prohibit the processing of his personal data (part thereof) and/or change their composition / content. Such request shall be considered by the controller within 10 days from the date of its receipt.

If, as a result of consideration of such a request, it is established that the personal data of the subject (part of it) is processed illegally, the controller is obliged to stop processing the personal data of the subject (part of it) and notify the subject of personal data. If, as a result of consideration of such a request, it is established that the personal data of the subject (part of it) is unreliable, the owner is obliged to stop processing the personal data of the subject (part of it) and/or change their composition / content and notify the subject of personal data. In case of impossibility to satisfy the request, the personal data subject is provided with a reasoned answer about the absence of grounds for its satisfaction."

Taking into account the presented legislative approach, the appeal against the failure to satisfy the request or motivated demand of individuals to the Commissioner or to the court with the provision of supporting materials (screenshots or photos, copies of the request or motivated demand and the contested response, etc.) is controlled by procedural norms.

GDPR has a broader legal framework for data management compared to the Law of Ukraine "On Personal Data Protection".

The publication of personal data and performance of a task in the public interest based on norms resulting from Art. 6 Paragraph 1 Point (e) and Paragraph 3 of GDPR in conjunction with special legal norms, e.g., arising from the data protection laws of EU member states. Art. 6 Paragraph 3 GDPR stipulates that:

"The grounds for the processing referred to in points (c) and (e) of Paragraph 1 the following are:

1. Union law.
2. The legislation of the Member State to which the controller is subordinated.

<sup>14</sup> For more see <https://yur-gazeta.com/dumka-eksperta/chi-realno-prityagti-do-vidpovidalnosti-za-porushennya-zahistu-personalnih-daniv-v-ukrayini.html>

The purpose of the processing must be specified in that legal basis or, in the case of processing referred to in Point (e) of Paragraph 1, must be necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller.

This legal framework may contain specific provisions to tailor the application of the rules of this Regulation, in particular: general conditions governing the lawfulness of processing by the controller; types of data to be processed; data subjects concerned; subjects to whom and for what purpose personal data may be disclosed; purpose limitation; retention periods; and processing operations and processing procedures, including measures to ensure lawful and fair processing, such as those relating to other specific processing situations as provided for in Chapter IX. Union or Member State legislation must be justified by an

objective of public interest and be proportionate to the legitimate aim pursued."

#### 4. Conclusions

In summary, it should be noted that in order to document the free movement of personal data and their processing, the GDPR is considered as a data protection legal framework for the protection of specific rights of individuals, albeit for candidate countries. The preliminary review has shown that the provisions set out in the GDPR and the PDP Law are quite similar. For Ukraine, given the function of personal data protection authorities, it is extremely important to use the experience of the European public sector in developing the free movement of data in the digital single market. Undoubtedly, the GDPR is a valuable source for improving the practice of data protection functions and influencing the system of protection of citizens' rights.

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# ANALYSIS OF THE CURRENT STATE OF ORGANIZATION OF LAND USE MANAGEMENT IN AGRICULTURAL ENTERPRISES

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**Abstract.** *The subject of the research* is to study the current state of organization of land use management in agricultural enterprises. *Methodology.* In the course of the study, general scientific methods were used, in particular, theoretical generalization; methods of analysis and synthesis and statistical analysis, the method of SWOT-analysis of opportunities and threats was applied, and the graphical method was used to visualize the results of the study. The aim of the article is to analyze the current state of organization of land use management in agricultural enterprises. *Conclusions of the study.* Thus, having systematized the factors that determine the peculiarities of the organization of land management in agricultural enterprises, three groups were identified: natural-climatic and geographical, organizational-economic, agrotechnical and agrochemical. Based on the SWOT analysis of land resources as an object of management, it is determined that the purpose of land resources management of agricultural enterprises is to ensure the efficient use of land as the main factor of agricultural production in the long term on the basis of reproduction of productive land and increase the sustainability of agricultural landscapes, taking into account the balance of public and private interests. It should be noted that all subjects of land relations have the opportunity to minimize the negative consequences caused by the manifestation of weaknesses of land resources identified on the basis of SWOT analysis. First of all, such opportunities are related to the increase of state support for agriculture and rural development; strengthening of state control over the targeted use of agricultural land and its reproduction; improvement of the financial condition of agricultural enterprises and intensification of their innovation activities; development of adaptive landscape farming systems; appearance on the market of innovations in the form of new breeding-genetic, technical-technological and organizational-managerial solutions that ensure the preservation and improvement of the consumer qualities of productive lands, as well as the prevention of their degradation.

**Key words:** land resources, land relations, agricultural enterprises, management of land resources, management organization of use.

**JEL Classification:** E20, H56, O10

## 1. Introduction

An indispensable condition for the comprehensive improvement of agricultural production, based on a variety of forms of ownership and management, is the effective and rational use of land resources, which brings to the fore the formation of land relations adequate to the market economy as the basis of production relations in agriculture regarding the implementation of land ownership. In the course of agrarian reforms, the problems of land use have become more acute: soil depletion and productivity of agricultural land are increasing, farming systems and production technologies are being disrupted,

reclamation and soil protection works have virtually ceased. In modern theory and practice of land resources management a special role belongs to a group of economic methods. Their essence is to determine the ways of influencing the material and property interests of land use entities aimed at the efficient use and preservation of the resource potential of land with the use of rent assessment tools, comparison of costs and results in the process of stimulating active and more productive economic activity.

The application of economic methods of land resources management in the agricultural sector of the economy has a number of specific features.

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Their purpose is the fastest possible adaptation of agricultural producers to qualitatively new conditions of management, as well as minimization of negative processes that worsen the possibilities of land use. Management methods should be adapted to regional conditions. The main methods are differentiation of land payments depending on the quality of land, location, type of use and composition of land. In addition, fines are sometimes applied for loss of soil fertility, erosion, violation of land and environmental legislation. In addition, in the theory and practice of land resources management there are various methods that differ in approaches and specific features of management, the degree of impact on the object of management, such as technical, technological, political, organizational, managerial, socio-psychological, etc.

The research of solving the problems of managing the use of land resources of agricultural enterprises is devoted to the work of many scientists, but the current situation in agriculture requires new ideas, assessment of ongoing processes, updating methods of economic recovery and its stabilization, improving the efficiency of land use. In this regard, a number of scientific, theoretical, methodological and practical problems need to be solved. Particularly acute are

the issues of objectively necessary priorities in the implementation of measures to manage the use of land resources, the principles and conditions for the implementation of these measures, the creation of a mechanism that will ensure the efficient use of land resources, and other organizational issues.

## 2. Current state of organization of land use management in agricultural enterprises

Land relations are a special economic category not only because of the specifics of land as an object of common interest, but also because of its dual nature, that is, it participates in the reproduction process as a natural factor and as a commodity. In this regard, the aspects characterizing land resources can be divided into two groups: technological aspect (effective use of the natural potential of land) and socio-economic aspect (cost parameters) (Korobskaya, 2020; Popov, 2018).

When distributing land resources, the first group of interests is aimed at the functional and economic properties of the land fund: the scale, proportions and priorities of its distribution in accordance with the level of economic development; types of their intended use; intensity of exploitation, productivity, as well as environmental conditions.

Table 1

### Distribution of the land fund of Ukraine by types of land in 2020 (Agropolit.com, 2020)

Oblast (region)	Agricultural land, thousand ha	of them:				
		arable	fallow	haymakers	pastures	perennial plantations
Vynnytsia	2012	1730	1	49	184	48
Volhynia	1048	672	0	162	202	12
Dnipro	2512	2127	0,03	17	314	53
Donetsk	2044	1654	1	43	289	58
Zhytomyr	1504	1144	41	119	178	22
Transcarpathian	451	200	0	94	129	27
Zaporizhzhia	2238	1901	0	83	216	38
Ivano-Frankivsk	621	401	2	82	121	15
Kyiv	1609	1321	13	101	117	57
Kropyvnytskyi	2032	1769	0	23	216	24
Luhansk	1907	1275	45	94	462	30
Lviv	1240	771	0,2	192	251	23
Mykolaiv	2000	1708	4	3	252	34
Odesa	2588	2077	27	51	351	82
Poltava	2167	1817	2	142	183	23
Rivne	922	658	3	126	124	11
Sumy	1695	1235	0,04	273	165	23
Ternopil	1035	851	3	24	145	14
Kharkiv	2361	1937	8	109	286	42
Kherson	1962	1780	0	10	150	23
Khmelnitskyi	1561	1326	0,7	91	105	38
Cherkasy	1450	1272	8	64	78	27
Chernivtsi	470	331	0	41	68	30
Chernihiv	2060	1456	22	297	262	24
<b>Total in Ukraine</b>	<b>41329</b>	<b>32698</b>	<b>190</b>	<b>2294</b>	<b>5263</b>	<b>864</b>

The most important type of land resources is agricultural land, which serves as the main means of production and subject of labor. They are subject to special protection and their transfer to other categories for non-agricultural needs is allowed only in exceptional cases.

The distribution of the land fund of Ukraine by types of land is shown in Table 1.

Currently, Ukrainians cultivate about one third of arable land in Europe, or 32.7 million hectares. Also, according to statistics, there are twice as many people per one inhabitant of Ukraine than per one European. In the structure of land holdings, the bulk of land is privately owned, about 31 million hectares, and 10.4 million hectares are in state and communal ownership. At the same time, about a third of the land, 32.7 million hectares, is under arable land. The largest amount of agricultural land is cultivated in Odesa, Zaporizhzhia and Kharkiv regions – more than 2 200 thousand hectares. The least land is owned by residents of Transcarpathian and Chernivtsi regions – less than 500 thousand hectares (Agropolit.com, 2020).

In Ukraine, land use is subject to payment. The purpose of the land payment is to stimulate the rational use, protection and restoration of land, increase soil fertility, formation of special funds to finance these measures, as well as filling local budgets.

The forms of payment for land are land tax and rent. The introduction of land tax is caused by the need to increase the efficiency of agricultural production through more rational use of land and other factors.

Local budgets in European countries are mostly filled with revenues from the taxation of real

estate (including land), the share of which reaches one third, or even exceeds half of all tax revenues of local budgets. In Ukraine, it is relatively low – only 13% (including almost 10% of the land payment) (Figure 1) (Tsina derzhavy, 2019).

The cost of land lease depends on the demand, the level of competition, the type of agricultural land, whether it is arable land, hayfields, pastures or perennial plantations, the quality of the land, as well as the level of awareness of potential buyers.

In the system of payments for land, rent is a market indicator to a greater extent than land tax. This is logical, since the practice of annual adjustment of rent rates for the use of land plots allowed most landlords to bring them in line with the level of demand for them.

For the state authorities that determine the amount of land taxation and other indicators of land value (cadastral value, market value), rent can serve as an indicator of the market value of land plots of different purpose and location in accordance with supply and demand. It should be emphasized that in foreign economic literature the concepts of rent are essentially perceived as identical. Indeed, all types of rents are essentially modified forms of land rent extraction, and fluctuations in land rent rates reflect trends in rent changes.

According to the results of research by scientists of the Institute of Agrarian Economics, the highest cost of renting one hectare of state-owned agricultural land is recorded in Kropyvnytskyi region – 8.4 thousand UAH, and the lowest – 0.9 thousand UAH – in Transcarpathian region (Figure 2) (Agropolit.com, 2019; Agropolit.com, 2020).

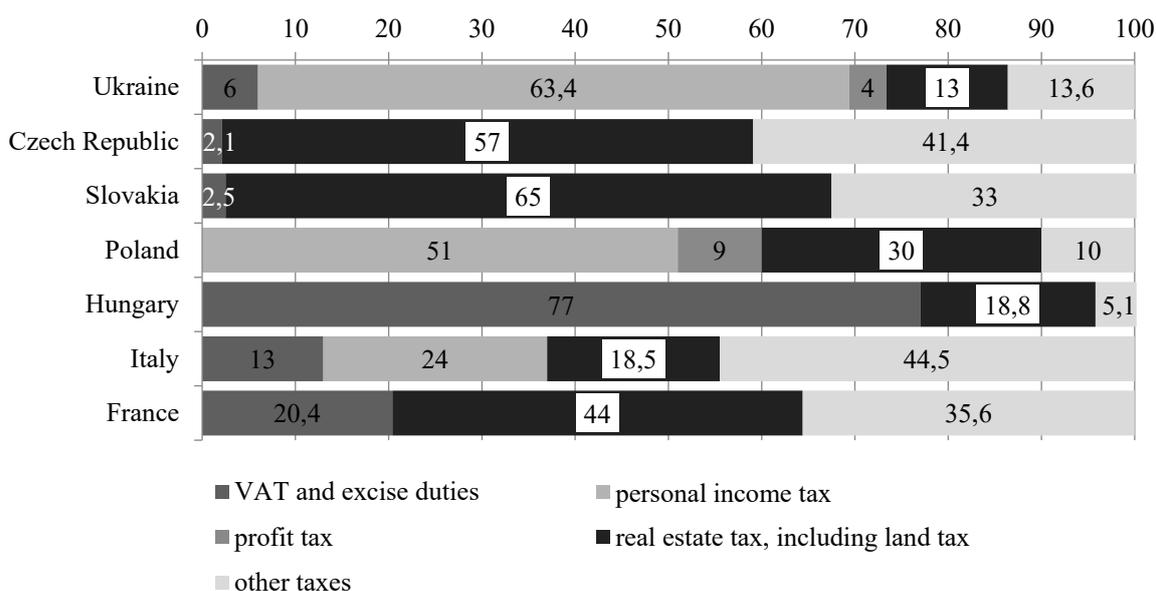
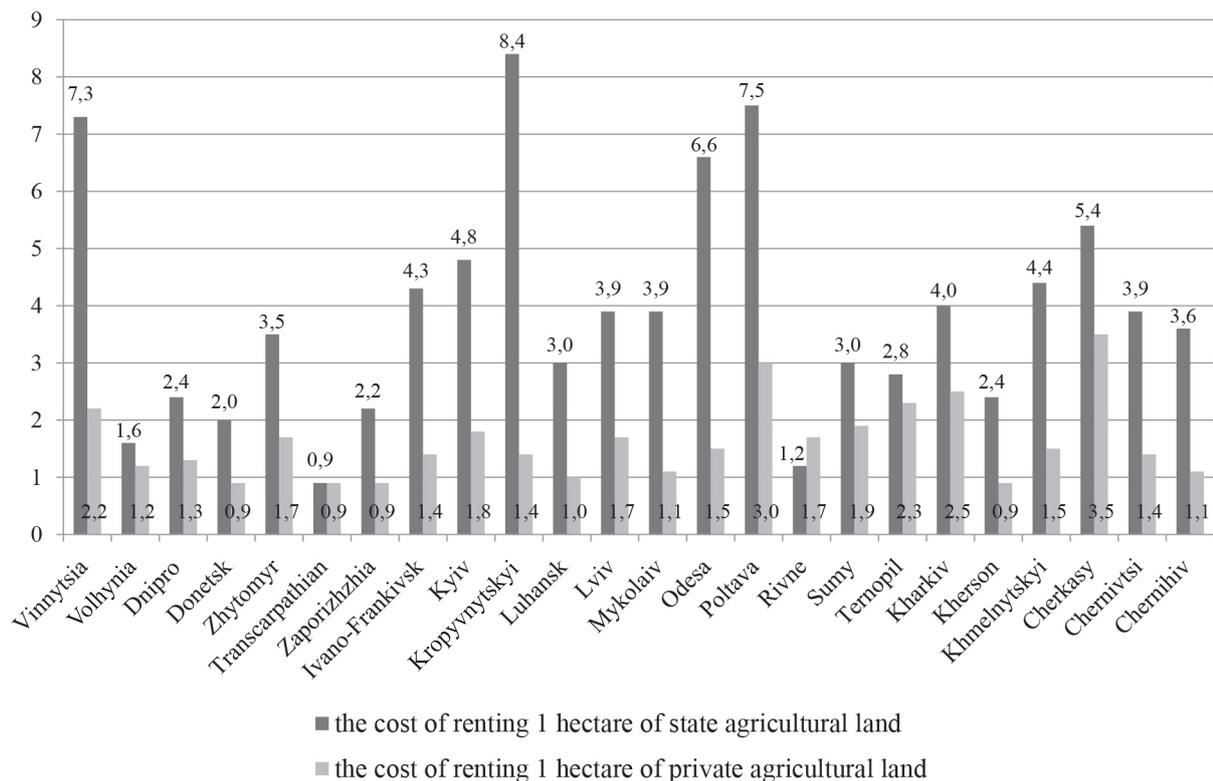


Figure 1. Structure of revenues to local budgets of European countries (in 2020), % (Tsina derzhavy, 2019)



**Figure 2. Average annual rent for state-owned land plots leased out at land auctions for the sale of land shares (units) by regions of Ukraine (2020), thousand UAH/ha**

Thus, in Ukraine, the average annual rent for state-owned land plots leased at land auctions is 3431 UAH/ha, while the average annual rent for shares is 1613 UAH/ha.

Agricultural production involves the use of both productive land (agricultural land) and land on which objects related to the activities of agricultural entities are located. Ensuring the reproduction of productive lands is one of the priority tasks in the organization of management of the use of agricultural land resources. Reproduction of agricultural land resources is carried out in the process of their economic use. Withdrawal of land from economic turnover, as a rule, leads to its degradation associated with the loss of consumer qualities and increased costs necessary for their reintroduction into the production process.

The close intertwining of the processes of reproduction of agricultural land resources with the processes of agricultural production determines the dependence of the efficiency of reproduction processes on a set of various factors that affect their quality in different ways.

It is proposed to systematize the factors that determine the peculiarities of land resources management of agricultural enterprises by the following groups: natural-climatic and geographical, organizational-economic, agrotechnical and agrochemical (Table 2).

The organization of land use management in agricultural enterprises is considered as one of the functions of the farming system, which includes the introduction of crop rotations, soil cultivation, application of fertilizers and plant protection products, seed production, technological and technical support, land reclamation and environmental protection measures.

Particular attention in the management of land resources of agricultural enterprises has recently been paid to the systems of adaptive landscape farming, which allow to take into account the characteristics of each land plot involved in economic circulation, and to ensure the growth of agricultural landscapes sustainability and preservation of soil fertility.

Obviously, these factors have a complex impact on the reproduction of land resources, which makes it extremely difficult to reliably assess the individual level of impact of each of them. To assess the efficiency of land resources reproduction, it is proposed to use indicators that reflect changes in soil fertility, productivity of arable land and natural forage lands, the share of land subject to wind and water erosion, the proportion of land involved in economic turnover, the number of land disputes that arise and the effectiveness of their resolution, etc.

Table 2

**Systematization of factors that determine the features of the organization of land use management at agricultural enterprises**

Natural-climatic and geographical	Organizational and economic	Agrotechnical and agrochemical
Temperature regime	Intensity of use of productive land	Following the scientifically proved agricultural system
Topography and threats of wind and water erosion	Level of efficiency of land users functioning	Land processing technologies
Soil fertility	Level of development of technical and technological base of land users	Level of use of fertilizers and plant protection products
Moisture supply	Level of economic development of territories	Scale and effectiveness of environmental protection measures
Level of active solar radiation	Level of development of infrastructure and personnel support	Technologies for growing agricultural crops
Type of agricultural landscape	Level of investment attractiveness of agricultural production	Level of biologization of agriculture
Location relative to places of processing and sale of products	Availability of target programs for preserving soil fertility	Improving the productive qualities of natural fodder lands
Location relative to transport network locations	Quality of state control over land use and protection	Level of farming culture

**3. Analysis of opportunities and threats to the organization of land use management in agricultural enterprises**

The state, using a wide range of administrative and economic management methods, promotes the formation of an adequate institutional environment of land relations, which regulates the processes of land management, including their reproduction. The practically uncontrolled growth of land concentration in the hands of large agricultural enterprises, combined with the growing intensity of productive land use, necessitates a review of issues related to the organization of land use management of agricultural enterprises aimed at ensuring a balance of interests of the state, landowners and land users of agricultural land.

Land as a strategic resource of agricultural production has a number of features that determine its strengths and weaknesses as a factor of production, and requires an objective assessment of the possibilities of improving the efficiency of reproductive processes and identifying threats to the loss of land reproduction and its degradation.

The development of the national economy is impossible without the formation and implementation of an effective policy in the field of distribution and use of land resources. Formation of strategic directions of land use and land ownership is possible only with the help of modern research tools. The search for tools for strategic analysis of the formation, distribution and use of land resources makes it possible to assert that a wide range of analytical tools can be used to study the development of land relations and develop strategic goals for the long term: business advantage models, McNair's performance pyramid,

benchmarking, SWOT analysis, discriminant analysis, cluster analysis, PESTEL analysis, etc. (Dankevich, 2018).

SWOT analysis is one of the most common analytical methods that allows to comprehensively assess the strengths and weaknesses of the company, as well as the opportunities and threats affecting it.

Conducting a SWOT analysis is important because identifying opportunities and threats related to the organization of land management in agricultural enterprises should be the basis for turning opportunities into strengths and preventing the realization of threats by taking appropriate measures to prevent them (Table 3).

The strengths of agricultural land as an object of land resources management of agricultural enterprises are as follows: productive lands have natural reproductive potential, which can be increased in the process of their rational use in economic activity; in Ukraine, soils are characterized by a high level of natural fertility; diversity of soils and natural climatic zones allows to grow a wide range of crops; rural areas of zones with a high level of soil and agro-climatic potential are characterized by a high level of agricultural development; Increasing the efficiency of agricultural production has provided an increase in the quality of the material and technical base of agricultural enterprises and an increase in investment in the reproduction of productive land; the tendency to involve previously unused agricultural land in economic circulation (Sharyi, Tymoshevskiy, Mishchenko, Yurko, 2019; Kovaliv, 2016)

At the same time, land resources as a factor of production give rise to a number of problems related

Table 3

**Matrix of SWOT analysis of opportunities and threats to the organization of land use management in agricultural enterprises**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>– productive lands have natural reproductive potential, which can be increased in the process of their rational use in economic activity;</li> <li>– in Ukraine, soils are characterized by a high level of natural fertility;</li> <li>– the diversity of soils and climatic zones allows to grow a wide range of crops;</li> <li>– rural areas of zones with high soil and agroclimatic potential are characterized by a high level of agricultural development;</li> <li>– increase in the efficiency of agricultural production is ensured by the growth of the quality of the material and technical base of agricultural enterprises and the increase in investments in the reproduction of productive lands;</li> <li>– the tendency to involve previously unused agricultural land into economic circulation</li> </ul>	<ul style="list-style-type: none"> <li>– diversity of soils and climatic conditions that require diversification of farming systems and constant adaptation of agricultural technologies to changing economic conditions;</li> <li>– uniqueness of each land plot, which requires consideration of specific features in the organization of use and reproduction, implementation of measures for the conservation and development of agricultural landscapes;</li> <li>– limited capacity of agricultural enterprises to develop and implement a strategy for the transition to adaptive landscape farming systems;</li> <li>– the presence of certain contradictions between the environmental and economic efficiency of reproductive processes, which require a compromise between the possibilities of increasing the intensity of land use and increasing the sustainability of agro-ecosystems by reducing the level of anthropogenic pressure;</li> <li>– lack of an effective system of state regulation of reproduction of productive lands and stimulation of land users and landowners to increase their fertility;</li> <li>– underdevelopment of the land market and land mortgage system, which significantly reduces the consumer properties of land as an element of the subsystem of financial support of economic activity.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>– increasing the volume of state support for agriculture and rural development;</li> <li>– strengthening state control over the targeted use of agricultural land and its reproduction;</li> <li>– improving the financial condition of agricultural enterprises and intensifying their innovative activities;</li> <li>– development of adaptive landscape farming systems;</li> <li>– appearance of innovations in the market in the form of new breeding and genetic, technical, technological, organizational and managerial solutions that ensure the preservation and improvement of consumer qualities of productive lands, as well as prevention of their degradation.</li> </ul>	<ul style="list-style-type: none"> <li>– almost uncontrolled concentration of agricultural land in the hands of large agricultural enterprises;</li> <li>– the presence of a significant number of land plots that are not registered in the cadastre, which leads to the existence of the shadow sector of land use and lack of proper control over the reproduction of land resources;</li> <li>– the possibility of reducing state support for agriculture;</li> <li>– imbalance between large, medium and small forms of agricultural production leads to a decrease in the efficiency of reproduction of land resources of farms and households;</li> <li>– reduction of the rural population and its labor potential</li> </ul>

to the organization of land use management in agricultural enterprises, which can be defined as weaknesses. These include the diversity of soils and climatic conditions that require diversification of farming systems and constant adaptation of agricultural technologies to changing economic conditions; the uniqueness of each land plot, which requires consideration of specific features in the organization of use and reproduction, implementation of measures for the conservation and development of agricultural landscapes; limited capacities of agricultural enterprises to develop and implement a strategy for the transition to adaptive landscape farming systems; the presence of certain contradictions between the ecological and economic efficiency of reproductive processes, which require a compromise between the possibilities of increasing the intensity of land use and increasing the sustainability of agro-ecosystems by reducing the level of anthropogenic

pressure; lack of an effective system of state regulation of reproduction of productive lands and stimulation of land users and landowners to increase their fertility; underdevelopment of the land market and land mortgage system, which significantly reduces the consumer properties of land as an element of the subsystem of financial support of economic activity (Dankevich, 2018).

It should be emphasized that all subjects of land relations have the opportunity to minimize the negative consequences caused by the manifestation of the above-mentioned shortcomings of land resources. First of all, such opportunities are related to the increase of state support for agriculture and rural development; strengthening of state control over the targeted use of agricultural land and its reproduction; improvement of the financial condition of agricultural enterprises and intensification of their innovation activities; development of adaptive

landscape farming systems; appearance on the market of innovations in the form of new breeding-genetic, technical-technological and organizational-managerial solutions that ensure the preservation and growth of consumer qualities of productive lands, as well as the prevention of their degradation.

There are also a number of systemic problems that threaten the reproduction of land resources. Among them, the following threats should be highlighted: almost uncontrolled concentration of agricultural land in the hands of large companies; the presence of a significant number of land plots not registered in the cadastre, which leads to the existence of the shadow sector of land use and lack of proper control over the reproduction of land resources; the possibility of reducing state support for agriculture; imbalance between large, medium and small forms of agricultural production leads to a decrease in the efficiency of reproduction of land resources of farms and households; reduction of the rural population and its labor potential (Ibatullin, Stepenko, Sakal, 2012).

The organization of land use management in agricultural enterprises should be focused on the fullest use of their strengths and available opportunities to improve the efficiency of their use, which minimize the negative impact of conditions and threats that adversely affect the reproduction of productive land (Miroshnychenko, 2010; Dekhtyarenko, Drapikovskiy, Ivanova, 2009). Most scholars study the changes in the impact of governance in the context of war and globalization (Pryshchepa, Kardash, Yakymchuk, 2020; Irtyshcheva, et etc., 2022; Vyshnevskaya, et al., 2022).

On this basis, the purpose of land use management of agricultural enterprises is to ensure the efficient use of land as the main factor of agricultural production in the long term on the basis of reproduction of productive land and increasing the sustainability of agricultural landscapes, taking into account the balance of public and private interests.

It is proposed to highlight the following as priority tasks for the organization of land use management in agricultural enterprises:

- Conducting a comprehensive inventory of agricultural land with the definition of real boundaries of land plots, their registration in the cadastre and delimitation of property rights;
- completion of re-registration of land shares into specific forms of ownership of specific land plots;
- formation of land market infrastructure, strengthening state control over the level of concentration of productive land in individual owners, ensuring transparency of all land transactions;
- development of institutional environment for regulation of land relations and public control over land turnover and efficiency of its use;

- development of a system of motivation of landowners and land users in preserving soil fertility and consumer properties of productive lands;
- identification of land plots that require immediate environmental protection measures and minimization of anthropogenic load, as well as development of measures to improve agricultural landscapes;
- development of a wide range of scientifically based modern farming systems, taking into account the natural and climatic characteristics of specific territories and the production direction of economic entities;
- development of recommendations on the location of agricultural production by territories and categories of economic entities, which ensure the increase of efficiency of productive land use.

The implementation of these tasks requires the concentration of efforts and resources of all subjects of land relations, but it should be noted that certain functions of the organization of land use management in agricultural enterprises also belong to the competence of the state, which within the framework of land policy determines the strategy of productive land use and their reproduction.

#### 4. Conclusions

Thus, having systematized the factors that determine the peculiarities of the organization of land management in agricultural enterprises, three groups were identified: natural-climatic and geographical, organizational-economic, agrotechnical and agrochemical. Based on the SWOT analysis of land resources as an object of management, it is determined that the purpose of land resources management of agricultural enterprises is to ensure the efficient use of land as the main factor of agricultural production in the long term on the basis of reproduction of productive land and increase the sustainability of agricultural landscapes, taking into account the balance of public and private interests.

It should be noted that all subjects of land relations have opportunities to minimize the negative consequences caused by the manifestation of weaknesses of land resources identified on the basis of SWOT analysis. First of all, these opportunities are associated with an increase in state support for agriculture and rural development; strengthening of state control over the targeted use of agricultural land and its reproduction; improvement of the financial condition of agricultural enterprises and intensification of their innovative activities; development of adaptive landscape farming systems; appearance of innovations in the market in the form of new breeding and genetic, technical, technological, organizational and managerial solutions that ensure the preservation and improvement of consumer qualities of productive lands, as well as prevention of their degradation.

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## CULTURAL HERITAGE IN THE CONTEXT OF DIGITAL TRANSFORMATION PRACTICES: EXPERIENCE OF UKRAINE AND THE BALTIC STATES

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**Abstract.** *The purpose* of the article is to analyze digitization as a global trend of the early 21<sup>st</sup> century and to develop a cultural model for studying the scope of application of digital transformation practices as a new way to preserve and promote cultural heritage based on the experience of the Baltic States and Ukraine. The study of the impact of digital transformation practices in the field of cultural heritage in Estonia, Latvia, Lithuania and Ukraine has demonstrated the need to deepen ties between these countries by establishing a cultural dialogue, exchanging information and experience on the use of technological innovations in the field of cultural heritage, as well as increasing the value and content of joint cultural projects. *Methodology.* The theoretical basis and methodology of the study is the historical and cultural method, which contributed to the study of the historical dynamics of digitization; typological and comparative methods – for the study and analysis of cultural heritage objects as phenomena and artifacts. A special role is played by the cultural method, which is meaning-forming through the study of interdependent cultural processes – representation, identity, etc. *Results.* The authors, involving the professional community, which emphasizes the problem of the lack of a general electronic register of cultural heritage sites in Ukraine, as well as the lack of a strategy for digitizing such sites, draw attention to the fact that the situation began to change rapidly in 2022. It has been proved that the experience of Estonia (museum information system MuS, five-year action plan for the digitization of cultural heritage for 2018–2023), Latvia (project "Digitization of cultural heritage content"), Lithuania (creation of the Council for the Digitization of Lithuanian Cultural Heritage, virtual electronic information system of cultural heritage VEPIS, museum information system LIMIS) will contribute to the strengthening of technological and cultural innovations in the field of protection and promotion of cultural heritage of Ukraine. Digitization is a task that requires significant financial and intellectual investments, but the authors prove that this direction can become a source of income for creative industries (economic value) and a resource for creating new meanings (symbolic value). *Practical implications.* The analyzed experience of the Baltic countries will be a valuable source of information for intensifying digital transformation in Ukraine. Deepening Ukraine's cultural ties with Estonia, Latvia and Lithuania in order to exchange experience in the field of cultural heritage is of practical importance, as a number of implemented Baltic projects will help Ukrainian specialists to increase the efficiency of using modern technological tools in the field of culture. The article pays attention to European and Ukrainian public and private cultural projects and initiatives that are being implemented to digitize the preservation and promotion of historical and cultural heritage. *Value/originality.* It is advisable to study the prospects of cultural heritage tokenization and NFT as a tool for preserving, supporting and promoting cultural heritage.

**Key words:** digital culture, digital transformation, cultural heritage, museum information system, digital museum, cultural policy.

**JEL Classification:** I23, D83, F68, Z13

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## 1. Introduction

The potential of cultural development in the context of digital transformation is of great interest to researchers. In our opinion, the cultural heritage deserves special attention, which requires a thorough study of scientific sources of various directions. Understanding the essence of this phenomenon in the new digital environment requires analysis of cultural, historical, sociological, economic and IT literature, as well as official reports of relevant government agencies.

It should be noted that despite the increased interest of modern researchers to this issue, the problem of digitization of cultural heritage is currently at the stage of active professional discussions in the scientific environment, which will eventually contribute to the formation of relevant theories. This state of scientific development of this topic is due to continuous technological innovations that contribute to the regular emergence of new meaningful and valuable aspects arising from the introduction of new digital practices in the field of cultural heritage. Researchers regularly receive new data (e.g., new technical possibilities that expand the boundaries of interaction with cultural heritage and cultural projects that affect the changing experience of specialists and visitors to memory institutes) to understand and form new scientific concepts. Exploring the current socio-cultural situation through the prism of professional cultural studies, we note that digital technologies increasingly cover a number of interdependent cultural processes, such as representation, identity formation, production, consumption, etc. (Rusakov, 2020) The "digital transition" from the systems and processes of industrial and post-industrial (information) culture to the "digital culture" and "digital society", which occurs due to the spread of digital transformation practices, should be more actively explored. Such changes contribute to the formation and establishment of unique systems and processes that create new opportunities for cultural experience when interacting with cultural heritage objects in digital format, through a combination of scientific, technological, value, social, economic aspects.

The purpose of the article is the digitization analysis as a global trend of the beginning of the 21<sup>st</sup> century and the development of a cultural model for the study of the scope of modern practices of digital transformation as a new way of preserving and popularizing cultural heritage based on the experience of the Baltic states and Ukraine.

The theoretical and methodological basis of the research is the historical and cultural method, which made it possible to analyze the historical dynamics of the development of digitization; typological and comparative methods (for the study of objects of

cultural heritage as phenomena and artefacts); culturological approach (the theoretical basis of the study of culture as a meaning-making system in the context of digital transformation due to the analysis of interdependent cultural processes – representation, identity, etc.).

This article will examine the phenomenon of cultural heritage in the context of digital transformation practices, analyze a range of current problems related to the preservation and popularization of historical and cultural heritage in digital format according to the normative and legal documents of UNESCO and the European Union, and study the experience of creating the integrated informational digital resources of cultural heritage in Estonia, Latvia and Lithuania regarding what can serve as a source of experience in the context of the European integration processes of Ukraine.

## 2. Review of relevant publications

The study of cultural heritage by Estonian, Lithuanian, Latvian and Ukrainian scientists has a long history, but the focus will be made on contemporary cultural studies. In such studies, cultural heritage has broader aspects of consideration, not just as the result of spiritual and material activity of the previous generations, but also as a source of creation of new meanings in modern culture. In addition, in modern research more and more often the aspect of digitization of the cultural heritage field is being studied.

The topic of cultural heritage finds a prominent place in the monograph by the culturologist Olha Kopyevska, who has examined state institutions and organizations in the culture field as a component of the state mechanism through the prism of political, cultural, economic and social transformations of Ukraine. Analyzing the state of preservation of cultural heritage, the author concludes that "the state of protection of Ukrainian historical and cultural heritage, has not yet responded to requirements of the international communities and those commitments that Ukraine undertook by signing the International Convention on world cultural and natural heritage protection." (Kopyevska, 2010) Considerable contribution to the development of the topic of cultural heritage was made in numerous scientific articles by a researcher of the Institute for Cultural Research of the National Academy of Arts of Ukraine Marina Mishchenko, whose work with professional scientific editions leads to rely on in this research (Mishchenko, 2020).

The topic of digital transformation needs an emphasis on cultural and sociocultural aspects of digital culture, after all its phenomenon indicates the dominant form of modern socialization

society – informational and virtual [26]. Interconnection of digitization and digital transformations with cultural heritage studied by Marina Mishchenko, as well as researchers in the professional journal "Digital platform: innovative technologies in sociocultural sphere", where in the framework of the permanent rubric "Preservation of cultural heritage and access to digital resources" thematic articles are regularly published (Trach, 2020; Volynets, 2021).

Simultaneously, one can state an insufficient number of publications which comprehend the prospects of digitization spheres of cultural heritage in general. It is worth noting that Ukrainian experts mostly focus on digital transformation of memory institution, and museums (Lelyk, 2019). Summarizing a number of materials about museums' digital transformation the authors note that "today museums are looking for innovative ways for solving social problems and conflicts," (Hlushchuk, Karpets, 2019) and therefore relationships between informative technologies and museum space become increasingly tighter. Keeping the main function of museums toward preservation of cultural heritage, informational technologies strengthen the main destination and at the same time popularize collections and museums, that helps to attract the additional flow of visitors, increase budgets of museums and create better conditions for protection and exhibition of historical and cultural objects.

In the monograph "Transformative processes in the social and sociocultural spheres of Ukraine" is allocated attention to digitization of cultural and historical heritage in Ukrainian libraries. The authors believe that "important strategic directions for library activities in modern stage are integration of information databases of historical and cultural funds, development of representation of cultural heritage in international digital projects." (Yavorska, 2021)

Estonian researchers conducted interviews with employees of memory institutions to define their roles as users and creators of digital cultural heritage due to the need to adapt to communication models of the new generation. According to this paper, such research may successfully supplement the culture of gaining cultural experience in the modern world. The authors write that "it is important to realize the necessity of digitization at the institution and at the national level; that it does not focus only on data storage and availability, but the goal of digitization will be to draw attention to the needs of the audience and also to the information exchange, provision of interpretation opportunities." (Aljas, Pruulmann-Vengerfeldt, 2009)

It should be noted that Estonian researchers, having significant theoretical and practical groundwork regarding cultural heritage and digitization, currently consider not just the benefits of digitization or

scanning, but also perspectives of cultural heritage in the context of Digital Humanities for the field. Such a direction, according to this paper, requires the attention of cultural experts, since it combines technological and worldview aspects. For example, in the article "Cultural heritage and digital reading: between the book and the platform" the authors emphasize the importance of transmedia texts and offer new methods (e.g., digital reading) to save cultural memory and identity (Ojamaa, Torop, 2020).

Scientific articles and monographs of Latvian specialists are full of organizational and theoretical studies, as well as philosophical and cultural studies. For example, Uldis Zariņš proposes the creation of conceptual models for strategic planning of digitization of cultural heritage (Zariņš, 2012), and Zinaida Manžuch, who has been practicing the development of the topic of digitization of cultural heritage for a long time, believes that it is worth considering the processes of digitization of cultural heritage in a broader worldview context. The author noted that digitization is not only related to computerization and technology of memory institutions, but also "enriches the study of digitization with philosophical, social, cultural, managerial, political and economic aspects" (Manžuch, Huvila, Aparac-Jelušić, 2005) that forms a new direction of development of the research and educational models which should provide libraries, museums, archives. In a more contemporary study, the author actualizes the ethical issue of digitization of cultural heritage, which reflects "fundamental changes in the understanding of the role of memory institutions and how they fit into higher-level social processes of memory." (Manžuch, 2017) The researcher believes that ethical issues are likely to influence the overall structure as well as the duration and cost of digitization issues in the future.

### 3. Generalization of the main provisions

#### 3.1. Cultural heritage as a meaning-making resource

The introduction of digital technologies into the sphere of culture and art began in the 20<sup>th</sup> century and contributed to the formation of several new artistic trends. Thus, in 1958, the artist Wolf Vostell laid the foundations of media art in the installation "Black Room Cycle", using computer codes for the first time. However, in the second half of the 20<sup>th</sup> century, world cultural institutions, which are memory institutions (archives, libraries, museums), began to use computers and other technical means to organize, catalog and coordinate historical and cultural sources and artifacts. The period of 1980–1990 can be called the conditional first wave of mass creation

of electronic catalogues by the largest international archives, museums and libraries due to digitization of sources. However, quickly enough, this activity was separated into a separate independent direction, which began to focus not only on providing "user access to diverse information of documentary treasures and physical preservation of original documents by creating their electronic copies, but also on the implementation of international and national projects, programs of digitization of cultural heritage objects." (Prykhodko, 2019)

The end of the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century brought further transformational processes in culture which was a result of digital innovations and encouraged theorists and practitioners to increasingly turn to cultural heritage, digitizing its most valuable objects. Lyudmyla Prykhodko notes that in the late 1990s of the 20<sup>th</sup> century. The topic of preservation of cultural heritage in digital form began to actively develop in the European Union in connection with the development of the information society, the creation of information infrastructure of the European continent, "digitalization" and the spread of digital technologies in all spheres of European society (Prykhodko, 2019).

Based on these and other globalization processes, starting from the 90s of the 20<sup>th</sup> century, the conceptual principles of UNESCO's cultural heritage protection are based on the strategies of using digital information technologies for the formation of documentary resources. The founding programme "Memory of the World", adopted in 1992, became the starting point for the emergence of a number of international and national projects aimed at the registration of digital resources of historical and cultural heritage and was embodied in the portal "UNESCO – Heritage" (Official website of the World Heritage List, 2005), dedicated to the protection of cultural, natural and documentary heritage (Dychkovskiy, 2019).

In the 2000s, one of the main tasks of libraries, archives and museums was the digitization of exhibits, so this period is marked by the creation of both public and private projects that declared different objectives of their activities, but the primary goal remained the preservation and promotion of cultural heritage in the context of modern lifestyle. According to the latest key European directives, cultural heritage is considered as a public resource of the future (Official Journal of the European Union, 2014). "It is a unique non-renewable resource that is undergoing cultural, environmental, social, economic and technological transformations that affect all aspects of modern life." (Musiienko, 2019) Within the framework of the cultural understanding of this topic, which is becoming increasingly relevant due

to globalization and digital transformation, cultural heritage can also be considered as a meaning-making resource that represents our values, worldview, lifestyle and shapes one's daily life. That is, cultural heritage contributes to giving greater meaning to human life, so it should be studied through the prism of cultural studies. Within this approach, cultural heritage is considered as a means of identity formation and correlation with the value-semantic dimension.

### 3.2. Comparative analysis of Ukrainian and Baltic projects on digital cultural heritage

Researcher Yuliya Trach draws attention to the long-term absence of a list of cultural heritage items in *Ukraine*, which are subjects to digitization, as well as standards for the creation of a digital resource to ensure its accessibility, active and effective use, compatibility and data exchange at the local and international levels, preservation of created resource and its updating (Trach, 2020).

Kateryna Kotsiubivska also notes that "in Ukraine, we can say, there are no fully integrated digital technologies, a system of online presentations of digital heritage and user service, as well as the level of modernity, informativeness, attractiveness and relevance; the available technologies, unfortunately, are difficult to compare with the main world models." (Kotsiubivska, Baranskyi, 2020)

Only in July 2022, the Ministry of Culture and Information Policy of Ukraine officially announced the creation of a digital platform for the management of national cultural heritage, which is defined as the core of cultural policy. The activation of this area is due to the understanding of the need to create a modern ecosystem of cultural heritage in Ukraine and to provide legislative and IT infrastructure in accordance with EU standards (Official Facebook page of the Ministry of Culture and Information Policy of Ukraine, 2022).

The Ministry of Culture and Information Policy of Ukraine has identified six points on the positive role of digital transformation in the field of cultural heritage: 1) key state registers will interact with each other to provide electronic services; 2) increasing trust in public e-services through the creation of a secure infrastructure; 3) integration into the global space through data exchange and compliance with platform requirements; 4) professional development and job creation in the digital industry; 5) digitized process provides anti-corruption effect; 6) innovation for the country in the field of cultural heritage.

Deputy Prime Minister of Digital Transformation Mykhailo Fedorov is convinced that using the experience of the Baltic States will help accelerate the digital transformation of Ukraine (Ukrinform, 2019). Therefore, it is appropriate to consider the experience

of digital transformation practices in the field of cultural heritage on the example of Lithuania, Estonia and Latvia.

The emergence of powerful European digital projects in the field of culture implemented at the state level was preceded by the development of a common EU strategy. It was determined that digitization and preservation of cultural memory should be carried out by digitizing printed materials, photographs, museum objects, archival documents, music and audiovisual materials, monuments and archaeological sites (Trehub, 2019).

According to the authors, it may be effective for Ukrainian specialists to study the experience of Lithuania, which began in 2005 with the approval of the concept of digitization of the cultural heritage of *Lithuania*. In the same year, the Council for the Digitization of Lithuanian Cultural Heritage was formed and work began on the creation of the Virtual Electronic Heritage Information System (VEPIS), which united the collections stored in libraries, museums and archives into a single digitized cultural heritage infrastructure on the portal [www.epaveldas.lt](http://www.epaveldas.lt). Currently, the digitized database of Lithuanian cultural heritage contains more than 4.8 million items, including pages of extremely valuable digitized old prints, newspapers, works of art, manuscripts, church books, audio recordings and classic works of Lithuanian literature (Lietuvos nacionalinė Martyno Mažvydo biblioteka, 2021). In 2021, the cloud information system [www.naujas.epaveldas.lt](http://www.naujas.epaveldas.lt) was created, which ensures the long-term preservation of digital cultural heritage content, its security, uninterrupted operation and integration of various standards, as well as the correct maintenance of previously created data.

Lithuania has also implemented the museum information system LIMIS, which aims to consolidate the data of museums and other memory institutions located in the country into one register. A similar system was developed in *Estonia* in 2004 under the name MuIS. Estonian museums are obliged to describe and digitize their collections for this system. The history of digital transformation in Estonia, as well as in Lithuania and Latvia, began immediately after the collapse of the USSR. It is worth noting that then the three Baltic countries gained independence at the same time and today these countries can be confidently called the respective leaders in the field of digitalization, especially in comparison with other post-Soviet states.

In Estonia, more than 900 million heritage objects are stored in various state cultural and art institutions, but only about a tenth of this amount is digitized. Therefore, in 2018, the Ministry of Culture of Estonia prepared a five-year action plan for the digitization of cultural heritage. The goal of the plan is to digitize one third of the cultural heritage stored

in museums, libraries and archives by 2023, to provide access to it in digital format, as well as to update the infrastructure of information storage in memory institutions. Thus, the action plan focuses mainly on the heritage from 1900 to 1940. According to the Estonian Ministry of Culture, "the goal of the action plan is that by 2023, 3% of documentary heritage, 32% of artifact heritage, 60% of film and photo heritage and 28% of printed heritage will be available in digital format, i.e., a total of approximately 33% of our cultural heritage." (Ministry of Culture of Estonia, 2022) The total cost of the project is 9.02 million euros, of which 8.19 million euros is planned at the expense of investments from the European Union structural funds.

In *Latvia*, since 2019, a project called "Digitization of cultural heritage content" has been implemented at the state level. The main task of which is to provide wide access to the cultural heritage of Latvia for public consumption in the digital environment, which serves as a basis for strengthening national identity, development of culture, science, knowledge society and creative industries, as well as ensuring sustainable long-term preservation of the national cultural heritage in digital form; and the possibility of its reuse in new products and services, as well as inclusion in the unique digital space of European and world culture. The project is scheduled for completion in 2022 and envisages the digitization of 976,000 pages of textual materials, 150,000 units of descriptions of various images and cultural values, including maps, photographs, reviews of cultural monuments and descriptions of things, 350,000 minutes of audio and video materials, 660 minutes of film materials, 50,000 museum objects, as well as 3D digitization of 30 cultural monuments, recording of 30 cultural events and 15 intangible cultural heritage objects (Latvijas Nacionālā arhīva, 2019).

Separately, it should be noted the consultations held by specialists of Ukrainian institutions and active exchange of experience with Baltic colleagues on the digitization of cultural heritage. For example, in the framework of the diplomatic initiative "Lublin Triangle", which unites Ukraine, Lithuania and Poland for in-depth cooperation in political, economic, social and cultural spheres. On February 28, 2022, the Ministers of Culture of Lithuania, Poland and Ukraine signed a Declaration of Intent on trilateral cooperation in the format of the "Lublin Triangle", which commits to pay more attention to the dissemination of information about the cultural heritage and history of the countries, to promote the development of cultural institutions and cooperation of experts in order to stop Russia's military aggression in Ukraine and protect the cultural and historical heritage. Therefore, in May 2022, a trilateral meeting was held, during which the project of digitization of Ukrainian

cultural heritage was presented and the prospects for its implementation were discussed. "Lithuania, together with Poland, is ready to provide financial, expert and other necessary assistance to the project of digitization of the Ukrainian cultural heritage in the format of the Lublin Triangle, as well as to mediate in possible support from the European Union," said the Minister of Culture of the Republic of Lithuania Simonas Kairis (Lietuvos Respublikos kultūros ministerija, 2022).

Latvia is also actively involved in the preservation and restoration of Ukraine's cultural heritage. In June 2022, with the support of the Ministry of Culture of Latvia and Riga Technical University, a group of specialists visited Ukraine and carried out 3D scanning of four cultural heritage sites. Latvian experts together with Ukrainian colleagues conducted a three-dimensional scanning of cultural heritage sites, recorded the damage and obtained data for planning the strengthening and restoration of cultural monuments affected by the war, transfer of experience and training of Ukrainian specialists. Specialists worked on 3D scanning of two monuments in Chernihiv (Museum of Ukrainian Antiquities "House of Vasyl Tarnovsky", Youth Cultural Center and the cinema building), as well as two monuments of sacred architecture in the Lviv Region (Church of the Holy Virgin, Lviv Region) and in Kyiv (St. Cyril's Monastery, which is planned to be included in the UNESCO World Heritage List). It should be noted that this project of support to Ukraine is similar to the technical assistance to Iraq in 2005–2006, which was provided by the Government of Latvia for a similar procedure for the preservation of prestigious cultural sites in the Middle East, which are included in the UNESCO World Heritage List (Riga Technical University, 2022).

Digitization and preservation of information is a very expensive task, especially when it comes to digitization of European cultural heritage. For example, in Latvia the cost of the project is 3,900,000 euros, of which 3,315,000 euros (85%) are ERDF funds and 585,000 euros (15%) are state co-financing. At least 50% of eligible project costs are the costs of digitization of cultural heritage content. In Estonia, the total cost of the project is 9.02 million euros, of which 8.19 million euros is planned at the expense of investments from the European Union structural funds.

However, digitalization is not only an investment in the preservation of cultural heritage, but can also become a source of income for many creative industries – an economic segment that contributes 3.3% of the annual GDP of the European Union and creates thousands of jobs. Therefore, Ukraine can get a unique opportunity to introduce the latest technologies in the field of preservation of cultural heritage and construction of new commercial and

symbolic meanings. It is worth repeating the opinion of theorists and practitioners that Ukraine still lacks a strategy and policy for the systematization and processing of cultural heritage, but at the same time it is worth noting the existence of various initiatives that have been supported by new cultural institutions, for example, the Ukrainian Cultural Foundation and the Ukrainian Book Institute.

Head of the Analytical Department of the Ukrainian Cultural Foundation Iryna Chuzhynova noted that digitalization is one of the cross-cutting themes of many projects supported by the new Ukrainian cultural institution. "Among the 12 proposed priorities of the UCF, there are two priorities directly related to the digitization and development of digital media. It is about promoting the introduction of innovations, digital technologies and digitization in the field of culture and arts, the development of an electronic information resource of cultural heritage and artistic values, the use of modern information technologies in the field of museum activities." (Trehub, 2019)

The Ukrainian Cultural Foundation was established in 2017 as a state institution that proposed a new model of providing state support on a competitive basis and promoting initiatives in the field of culture and creative industries. Over the years, the Foundation has supported several important projects on digitization of cultural heritage in different regions of Ukraine. For example, in 2020, the Borys Voznytsky Lviv National Art Gallery in Lviv announced that it had started the process of digitizing its collections to create a digital archive. At the first stage, priority exhibits from the 64 thousandth collection were identified. It is reported that more than 300 works of art were selected by the project experts from the collection of the gallery, which is stored in the Olesko Castle (a branch of Borys Voznytsky Lviv National Art Gallery), including ceremonial and representative portraits from the early works to the 18<sup>th</sup> century and sculptures from the 16<sup>th</sup> and 18<sup>th</sup> centuries, among them the authorship of Pfister and Olenskyi, many of which are widely unknown.

In 2021, with the financial support of the Ukrainian Cultural Foundation, the creation of the first digital archive of Mykola Yaroshenko, one of the key figures in the history of Poltava and Ukrainian fine arts of the 19<sup>th</sup> century, began. The project envisages the digitization of 55 canvases and 100 graphic works of the artist, as well as the creation of a separate section on the website of the Poltava Art Museum, through which each visitor will be able to virtually get acquainted with the artist's work (Artifact Magazine media platform, 2021).

In the same 2021, with the support of the Ukrainian Cultural Foundation, a large-scale project of the Museum of Theater, Music and Cinema Art of Ukraine called "Open Kurbas: Digital Collection" was launched.

As a part of the project, 12,000 museum objects have been digitized and a bilingual Ukrainian-English site was created with open access to the collection of monuments related to the activities of the outstanding director of the 20th century Les Kurbas (Official website of the Open Kurbas: digital collection, 2021).

### 3.3. Digital representation of cultural heritage

At the beginning of the 21<sup>st</sup> century, the concept of "cultural heritage" underwent a semantic and substantive expansion, due to the expansion of the possibilities of using the latest technologies. A new concept of "digital heritage" is being formed, which has a double meaning – cultural heritage in digital form or digitized (electronic) cultural heritage (Prykhodko, 2019). Consider the second option when it comes to creating electronic (digital) copies of cultural heritage objects – valuable documents and artifacts.

The modern information age is characterized by various opportunities to transmit and receive information, especially it affects the availability and speed of knowledge transfer. The basis of these opportunities is digital transformation, which we consider as a modern way of applying digital technologies and digital strategy in various spheres of human activity, including culture. Lithuanian researchers note that "strategically managed digitalization of cultural heritage is becoming an important tool that ensures the development of society and creates added value of social, cultural, innovative and financial capital." (Laužikas, Varnienė-Janssen, 2015)

In the process of creating these values, new ways of representing cultural heritage play a significant role, expanding the worldview through the process of popularizing the cultural heritage of mankind by finding new ways of applying digital technologies in the field of art and culture. In order to be able to fill the virtual space with museum content, it is necessary to carry out a significant amount of research, scientific, restoration and other types of work on the preservation and presentation of historical and cultural heritage. The main areas of IT use in restoration, conservation and preservation of cultural heritage are virtual reconstruction, 3D scanning, restoration of paintings, digitization of works of art (Hlushchuk, Karpets, 2019; Kotsiubyvska, Baranskyi, 2020).

**Virtual reconstruction** involves the use of computer technology that allows scientists to collect and process a large number of image sequences, thus improving the photorealistic display of texture when creating their 3D models. Creation of a virtual model of a cultural heritage object is a visual representation of a cultural heritage object. This will make it possible to preserve it in the digital dimension.

Usually, virtual reconstruction is carried out by means of 3D modeling, which allows collecting, interpreting, analyzing and, most importantly, visualizing data thanks to special digital technologies. The created 3D models make it possible to develop a variety of multimedia and virtual reality products to stimulate interest in cultural heritage and its condition, as well as to stimulate visits to the original physical site. 3D models have also been prepared to provide an opportunity to view them using 3D navigation tools – to zoom in, zoom out, rotate and view from different angles and sides; to perform measurements (distances, areas, volumes) and publish them on the Internet with 3D navigation capabilities.

The use of **3D technologies** in the field of modelling of three-dimensional technologies is associated with the creation in the 90s of the 20<sup>th</sup> century of specialized software. It is mainly about 3D-engine technology, which is still one of the most promising in three-dimensional graphics. This technology gives interactivity to a pre-created three-dimensional space, allowing you to take a virtual walk through it, interact with objects, characters, etc. "3D scanning is a promising direction not only for those industries in which it has been traditionally used for a long time. People can use this technology quite effectively to modernize the methods of protection of immovable objects of cultural heritage and museum sphere." (Mishchenko, 2020)

In Latvia, for example, the plan of the project "Digitization of cultural heritage content" stipulates that the Intangible Cultural Heritage Administration should digitize 30 cultural monuments using 3D laser scanning and photogrammetric methods, geophysical survey of the underground part of cultural monuments by radar method and bathymetric survey of the underwater part of Koknese. Thanks to modern technologies of documenting cultural monuments of national and regional significance, as well as those under state protection, it is possible to obtain accurate data on the content, volume, form and materiality of cultural monuments, which can be used to clarify the state of preservation, restoration and documentation of history (National Heritage Board, 2021).

In modern museum **restoration** practice, technical and technological research is an integral part of an integrated approach to the study of works of art. Every year there are new methods of such research and new devices that allow more and more accurate analysis of works of art without damaging them. Of course, technical and technological expertise cannot give answers to all questions. But the best results are formed from comprehensive research conducted in cooperation with technologists and art historians (Andrianova, 2019). For example, in

2019, with the support of the Ukrainian Cultural Foundation, a manual was published, which reviews the most common optical and physicochemical methods. It was used to study five paintings selected for the project from the Bohdan and Varvara Khanenko National Museum of Art. "Unfortunately, only one of them turned out to be original. However, the most important result of the project is that restorers, technologists and art historians have gained new, much deeper knowledge about the studied works and learned to interpret them more accurately and preserve them better." [p. 3]

In a scientific article, Lithuanian researcher Loreta Meshkelieвичin examines the preparatory processes, procedures and initial results of the project, as well as the technical possibilities of digitization, which took place in the Lithuanian Art Museum as a participant in the program "Creation of an integrated virtual library information system".

The author writes that "as part of the initial efforts, a Digitization Center for the collection was established and the necessary digitization equipment was purchased with funds from the museum and project sponsors. The center has two digitizing cameras and a unique Cruse CS 185ST FAS artifact scanner that can produce 2D base images of the highest quality. With the help of additional equipment, it is possible to obtain three-dimensional images. The material selected for digitization is grouped into six main categories: exhibits of paintings on paper; collections of historical and artistic photography; documents, maps and drawings; collections of bonistics, sphragistics, numismatics; exhibits of textiles; paintings." (Meškelevičienė, 2009)

**Digitizing of artworks** is one of the best and, in some cases, the only way to ensure that heritage is adequately preserved and made accessible to as many people as possible. According to culturologist and art historian Diana Klochko, the process of digitization of all our museum collections will significantly change the perception of our heritage and, accordingly, the attitude to culture. "If the state allocated (and not so much) funds for the total digitization of the funds of all art museums, it would be done now. So that all museums would have full digital catalogues. In order to be able to go to the full website of the museum, read annotations, the history of each item, its nationalization and exhibition and, finally, to imagine what a visual fund of artistic values is – this should be a normal state support. Real digitization and digitalization." (Dnistroyi, 2021)

In 2020, in the V. Vereshchagin Mykolaiv Art Museum the collection of graphics, which had not previously been exhibited to the audience, was digitized. Specialists focused on the most valuable works of the 18th, 19th and the first half of the 20th centuries – paintings by Danylo Krainev, Roman

Semashkevych, Vasyl Shukhaev, Borys Kustodiev, Ivan Shishkin, Nicholas Roerich, Vasyl Vereshchagin and other artists were selected for digitization among 500 graphic museum exhibits. Previously, museum visitors did not have the opportunity to get acquainted with these works. Digital copies are planned to be presented in the format of a web resource and a separately printed catalog. At the same time, the project involves the creation of 3D models based on five digitized works. These will be animated models that can be read with a smartphone by pointing at the code or image of this particular work. The implementation of such a project will allow users to remotely get acquainted with the museum graphics of the Mykolaiv Museum.

During the implementation of the project "Digitization of cultural heritage content" in Latvia, text documents, as well as audio and video materials are being digitized. And the only copies of books published in the country, fiction literature by Latvian authors to support digital research, as well as periodicals will be digitized to ensure as full as possible availability of newspapers in the digital environment in the period up to 4 decades of the 20th century. Text materials stored in Latvian museums will also be digitized. In addition, it is planned to digitize a collection of audio and video cassettes produced in the 1990s and early 2000s from the LNB collection.

A separate area worth considering is the **tokenization of cultural heritage**. In Ukraine the IT sphere is one of the most dynamic. According to Hacker-Rank, Ukraine takes the 11th place among 50 countries with the best software developers. Therefore, Ukraine is rapidly adapting new models to various fields of activity, including culture and art. An example of cultural heritage in digital format can be both an electronic copy of paper documents, monuments, paintings, etc. and the original, which exists only in digital form. For example, in the last few years in Ukraine there is a growing interest in such a phenomenon as NFT – a unique digital asset built on blockchain technology. NFT tokens provide artists and content creators with a unique opportunity to monetize the results of their creative activity, which is why the digital art sphere has become the first to massively use the new technology. Such interest is due to the ability of blockchain technology to provide a unique signature and ownership of NFTs. With the beginning of a full-scale war in Ukraine in 2022, the role of such a phenomenon as NFT is changing significantly. For example, Ukrainian artists use it to raise funds for urgent military and humanitarian needs. Recently, the META HISTORY war museum was created, which sells a collection of NFT art called Warline – a set of digital works chronologically representing every critical event of the Russian-Ukrainian war.

According to the authors, tokenization of cultural heritage can be one of the promising, although currently little implemented areas. Currently, blockchain projects are becoming increasingly popular around the world, including in the arts, although these trends have not yet been reflected in the digitalization of cultural heritage.

One of the world's first examples of such an application is CryptoJewish, which seeks to demonstrate the promise of developing valuable multidimensional content using a new and innovative digital language, bringing elements of millennial culture to the digital revolution. 25 of the rarest items in the Crypto-Jewish collection are housed in the fourth-largest synagogue in the world – "rather, in its digital version in Decentraland, which Chief Rabbi Peter Deutsch and Rabbi Daniel Channen, along with the entire CryptoJewish NFT collection, have already declared kosher".

In 2022 two significant events took place in the Ukrainian cultural and artistic environment, which may indicate the beginning of the tokenization of cultural heritage. This is a new experience for the National Museum of Art of Ukraine (Kyiv) and Andrey Sheptytsky National Museum in Lviv. At the beginning of the year, the capital's museum, having started selling licensed NFT tokens, became the first museum in Ukraine to create an NFT collection based on works from its art collection. It should be emphasized that programmers, designers and art critics, who worked for more than three months, focused exclusively on the masterpieces of Ukrainian artists – the digital collection will include works by Vsevolod Maksymovych, Oleksandr Murashko, Oleksandra Ekster, and Petro Rybka. The Lviv Museum continued to expand the horizon of the vision of Ukrainian museums by announcing the creation of the NMT collection "Alternative Dimensions" in 2022, which will include works by prominent Ukrainian and European artists that have never been included in the permanent exhibition of the museum due to their physical properties, in particular, excessive sensitivity to moisture and light, as well as insufficient protection of museum premises. In particular, digital versions will receive Rembrandt's etchings, drawings by Italian artists of the 17<sup>th</sup>-18<sup>th</sup> centuries, and Ukrainian folk engravings in the woodcut technique of the 18<sup>th</sup>-20<sup>th</sup> centuries.

The Ukrainian Heritage Hub project (<https://www.heritagehub.org>), which proposes the preservation of Ukrainian cultural heritage through the reliable data storage algorithms of blockchain technology, is an ambitious project that has no analogues. In addition to preservation, the project aims to record Ukraine's rights to cultural heritage in the digital world on the blockchain.

Thus, in the modern world there are new trends for art in general and museums in particular. NFT allows these works to travel virtually from museum collections to the world. In addition, the museum has the opportunity to receive certain funds that it can use for its development, to digitize collections, to show these collections to the world, and, as far as possible, to help Ukrainian cultural institutions that suffered during the war.

#### 4. Conclusions

One of the promising areas of research on the digitization of the cultural sphere and the introduction of digital practices in the field of cultural heritage is cultural studies, which, offering an interdisciplinary approach (involving theoretical and practical developments of economics, philosophy, cultural studies, psychology, visual studies), considers cultural heritage as a meaning-making resource in the context of modern culture. This approach expands the disciplinary and ideological boundaries of the study of cultural heritage from the aggregate of material and spiritual heritage of mankind to consideration as a special type of capital – economic, cultural, creative.

Analysis of the implemented technological and cultural projects on digitization of cultural heritage in the Baltic States shows that this process requires significant financial costs. At the same time, studies show that these investments are necessary for long-term strategies for the implementation of the cultural policy of any modern state, as they are converted into economic capital (growth of the share of the creative economy in the country's GDP), human capital (new jobs for a number of specialists in both humanitarian and technological fields) and cultural capital (formation of identity in the modern digital world, growth of tourist attractiveness of cultural institutions and the country as a whole).

Obviously, digital practices in the field of cultural heritage do not guarantee the physical protection of original cultural objects, which can be confirmed by the fact that 186 cultural heritage sites of Ukraine were destroyed or damaged during the Russian invasion in 2022 (information as of September 5, 2022 according to UNESCO open information). The developed digital tools of the Baltic States for work in the field of cultural heritage show that modern technologies can be an effective way to preserve reliable information in case of its destruction, damage or theft. For example, specialists of Riga Technical University are already actively cooperating with Ukrainian colleagues on the restoration of historical and cultural heritage in Ukraine. The ongoing war on Ukrainian territory demonstrated the insecurity of cultural heritage objects in the 21<sup>st</sup> century, which became the reason

for the revision of the cultural policy of a number of European countries and contributed to the active exchange of experience and information between Ukraine and other countries. Thus, the study of electronic museum, archival and library information systems (prerequisites, methods of implementation, user experience) of Estonia, Latvia and Lithuania will help to accelerate the digitization of these areas for the protection and promotion of Ukrainian cultural heritage, and the consideration of legislative acts of these countries will help in the implementation of legal norms and standards of the European Union in Ukraine.

The authors believe that the sphere of cultural heritage is characterized by high digital potential, and one of the promising directions of digitization of cultural heritage can be tokenization. In the context of the technologies of the future, this format of preserving the characteristics of valuable cultural objects will help not only to further adapt to the requirements of, for example, Metaspace, but also to protect data and create additional financial and symbolic value. However, this topic requires further research, as it raises a number of issues: legal, economic, educational, environmental and, most importantly, ideological.

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# ESTABLISHMENT OF CONSTITUTIONAL GUARANTEES OF OPENNESS OF THE ADMINISTRATION OF JUSTICE AS THE BASIS OF THE RIGHT TO A FAIR TRIAL IN CONDITIONS OF ECONOMIC TURBULENCE DUE TO MILITARY ACTIONS

Ihor Zavalniuk<sup>1</sup>

**Abstract.** The *subject* of the study is social relations in the field of establishing constitutional guarantees of openness of the administration of justice as the basis of the right to a fair trial in conditions of economic turbulence due to military operations. *Methodology.* The methodological basis of the study is the methods of induction and deduction, dialectical-materialistic method, method of analysis and synthesis, historical method, which allowed to objectively comprehend the content and essence of the issues under study. The *purpose* of the article is to study the constitutional guarantees of openness of the administration of justice as the basis of the right to a fair trial in the conditions of economic turbulence due to military operations, and then to propose mechanisms for their effective functioning. The *results* of the study showed that there are two main types of procedures for the application of constitutional norms in the field of ensuring the right to a fair trial. It seems that the optimization of the application of constitutional norms in the field of ensuring the right to a fair trial involves achieving a balance between these two types of procedures, which ultimately ensure the proper implementation of the constitutional right to a fair trial. Based on the results of the application of the constitutional norm in the field of the right to a fair trial by the courts, two groups of legal consequences of the adoption of acts of application were identified. *Conclusions.* The idea of justice has been enshrined in the constitutional text as a legal idea rather than a principle of law. At the same time, in modern Ukrainian jurisprudence there is a paradoxical situation when the formally subjective right to a trial has a greater internal content than the principle of "justice" used in various, including procedural, branches of Ukrainian law. Modern Ukrainian legislation rarely operates with the category of "right to a fair trial", but in this case we are dealing with the legitimization at the level of sectoral Ukrainian legislation of the legal construction already established in domestic science and practice, which came from international law, and not an attempt to give the principle of fairness of judicial activity a real formal legal nature. The fact that the modern Ukrainian legislator failed to systematically and conceptually reflect its attitude to the idea of judicial justice in the conditions of the military-economic crisis also has a negative impact on the relevant judicial practice.

**Key words:** constitutional law, constitutional norms, justice, the right to a fair trial, judicial proceedings, economic turbulence, military actions.

**JEL Classification:** K10, K38, K40, K41

## 1. Introduction

In recent years, researchers have increasingly used the technical term "turbulence" to describe the current economic situation. It is used along with such terms as "post-industrial society", "knowledge economy", "innovation economy", "new reality", "economy of rapid change" (Brown, 2006).

Globalization and strengthening of interconnection between countries, scientific and technical progress

and new technological base transform the economic system into a diversified and competitive one, with increasing innovation activity, increasing the share of high-tech and intellectual production. In this special, new, knowledge-based economy, knowledge plays a key role. It is the main productive force.

An economy based on social and legal relations is an economy that allows transforming knowledge into income, and not only in high-tech industries.



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A characteristic feature of such an economy is that relations have become an independent powerful factor of production that cannot be replaced by other factors.

The economy based on social and legal relations is characterized by a higher level of risks faced by the subjects of this economy. The increasing pace of change in the modern economy leads to the fact that the emergence of new knowledge not only depreciates tangible elements and factors of production more and more rapidly, but also makes many intangible factors of production unnecessary, investments in which may not pay off in full or lead to losses. The risks associated with the high pace of technological and managerial change are thus becoming higher. Risk in modern society is becoming an all-encompassing phenomenon also due to the increase of innovativeness, which is set as a goal of development, as innovations can be used in actions that are traumatic for society and individuals.

Thus, in the author's opinion, the change of technological modes, development of innovations and economy based on social relations generates a large number of new risks, mobility and mobility of economic processes, their growing uncertainty and unpredictability, contradictory trends. The combination of these characteristics of the economy can be called "turbulence" ("turbulence" – from Latin – "troubled", "disordered") (Brown, 2006).

At the present time the role and importance of military scientific substantiation of decisions of public administration bodies in all spheres of the economy and law is significantly increasing in the course of solving the challenges they face to ensure the military security of the state.

The development of the judiciary, like the judicial process itself, is not immune to these trends. The judiciary is adapting to the prevailing conditions, making every effort to do so and clearly requiring the use of the latest applied scientific approaches in the relevant direction. One of the most pressing constitutional and legal issues in today's reality is ensuring the right to a fair trial, which is a fundamental element of the set of human and civil rights.

## **2. Constitutional and legal characteristics of economic turbulence resulting from military actions**

In economic literature, turbulence is understood as a situation in the economy characterized by the following features:

- uncertainty and the impossibility of a clear description, prediction of events;
- complexity, interconnectedness and heterogeneity of factors affecting the economy, variability of their impact;

- unpredictability of consequences and risks of technological achievements of mankind;
- high speed of ongoing changes, etc. (Burlachkov, 2009).

The study of turbulence takes place in different aspects:

- in relation to global economic systems, for example, where its impact on the country's economy and society as a whole is considered (macro level);
- at the micro level, for example, as a certain characteristic of the external environment in which enterprises and organizations operate. Here the emphasis is on the classification of environmental factors, measuring the level of turbulence, developing strategies for the behavior of bodies depending on the level of turbulence, the adaptability of organizations and its subsystems to the ever-growing turbulence.

Almost all authors are of the opinion that the increase of turbulence in the economy is a trend and is caused by many factors, including military actions (Yanickij, 2011). Thus, the change of technological modes, the development of the knowledge economy and the innovation sector produce many risks that affect the state of all economic systems.

According to the author, turbulence becomes an integral characteristic of the surrounding space, which transforms and changes the usual course of things, requires society to make adequate changes to the current situation. All this determines the relevance of the study, including constitutional and legal, of various systems in conditions of economic turbulence.

The ongoing changes directly put forward a number of requirements to the quality of justice. To begin with, it must be adaptive and able to change rapidly in response to the dynamics of the external environment, while maintaining strict compliance with constitutional and legal requirements. All this, in turn, requires clarification and definition of the main categories that allow the most adequate description of the development of the phenomena under study (Yanickij, 2011).

The study of the institute of constitutional and legal status of man and citizen under martial law occupies one of the leading places in the field of theoretical and legal research from the point of view of direct action of the constitution of the state as a normative legal act that has the highest legal force in its territory. During martial law, restrictions on the rights and freedoms of citizens must be carried out in strict accordance with the constitutional norms and legislation. According to the author, the improvement of the regulatory framework in the field of constitutional and legal affirmation of human and civil rights and freedoms, and most importantly – the corresponding implementation, under martial law, should take place within the framework of specifying the norms

of international law relating to certain issues, including the right to a fair trial.

In a broader context, it should be noted that the lack of access to basic quality services, government policy, legislation and practice of judicial and law enforcement bodies should not negatively affect the rights of the conflict-affected population, in particular freedom of movement, access to pensions and social benefits and, of course, the right to a fair trial.

### **3. Constitutional and legal consolidation of the right to a fair trial in modern economic and political conditions**

Justice is often considered as one of the basic principles of law and legislation. The principles of law are a dynamic phenomenon. They are improved in the process of development of human civilization and, in particular, the development of political and legal thought. The latter circumstance does not contradict the statement that by their nature the principles of law are much more stable and durable than "ordinary" legal provisions. Principles of law reflect the view of law and the nature of legal phenomena both at the universal (international) and domestic levels. At the same time, law can be considered in a broad sense and include both specific areas of legislative regulation of social relations and general approaches to the organization of public power, ensuring rights and freedoms, etc. Different legal principles may be characteristic of different stages of development of human civilization, state and society. The principles of law should be disclosed on the basis of an integrated approach to understanding the essence of legal processes both at the basic and specifying levels. This approach makes it possible to distinguish general and sectoral (intersectoral) principles of law characteristic of certain branches of law or certain branches of legislation (Marochkin, 2010).

Objective difficulties in developing a common understanding of the principles of law are explained by the large proportion of subjective in their content. The latter circumstance does not prevent the formation of a relatively well-established system of legal principles. At the same time, we should not forget about the traditional "basic" division of law into natural and positive law (an extremely simplified view of a large number of different types of law understanding), that is, the conceptual approach to the principles of law, if they are understood as natural law and positive law, will be significantly different.

The principle of justice is enshrined in the text of the Constitution of Ukraine, in particular, in its preamble. The question remains whether it is enshrined as a principle of law (legal principle,

constitutional principle) or as an initial system-forming constitutional idea. The right to a fair trial (court verdict), traditional for international law, was indirectly obtained at the level of the Basic Law. And even if this wording was not formally mentioned in the text of the Constitution of Ukraine, however, most of the principles and powers that fill this legal construction were presented at the level of the Basic Law (Fritsky, 2004).

Unlike constitutional norms, constitutional principles may compete with each other. As for the substantive differences between the categories of "constitutional norms" and "constitutional principles", the latter serve as an objective or subjective criterion for the adequacy of the application of the former, i.e., a way of purposeful correlation with the moral requirements recognized in society, for example, justice. For similar reasons, we can distinguish constitutional principles in the sense of "general" and "sectoral" principles enshrined in the text of the Basic Law. In the practice of constitutional justice of Ukraine, the principle of justice is considered both as a constitutional and as a general legal principle. This confirms the assumption that, firstly, justice is a general legal principle. Secondly, fairness is also a constitutional principle, despite the fact that it is not explicitly stated as such in the text of the Basic Law of the country (Macdonald, 2021).

In its legal positions, the Constitutional Court also uses the phrase "constitutional right to judicial protection and fair trial", thereby designating the latter as "constitutional", despite the fact that it is not directly enshrined in the Constitution of Ukraine. In the scientific literature, one can find a proposal to enshrine the latter in the second section of the Constitution of Ukraine, however, given the pronounced unwillingness of the political elite to resort to the procedure of revision of the Basic Law, which was manifested during the last constitutional reform, it is clearly not to be expected in the near future.

It should be noted that with regard to fair trial the Constitutional Court of Ukraine prefers to use such a legal construct as "subjective right", i.e., speaks about "the right to a fair trial" or "constitutional right to a trial". According to I. Timchenko, the right to a fair trial is closely interrelated with the right to judicial protection (Timchenko, 2018). On the one hand, the right to judicial protection is specific to the right to a fair trial. On the other hand, a proper understanding of the right to judicial protection is possible only on condition of an adequate understanding of the essence and content of the right to a fair trial, i.e., the latter serves as a guideline for the former. One can disagree with this point of view. After all, the right to judicial protection outside the context of fairness of the trial loses any meaning. Once again the attention is drawn to the excellent

semantic content of the Constitution of Ukraine – everyone is guaranteed judicial protection of his rights and freedoms, access to justice for victims. In the second case, justice is understood not literally as access to judicial protection, but in a broader sense of the category "fairness", close to the concept of justice. In fact, it is about the victim's right to justice.

The question of the place of the right to a fair trial as a relatively independent legal construct among other subjective rights, similar concepts and categories is of undoubted interest. The relevance of the problem increases in view of the fact that modern Ukrainian legislation rarely operates with the category of "right to a fair trial", unlike, for example, representatives of science. In cases where this term is used, it refers to the right to a fair trial based on the principle of competition and equality of rights of the parties. Today it is impossible to say that the legislator at least tried to reveal the semantic content of the relevant legal construction. Most likely, it is about legitimization at the level of sectoral Ukrainian legislation of the legal structure already established in domestic science and practice, which came from international law.

Recall that subjective rights, freedoms and obligations, as is commonly said, embody the core of the legal status of a person, form its core. However, the structure of the legal status itself, that is, a specific list of elements that should be included in it, each author (scientist) determines individually. There is no consensus among scholars on the inclusion in the legal status of a set of procedural rights (legal guarantees of rights, rights that characterize the legal status of a person in the judicial process). In particular, M. Entin points out that the inclusion of the principles of judicial procedure in the legal status of an individual is unjustified. And even if the legal status consists, among other things, of procedural rights, for example, the right to appeal to the court, the "objective legal principles" of these procedures (administrative, judicial, constitutional) go beyond the legal status and are guarantees of its provision (Entin, 2003).

It is not difficult to notice that a significant part of the so-called legal guarantees reveals the "right to a fair trial" in the interpretation of the proposed Convention for the Protection of Human Rights and Fundamental Freedoms (Convention for the Protection of Human Rights and Fundamental Freedoms, 2010). In other words, even if the Constitution of Ukraine does not formally contain the "right to a fair trial", some of its components that fall within the competence are quite voluminously or partially (at the choice of the researcher) presented in the text of Section Two of the Basic Law (Savchin, 2009).

It should also be noted that not all the components of the right to a fair trial, which are enshrined in the

text of the Constitution, are formulated as subjective rights, which gives grounds to consider them, including as principles (in this case – sectoral principles). Indicative in this sense is the provision that no one is obliged to testify against himself, his spouse and close relatives, the circle of which is determined by law. The absence of an indication that this is a "subjective right" allows interpreting this provision as a principle of judicial activity, a principle of justice. For comparison, in the criminal procedure legislation this principle is presented as a subjective right – the right not to testify against oneself, one's spouse and other close relatives. Thus, at least in the above example, the difference between the sectoral principle and the subjective right is extremely insignificant (Weissbrodt, 2020).

Once again, not all "human rights" that are traditionally considered as such are enshrined as "rights" in the text of the Constitution. The question of whether it is appropriate to call those constitutional provisions that are not designated as such rights remains open. For example, the "right to judicial protection", which is often used in domestic jurisprudence, is derived from the constitutional "everyone is guaranteed judicial protection of his rights and freedoms." On the other hand, for example, the right to access to justice – from "the State provides victims with access to justice. The constitutional provision that "all are equal before the law and the court" is often transformed into the right to equality before the law and the court. The provision that the accused is not obliged to prove his innocence is also often transformed into the right not to prove innocence. There are many such examples, and in some cases the necessary prefix "law", as already noted, is proposed by the legislator itself in the process of sectoral regulation. Thus, it can be concluded that even if the legislator does not use the phrase "right", it can be subjective rights. The same logic applies to the basic and sectoral principles of jurisprudence. The latter fact actualizes the problem of delimitation of subjective rights, legal principles, procedural requirements, etc. For example, the legislator's indication that the sentence must be fair is often regarded as the right to a fair trial.

In conclusion, the following should be noted. The modern scientific debate on the principles of law is characterized by the problem of the primary and secondary nature of legal principle and formal law: legislation is based on the principles of law or the principles of law should be distinguished on the basis of the analysis of the current legislation. Such a statement of the problem, of course, touches upon the problem of different types of legal understanding.

The idea of justice should be considered as a general legal principle (general principle of law); constitutional principle (as such it is enshrined in

the legal positions of the Constitutional Court of Ukraine); inter-branch principle, which was mediated in the form of the right to a fair trial and the block of its powers; branch principle characterizing justice in various, including procedural branches of law of Ukraine (Constitution of Ukraine 1996). A careful analysis of the special literature and relevant legislation also shows that the principle of justice is often the basic principle (the main idea), through the prism of which, in turn, the rule of law, legality, equality are considered. The right to a fair trial, in its turn, as a legal guarantee of the right to liberty and security of person, characterizing the negative aspect of freedom, formally does not belong to them. In theoretical and practical terms, constitutional principles, unlike constitutional norms, can compete with each other, as well as act as an objective or subjective criterion for the adequacy of the application of constitutional norms, that is, a way to purposefully correlate the latter with the requirement of justice.

According to the author, the idea of justice was enshrined in the constitutional text as a legal idea, not a principle of law. At the same time, in modern Ukrainian jurisprudence there is a paradoxical situation when the formally subjective right to a trial has a greater internal content than the principle of "justice" used in various, including procedural, branches of Ukrainian law. Modern Ukrainian legislation rarely operates with the category of "right to a fair trial", but in this particular case one is dealing with the legitimization at the level of sectoral Ukrainian legislation of the legal construction already established in national science and practice, which came from international law, and not an attempt to give the principle of fairness of judicial activity a real formal legal nature. The fact that the modern Ukrainian legislator has failed to reflect its attitude to the idea of judicial justice in a systematic and conceptual way also has a negative impact on the relevant judicial practice.

#### **4. Application of the constitutional and legal idea of fair trial in the conditions of unstable economy caused by military actions**

A significant number of scientific events and published scientific works now confirm the relevance of the issue of applying the Constitution of Ukraine in the field of ensuring rights and freedoms, especially the right to a fair trial.

The implementation of the provisions on the supremacy and direct effect of the Constitution of Ukraine in judicial practice shows that in order to make a constitutional, lawful, reasonable and fair decision in a case, it is necessary to carry out its mandatory assessment primarily from the standpoint of constitutional norms. Inaction in this direction

may affect the implementation of constitutional rights and freedoms, as they must be applied directly – by virtue of their supremacy and direct effect.

Almost all procedural codes oblige courts to decide cases based on the Constitution of Ukraine. At the same time, the legislation states that if a normative legal act does not comply with a normative legal act that has greater legal force, for example, the law does not comply with the Constitution of Ukraine or the Decree of the President of Ukraine does not comply with the law, the court applies the norms of the act that has greater legal force. Ensuring the implementation of these provisions can be a significant factor that will protect the right of citizens to a fair trial and effectively implement the principles of the Constitution of Ukraine (Gardashuk, 2003).

The courts, fulfilling their duties to protect rights, effectively protected rights and freedoms and created preconditions for the development of the practice of applying the Constitution of Ukraine.

According to the Constitution of Ukraine, it has the highest legal force, direct effect and is applied throughout the territory of the state, and laws and legal acts adopted on its territory must not contradict the Constitution of Ukraine, in addition, the legislation emphasizes the need for direct application of the Constitution of Ukraine in judicial practice (Constitution of Ukraine, 1996).

However, the scope of application of constitutional norms should not be absolutized. In constitutional law enforcement there are also paradoxes when the frequency of application of the norm is undesirable, in any case, the effectiveness of the relevant norm is questionable. For example, is it worth rejoicing that voters will often recall deputies of representative bodies of local self-government? Is it worth to be happy that the President of Ukraine will regularly remove from office senior officials? It seems that in all such cases, the law enforcement, which is not defective in itself, gives a signal of a defect in the application of another norm – in the selection and nomination of candidates for deputies or for the position of a senior official.

In practice, the direct application of constitutional norms in the field of rights and freedoms is not always possible or even impossible in the absence of a law that directly relates to the constitutional right to a fair trial. In certain situations, a court cannot resolve a dispute without a law regulating the legal relations that have arisen (Simmons, 2021).

Summarizing the above, it seems important to emphasize the following.

The application of constitutional norms in the field of ensuring the right to a fair trial is carried out using two main types of procedures:

- in an imperative (strictly established) procedural order;
- in the discretionary regime, where judges have a relative freedom of discretion in the exercise of procedural actions or in the interpretation or interpretation of constitutional norms.

It seems that the optimization of the application of constitutional norms in the field of rights and freedoms involves achieving a balance between these two types of procedures, which ultimately ensure the proper implementation of the constitutional right to a fair trial.

As a result of the application of the constitutional norm in the field of rights and freedoms by the courts, the following two groups of legal consequences of the adoption of acts of application can be distinguished:

- recognition of a legal norm as constitutional or unconstitutional (Constitutional Court of Ukraine);
- recognition of the decision as lawful, establishing the need for its revision or cancellation (courts of general jurisdiction).

The differences in legal consequences allow to understand, on the one hand, the differentiated role of Ukrainian courts in the application of constitutional norms in the field of ensuring the right to a fair trial, and, on the other hand, actualizes the task of improving the coordination of the activities of various parts of the judicial system of Ukraine to achieve a common goal – the proper implementation of constitutional rights and freedoms of citizens in wartime and the resulting economic turbulence.

## 5. Conclusions

The growth of turbulence in the economy is a trend and is caused by many factors, including military actions. Thus, the change of technological modes, the development of the knowledge economy and the innovation sector produce many risks that affect the state of all economic systems. Judicial authorities are adapting to the current conditions, making every effort to do so and obviously need to use the latest applied scientific approaches in this area. One of the most acute constitutional and legal issues in modern realities is ensuring the right to a fair trial, which is a fundamental element of the complex of human and civil rights.

The study of the institute of constitutional and legal status of man and citizen under martial law occupies one of the leading places in the field of theoretical and legal research from the point of view of direct action of the constitution of the state as

a normative legal act that has the highest legal force in its territory.

In the author's opinion, the idea of justice has been enshrined in the constitutional text as a legal idea rather than a principle of law. At the same time, in modern Ukrainian jurisprudence there is a paradoxical situation when the formally subjective right to a trial has a greater internal content than the principle of "justice" used in various, including procedural, branches of Ukrainian law. Modern Ukrainian legislation rarely operates with the category of "right to a fair trial", but in this case it is about legitimization at the level of sectoral Ukrainian legislation of the legal construction already established in national science and practice, which came from international law, and not an attempt to give the principle of fairness of judicial activity a real formal legal nature. The fact that the modern Ukrainian legislator has failed to reflect its attitude to the idea of judicial justice in a systematic and conceptual way also has a negative impact on the relevant judicial practice.

The application of constitutional norms in the sphere of ensuring the right to a fair trial is carried out using two main types of procedures: in a mandatory (strictly established) procedural order; in a discretionary mode, when judges have a relative freedom of discretion in the implementation of procedural actions or in the interpretation or interpretation of constitutional norms. It seems that the optimization of the application of constitutional norms in the field of rights and freedoms involves achieving a balance between these two types of procedures, which ultimately ensure the proper implementation of the constitutional right to a fair trial.

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# LEGITIMACY OF LAW AS ITS JUSTIFICATION AND RECOGNITION

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**Abstract.** The *subject* of research is social relations in the field of legitimacy of positive law in the modern state. *Methodology.* The methodological basis of the study is the methods of induction and deduction, dialectical-materialistic method, method of analysis and synthesis, historical method, which allowed to objectively comprehend the content and essence of the issues under study. The *purpose* of the article is a theoretical and legal study of the legitimacy of law as its justification and recognition. The *results* of the study are: the legitimacy of law from the point of view of the theory of communicative rationality is investigated; the historical and theoretical process of development of interaction between subjects and the process of recognition, legitimation of norms in society as a social evolution is investigated; the development of the ideas of legitimacy and moral consciousness in the modern legal order is investigated; the tendencies of legitimation of positive law in the modern state on the basis of morality are determined; the peculiarities of ensuring the legitimacy of power through the legitimacy of law are highlighted. *Conclusions.* Law and modern morality stem from traditional relations, and they are interconnected. Legal norms are not just orders, they are fulfilled not only out of fear of coercion, but also out of respect for the law. However, for this, the legal order must be legitimate, enjoy the authority of citizens, and this is possible only if the positive law does not contradict the moral norms shared by a given society. The legitimacy of law lies, first of all, in the development of the legal basis of state and social life. But the meaning of the legitimacy of law in a society that calls itself democratic is seen not in the mere fact of existence and strict implementation of even legally perfect legislation, but in the extent to which it comprehensively embodies universally recognized humanistic goals, ideals, and values. Among them are the recognition of the people as the exclusive source of power and law, the rule of law, separation of powers, inadmissibility of usurpation and unlimited power, equality of all before the law and the court, inviolability of justice, etc. Of course, it is about fundamental human rights and freedoms with the legislative consolidation of the state's obligations to ensure and protect them. The legitimacy of law is the idea, requirement and system of real expression of law in the laws of the state, in lawmaking itself, in subordinate lawmaking with the steady recognition and perception by the population of the state.

**Key words:** legitimacy of law, legitimation, legality, theory of law, legal nature, legal norms, lawmaking, state, human rights, positive law, morality.

**JEL Classification:** K10, K39

## 1. Introduction

Modern Ukraine is undergoing radical democratic transformations. However, during this time fundamentally new political, economic and ideological relations have been formed in the country. They are based on human rights, democracy, rule of law, market relations, pluralism of opinions, etc.

Despite the successes, modern Ukrainian society is still far from democratic perfection. Here it is possible to fully talk about the issue of legitimacy of law. On the one hand, this issue has long been

one of the most pressing in Ukraine. On the other hand, the legitimacy of law in modern Ukraine is in a state of relative oblivion at the level of domestic politics and ideology, due to insufficient attention to the theory of state and law. To a large extent, this is due to the bureaucratization of society, the unwillingness of the growing bureaucracy to bind itself to obey the law, which is formed by legal nihilism in society.

Discussions on the understanding and content of the legitimacy of law have been going on in science



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for a long time. The solution of these issues in a particular country is usually determined by the political and legal regime, the functioning of specific political and legal systems, the dominant ideology regarding the understanding of law, power, human rights, freedom, democracy. With all the diversity, it usually refers to the well-known liberal democratic principles in the relations of the population with the state authorities, or their variants.

The understanding of legality largely depends on how the law is interpreted. In science, as is known, there are two main concepts of understanding law. According to one of them, the law is a system of legal norms emanating from the state, enshrined in legislation and guaranteed, i.e. written law. According to another concept, law is not only power norms, but also fundamental ideas and principles of freedom, equality, dignity, morality, humanism, justice, which are most concentrated in natural, inalienable human rights.

Disputes about the priority of this or that concept do not stop. Meanwhile, today the productive opinion about the value of each of them and the need for their close interconnection in practice is increasingly prevailing.

In Ukrainian legal science, especially in the educational literature, the legality of law is often referred to, with certain variations, as the requirement of compliance and perception of normative legal acts by all subjects of law – state bodies, public organizations, enterprises, institutions, officials and citizens. This approach was laid down in the Soviet period of the country's history. The main emphasis then was on the implementation of legal norms. The question of their very content was silenced, which did not cause criticism, because, as the authorities claimed, the content of legal norms is the will of the workers, the whole people.

This understanding of the legitimacy of law is very convenient for any dictatorship. It has the opportunity to create selfish arbitrariness with the help of undemocratic law and its further strict implementation and forced perception by the subjects of power and the people.

It is no coincidence that with the objective course of history, the moral understanding of law, which is generally recognized today, was formed and established, based on the axiom: "the law is correct in content, not in established form" or "not every legislative or judicial-administrative decision, being formally correct, contains a right." (Mishchenko, 2010)

Accordingly, it is necessary to adequately approach the understanding of the legitimacy of law in its true democratic sense.

## **2. Legitimacy of law and the theory of communicative rationality**

The question of the legitimacy of positive law is very relevant in legal science, meanwhile, in recent years, rationalism in understanding the nature of law has been criticized in domestic legal science. It is about E. Yuriychuk, who defends the anthropological approach to law (Yuriychuk, 2010), as well as about T. Novachenko, who points out: "Having embarked on the path of scientific development, jurisprudence finds itself at the crossroads between science and ideology, precisely established fact and value, often succumbing to the spell of illusions, myth-making." (Novachenko, 2016).

In connection with the criticism of the theory of classical rationality, the theory of communicative rationality, which has not yet become widespread in Ukraine, developed by K. Apel and J. Habermas in the twentieth century, seems interesting. According to this theory, there are two types of activity in society: instrumental and communicative. While M. Weber and many other scientists reduced actions and social development to instrumental actions, representatives of the theory of communicative rationality also distinguish communicative actions aimed at mutual understanding. According to J. Habermas, M. Weber was wrong to consider purposeful action as the only model that explains behavior in society. M. Weber identified different types of social action, which differ in varying degrees of rationality. However, in his typology there is no action aimed at mutual understanding of subjects, that is, communicative action (Apel, 1998; Habermas, 1995; Weber, 1998).

Communicative rationality implies that statements can be criticized. Here knowledge is not given as definitively formulated rules, it can be questioned in communicative practices. Proponents of communicative rationality have developed a theory of consensual truth. A fact is not directly an object that exists independently of the subject. A fact is something that is asserted in the statement of the subject. Therefore, the truth is what the community recognizes. In general, in the XX century, many thinkers criticized the categories of "reason" and "rationality", since rationality was perceived exclusively in the sense of the ideas of the Enlightenment. M. Weber, as well as representatives of the so-called Frankfurt School of philosophy M. Horkheimer linked the problems of social development with the spread of purposeful action. The theory of communicative rationality indicates that in the process of evolution of society there is a separation of purposeful action from communicative. After that, different types of coordination of actions are formed, in one case it is mutual understanding, and in the

other – money and power. Thus, supporters of communicative rationality suggest "to consider society as a whole, which in the course of social evolution is differentiated into a system and a life world. The systemic evolution is measured by the growing regulatory capacity of society, while the state of development of the symbolically structured life world is marked by the separation of culture, society and personality." (M. Weber, 1998; M. Horkheimer, 1985)

The fact that in society, in addition to purposeful actions, there are also communicative ones is justified by the historical process of anthroposociogenesis, or the process of social evolution. Communicative action is the basis of other actions. These views were first developed by the representative of interpretive sociology G. Kelsen. According to G. Kelsen, three stages of interaction development can be distinguished in the course of social evolution. First, there is interaction mediated by gestures. Then comes the stage at which symbolically mediated interaction takes place. Finally, the last stage is linguistically mediated, normatively directed interaction (Kelsen, 2004).

At the third, the highest stage of symbolic indirect influence, grammatical language is already formed. In order for it to be formed, it is necessary to have objective, social and subjective in society. Before the formation of these worlds, language cannot perform the function of coordination, because the participants are not able to orient their actions so that they serve as a claim to significance. The binding effect of a statement is directly related to the fact that the listener perceives it as significant. In addition, this means that the speaker, claiming to be significant, firstly, claims to establish truth in the objective world, secondly, to the correctness of legitimate systems in the social world, and thirdly, to sincerity in the subjective world of the subject. Considering how a person, G. Mead points out that a norm is an expectation of the behavior of a "generalized other", that is, a pattern of behavior that any member of society expects from us, perceives norms. "The installation of a generalized other is the installation of the whole community." (Mead, 1934) The perception of a norm occurs only when an individual agrees with it. The norm differs from mere requirements supported by sanctions by the moment of its recognition by the addressee. The difference from animal signals-symbols is that the interaction takes place on the basis of a common culture.

However, this raises the question of how a rule becomes meaningful, legitimate for the whole community. This aspect was most thoroughly developed by L. Wittgenstein: "When different people perform certain actions in different circumstances, it is only by following the rule that it is possible to determine whether they are performing the same actions or not. The criterion

that a naturalist uses when observing natural processes will not help here: to identify what is repeated in the observed phenomena. What is repeated, or thus remains in symbolic actions, can be identified only by relying on the rule." (Wittgenstein, 2022) Thus, not every repetition is a rule in society. What is also important is the reaction of other people, in which interaction becomes a cultural program, provided with a common understanding of what is right and what is wrong. However, where does this agreement come from? Subsequently, É. Durkheim drew attention to the fact that ritual practice is the form that generates norms in society, since initially legal norms had a religious character. Violation of these rules was understood not only as a sanction, but also as a violation of the sacred. Henceforth, the moral authority of the rules justifies sanctions and is primary in the norms. Thus, as É. Durkheim pointed out, ritual religious practices made social interaction possible with the help of symbols and formed norms that became significant for the social community. It is ritual practices that create the community of the group, which is personified in significant symbols. Human activity, its instrumental actions presuppose the presence of cooperation within the community, that is, regulation of relations by norms (Durkheim, 1982).

### **3. Legitimacy of legal norms: ideological genesis**

Consider now how the further development of interaction between subjects takes place and how the process of recognition and legitimation of norms in society changes with social evolution. The functions originally performed by ritual practice are transferred to communicative action; the authority of the reached consensus gradually replaces the authority of the sacred. This means the liberation of communicative action from sacredly protected normative contexts. The disillusionment that leads to the sphere of the sacred losing its power occurs through the linguistics of ritually secured basic consent; the potential for rationality of communicative action is released. When there is a division of labor in society, there is a separation of ordinary life and its practices from the sphere of religious practices. The ordinary, or profane, sphere of life performs the function of adapting society to the environment, which gives a certain independence to actions in this sphere. Unlike the sacred sphere, where symbols and rituals are not subject to criticism, in other spheres of life norms can be challenged. The grounds for recognition are gradually changing, that is, the reason for the legitimacy of norms is no longer the authority of the sacred, but the consensus in society, which depends on arguments.

In the early stages of social evolution, there is a mythological consciousness, characterized by a fuzzy distinction between the external world and language, as evidenced by the magical practice that identifies names and the objects they denote. Such a worldview can be characterized as "closed" (using the terminology of J. Berger), that is, when there are no alternatives to sacred beliefs, and they cannot be challenged (Berger, 1998). According to supporters of communicative rationality, there are three historical types of worldview: mythological, religious and metaphysical, modern. The first type is characteristic of tribal societies, the second is inherent in ancient and feudal states, and the last is formed in the modern era. The transition from one type of worldview to another means an increase in the degree of openness of worldviews, the growth of their rationality. These changes cannot be explained only by external, for example, economic, factors). They are explained by problem solving, by the learning process.

The modern scientist S. Zykova developed the training and its stages. In his opinion, learning is seen as a problem-solving process. The new stage of development is characterized by the formation of new skills. Thus, the transition from one stage of thinking to another, higher one, is caused, first of all, not by the influence of the outside world, but by the learning process. According to the proponents of communicative rationality, the development of worldview in the process of anthroposociogenesis is similar to the stages of intellectual development of S. Zykova. In the works of the latter, the category of "decentration" is used, which characterizes the process of intellectual development of the individual. Initially, the external world and the inner world of the subject are not distinguished at this stage. In addition, social and physical phenomena, symbols and meanings are not separated. Subsequently, there is a differentiation of the inner and outer world. The individual begins to realize the points of view of others, which is a manifestation of the decentralization of his worldview. As noted above, the evolution of social worldview is also characterized by decentralization. The mythological worldview does not separate the objective, subjective and social worlds, so it does not allow to distinguish between the world of significant norms and the world of subjective experiences (Zykova, 2013).

M. Weber first studied the process of changing the social worldview from mythological to modern. The process of rationalization, or "disenchantment" of the world in human consciousness in the process of society development as a change of culture was studied by him most consistently along with all the factors that characterized rationalization (Weber, 1994). However, in relation to the subject under study, the most valuable is the development of the

worldview itself, which results in the formation of a secular culture in which the norms of law are legitimized in a different way than in traditional societies.

The change of worldview and the departure from religious legitimation of norms occurs as a result of differentiation of such spheres as art, morality and religion. The beginning of this process falls on the XVI century, and it ends in the XVIII century. Thus, by the end of this period, scientific activity was already separated from religion, academies and universities were engaged in science, in which scientific problems were studied independently of religious doctrines. The independence of art and literature is evidenced by the emergence of criticism – artistic or literary. Of course, in this historical period the argumentation is still tied to religion, but the legal system is becoming more and more independent, which is manifested in professional education, development of legal science and justice. "Disenchantment," as M. Weber called this process, led to the formation of autonomous public cultural values that are not associated with magic or religion. The division of society into the world of the sacred and the world of ordinary life disappears; the worldview becomes "open" (Weber, 1994). Thus, in the process of developing a social worldview, the development of positive law takes place.

#### **4. Development of ideas of legality and moral consciousness in the modern legal order**

The development of morality and law is directly related to the development of public moral consciousness.

After the emergence of state power, the so-called traditional society, or society formed around the state, is formed. There is already a legal order, although there is no clear distinction between law and morality. Legal norms are perceived as something given, there is no understanding that they can be criticized or challenged. The rule of law is certainly beginning to form as an independent system, because there are already general norms and sanctions, and punishment is already understood as protection of the normative order. However, in a traditional society, an individual simply complies with the existing norms, which he or she cannot challenge. D. Zadykhaylo called such dependence on existing norms heteronomy, which means that it is not the will of man that creates the law, but this law acts as an external third-party motivation (Zadykhaylo, 2007). Finally, in the period of modern times, the so-called modern society is formed, during this period legal norms can already be criticized and are based on universal principles, not on the forms of life of specific societies. Legitimation of law through general legal principles is connected with the idea of rational natural law, which was developed in the XVII century.

In the transition to modern consciousness and culture, the morality inherent in traditional society is divided into morality and positive law. The historical process of rationalization of culture was analyzed by M. Weber, who pointed out how the ethics of faith is formed from the religious traditional consciousness, when due to "disappointment" with the world, the norms justified by traditions are devalued. That is when morality in the true, modern sense appears. For human behavior to be said to be dictated by morality, it is not enough that it is simply based on generally accepted norms. It is necessary that the personality is autonomous and moral norms are accepted voluntarily, not because of sanctions in society or fear of God (Weber, 1994). Moreover, autonomy can only be rational. Morality is formed from the morality of traditional society, when norms lose their self-evidence, when there is an attitude to generally accepted norms, an understanding that they may be different, and, therefore, their recognition by a person requires their justification by the principles of justice, and these principles can be discussed.

Therefore, in modern society the attitude to law and morality becomes conscious.

### **5. Trends in the legitimacy of positive law in the modern rule of law based on morality**

Positive law (position in Latin means "establishment", "affirmation") in the period of formation of the modern worldview is already considered as a human institution, and not as an eternal unchanging divine law. "Modern law is regarded as a law that has been positively put into effect. It does not develop through the interpretation of recognized revered traditions; rather, it expresses the will of a sovereign legislator who regulates the state of affairs in society through the legal means of organization." (Mishchenko, 2010) Law and modern morality stem from traditional relations, and they are interconnected. Legal norms are not just orders, they are fulfilled not only out of fear of coercion, but also out of respect for the law. However, for this, the legal order must be legitimate, enjoy the authority of citizens, and this is possible only if the positive law does not contradict the moral norms shared by a given society. Of course, since positive law is endowed with the power of state coercion, it also affects subjects who do not share public moral principles, but at the same time laws cannot ignore the values of this society, otherwise they will not be norms with authority.

However, it should not be assumed that in modern society morality is above law, rather they complement each other. Here we should recall the characterization of legality, which was given by E. Kant in the work "Metaphysics of Morals" (Kant, 1996). Law abstracts from free will, as freedom of choice is sufficient for

law-abiding behavior. Also, unlike morality, law regulates only external relations between people, that is, it is not interested in the motives of behavior. This is because law provides coercive power that can influence external actions, but not the motivation and values of the subject. Thus, positive law needs morality, because law is limited by legality, and legality is the sphere of morality. Thus, moral principles legitimize law, since law cannot be based solely on coercion, but, on the other hand, law compensates for the lack of coercion in modern morality. At the same time, of course, not all legal issues are moral, since the main source of positive law is legislation.

### **6. Features of ensuring the legitimacy of power through the legitimacy of law**

The establishment of democratic ways of forming political institutions in modern times destroys traditional legitimation. Through the rationalization of society, the authority of the sacred is replaced by moral consent, which expresses in a rational form what has always been implied in the symbolism of the sacred: the common interest. Norms are enforced because they have moral authority and express a common interest. Therefore, the implementation of these norms also serves to preserve group identity.

In the traditional society, the rights of the one who held this position were considered as personal rights of the one who held this position. In the conditions of the secular worldview in the new time, when the rule of law is being formed, power has become an abstract category not related to a specific person. Thus, in modern times, bureaucratic management is being formed, which M. Weber first wrote about (Weber, 1994). The formation of legal dominance is associated with a change in the values and motives of interaction in society. The development of motives in interaction is associated with the separation of empirical motivation of the subject from actions aimed at interaction. As S. Kozlov wrote, "in the course of social evolution, there must be a process of increased generalization of value systems." (Kozlov, 2014)

Power relations are unequal, asymmetrical relations. In addition, the authorities rely on monopolistic means of coercion that can always be used against a citizen. In particular, V. Nevidomiy draws attention to this, indicating the reason why the legitimization of power is necessary. In particular, he writes that the justification of state power is necessary because it restricts the freedom of the individual and at the same time has the means of coercion (Nevidomiy, 2011).

This position of the parties can be justified only by the fact that the government serves the general interests in society. Therefore, power inevitably needs justification, i.e., legitimation. In addition, since

the government acts through legal acts, the legitimacy of the government is ensured through law. First of all, it is about modern law and the state.

## 7. Conclusions

Human activity, its instrumental actions presuppose the existence of cooperation within the community, that is, regulation of relations by norms. The change of worldview and departure from religious legitimation of norms occurs through the differentiation of such spheres as art, morality and religion. In the process of development of social outlook, positive law is developing. The rule of law, of course, begins to form as an independent system, because there are already general norms and sanctions, and punishment is already understood as protection of the normative order. In the period of modern times the so-called modern society is formed, during this period legal norms can already be criticized and are based on universal principles, not on the forms of life of specific societies. Legitimation of law through general legal principles is connected with the idea of rational natural law. Positive law in the period of formation of the modern worldview is already considered as a human institution, not as an eternal unchanging divine law.

Law and modern morality stem from traditional relations, and they are interconnected. Legal norms are not just orders, they are fulfilled not only out of fear of coercion, but also out of respect for the law. However, for this, the legal order must be legitimate, enjoy the authority of citizens, and this is possible only if the positive law does not contradict the moral norms shared by a given society. Of course, since positive law is endowed with the power of state coercion, it also affects subjects who do not share public moral principles, but at the same time laws cannot ignore the values of this society, otherwise they will not be norms with authority.

However, it should not be assumed that in modern society morality is above law, rather they complement each other.

The establishment of democratic ways of forming political institutions in modern times destroys traditional legitimation. Through the rationalization of society, the authority of the sacred is replaced by moral consent, which expresses in a rational form what has always been implied in the symbolism of the sacred: the community of interests. Norms are enforced because they have moral authority and express a common interest. Therefore, the implementation of these norms also serves to preserve group identity.

Power relations are unequal, asymmetrical relations. In addition, the authorities rely on monopoly means of coercion, which can always be used against a citizen. This position of the parties can be justified only by the fact that the government serves the general interests of society. Therefore, power inevitably needs justification, i.e., legitimation. In addition, since power acts through legal acts, the legitimacy of power is ensured through law. First of all, it is about modern law and the state.

The legitimacy of law lies, first of all, in the development of the legal basis of state and social life. But the meaning of the legitimacy of law in a society that calls itself democratic is seen not in the mere fact of existence and strict implementation of even legally perfect legislation, but in the extent to which it comprehensively embodies universally recognized humanistic goals, ideals, and values. Among them are the recognition of the people as the exclusive source of power and law, the rule of law, separation of powers, inadmissibility of usurpation and unlimited power, equality of all before the law and the court, inviolability of justice, etc. Undoubtedly, it is about the fundamental human rights and freedoms with the legal consolidation of the state's obligations to ensure and protect them. The legality of law is understood as the idea, requirement and system of real expression of law in the laws of the state, in lawmaking itself, in subordinate lawmaking with consistent recognition and perception by the population of the state.

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# STRATEGIC VECTORS FOR THE DEVELOPMENT OF SPORTS AND RECREATIONAL ACTIVITIES: INTERNATIONAL AND NATIONAL EXPERIENCE

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**Abstract.** *The subject of the study* is international and national education on the strategic development of physical education and recreation. *Methodology.* General scientific methods were used in the research, in particular: theoretical generalization; methods of positive-normative analysis and statistical analysis. *The purpose* is the process of researching international experience in order to identify best practices for the development of strategic vectors for the development of physical culture and recreation activities in Ukraine. *Conclusions of the study.* The experience of the leading countries of the world in organizing the management of physical culture and recreation activities has been studied and systematized, and the possibilities of implementing individual mechanisms and tools in the national model at the present stage of its reorganization have been determined. It is noted that currently the basic condition for the development of the system is the search for the most optimal balance of powers between the state, regions and the private sector in managing this area, which includes the advantages of the American model on the one hand (primarily in terms of creating favorable conditions for attracting private capital) and the European model, which provides for a moderate transfer of powers by the state through setting priorities, coordination of business entities and targeted financing of priority areas. It is noted that the defining features that are inherent in the system of management of physical culture and recreation activities in all countries that have achieved high results in this area are, first of all: a developed legal framework and institutions, clear state priorities for the development of sports, diversified sources of funding and tools to stimulate entrepreneurship, as well as high attention to training and development of science and technology in this area. It is proved that the development of sports and recreation should be carried out at different levels: state, regional, territorial communities. The possibilities of development of sports and recreational activities on the example of Odesa region are analyzed. As of early 2020, it was recognized that the level of funding for sports and recreation in Odesa region from the local budget and other sources, such as trade unions, sponsorships, etc. is insufficient. In addition, problems with the development and condition of sports architectural objects and facilities were noted. Problems with the staffing of the sports and recreation sphere in Odesa region are associated with low wages, which caused the outflow of personnel. A particular shortage of sports facilities is observed in rural areas.

**Key words:** sports and health activities, financing, national characteristics, World Health Organization.

**JEL Classification:** G18, H30, H51, H61, I10

## 1. Introduction

In modern transformational conditions, the physical culture and recreation sphere as a specific type of professional activity and an important social institution has an active influence on human development and under the influence of global

trends undergoes deep qualitative and structural transformations.

In Ukraine, along with a high level of human development, the development of professional sports is stagnating. There is insufficient financial support from the state authorities at various levels, sports

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events are possible only through sponsorship, in most regions there are no conditions for training (outdated infrastructure, high energy costs, low salaries of coaches), limited choice of youth for development in various sports, most existing sections provide only paid services, which reduces their accessibility for children and youth from low-income families. The above factors, as well as a number of systemic problems in the development of professional sports, caused by destructive phenomena of socio-economic nature, which are inherent in the development of socio-economic systems in Ukraine in recent years, have led to the loss of Ukraine's general position in the international sports arena, the outflow of talented athletes and coaches abroad and the deterioration of the overall image.

Despite the existence of strategic programs for the development of sports in Ukraine, the management of this sphere is unsystematic and imperfect. The chronic shortage of public resources, acute socio-economic problems that come to the forefront of state regulation, as well as the general decline in the country's investment attractiveness restrain investment support for the development of this sphere and transfer the problems of youth and sports development to a secondary level. That is why, in modern conditions, the study of international experience in the development of physical culture and health activities and its adaptation in Ukraine is quite relevant.

The purpose of the article is the process of researching international experience in order to identify best practices for the development of strategic vectors for the development of physical culture and recreation activities in Ukraine.

## 2. International experience in the development of physical culture and recreation activities

According to the results of the study, N. Neroda also identifies certain features that distinguish the European and American models of sport: "The European model of professional sports is characterized by the lack of a clear division between amateur and professional sports, despite the significant influence of the concept of amateurism on the development of professional sports in Europe. European professional sport is characterized by a sport-commercial direction of development, in contrast to American professional sport, which focuses on commercial and sports direction. The peculiarities of the organizational structure of professional leagues, namely the open format, characteristic of the European model, or the closed format, characteristic of the North American continent, regulate the procedure for new teams to join the league and form the peculiarities in the regulation of sports competition and the labor

market. The processes of international integration had a significant impact on the formation of the legal framework of European professional sport, which affected its greater internationalization." (Neroda, 2016)

In general, the features that unite the American and European models of development of physical culture and recreation activities are as follows:

- 1) a wide range of differentiated sources of funding for the development of sport, based primarily on the recognition of sport as an important area of business, the integration of sport and business, sport and municipal government, sport and science;
- 2) special attention is paid to the development of mass sports, which is considered as an important element of economic, social and ideological policy of the state;
- 3) high level of development of management and marketing of sports as a tool of sports business and attracting investments in sports and recreation activities;
- 4) developed scientific base and priority innovative research in the field of sports, funded from various sources, among which the most powerful are international organizations, sponsors and the business sector;
- 5) a stable and comprehensive system of regulation of relations in the field of sports, as well as integrated rules and restrictions relating primarily to ensuring transparency and preventing corruption in the organization of sports competitions, doping, etc.
- 6) the development of "sports diplomacy", which is seen as a "soft power" to overcome various misunderstandings between countries. The growing attention to sports diplomacy is largely seen as a response to the crisis of traditional diplomacy. New forums and instruments were perceived as necessary to achieve international policy goals. Sport can play a role in achieving foreign policy goals. In addition to the general perspectives of public diplomacy and cultural diplomacy, the concept of sports diplomacy was also considered. This is all the more relevant as the values associated with sport, such as volunteerism, civil society and democracy, are closely linked to democratic values.

Comparing the European and Ukrainian models of sports management and state regulation in this area, Professor S. V. Lischuk notes that in Ukraine, despite the high level of state intervention in the development of sports and recreational activities, a significant number of issues remain unsettled. In particular, with regard to professional sports, according to the scientist: "The current experience of state regulation of professional sports cannot be called successful. In this regard, it is necessary to solve the following problems:

- 1) to find the optimal combination of self-regulation and state regulation in the field of professional sports;

2) to establish the limits of state regulation of public relations in the field of professional sports.

The solution to these problems cannot be unambiguous and simple: on the one hand, it is necessary to prevent excessive state interference in the affairs of sports organizations, which is dangerous and can destroy the system of state regulation created by sports organizations. On the other hand, the problems of ensuring public order, bribery of participants in sports events, doping and corruption in sports cannot be solved without the help of the state. Accordingly, the state should understand its role and more clearly define the limits of its participation in the legal regulation of social relations in the field of professional sports." (Lischuk, 2015; Melikh, 2019)

Given the difficulties of the current stage of the socio-economic situation in Ukraine, the problems of certain reformatting or complete restructuring of the current model of state management of physical culture, sports and recreational activities, which will meet current and strategic challenges and will be based in certain aspects on international experience, become obvious.

The analysis of the experience of countries with developed economies shows that the most acceptable model of management of physical culture and recreation activities in Ukraine is the European model, which provides for a wider participation of the state and local governments in the development and

financing of certain areas of development of this industry. In this context, the most balanced distribution of powers between the state and regional levels of government regarding its role is important.

### 3. Strategic vectors of development of physical culture and recreation activities in Ukraine

The development of physical culture and recreation should be carried out at different levels of the state, region and territorial communities. Consider the possibilities of developing physical culture and recreation activities on the example of Odesa region, which is the largest in area among all regions of Ukraine.

The demographic situation in the Odesa region corresponds to the national one and is characterized by the tendencies to reduce the available and permanent population, deterioration of the natural movement and vital rate, increase of migration flows (Table 1).

The average life expectancy in Odesa region for 2015–2020 ranged from 70.4 years in 2015 to 72 years in 2019, for women – from 74.7 to 79.9 years, and for men – from 65.9 to 66.9 years (Table 2). It should be noted that in 2020 there was a slight but significant decrease in life expectancy for both genders, which most researchers attribute to the effects of the pandemic.

As for the age distribution of the population of Odesa region, there are also national trends of predominance of the elderly population over the

Table 1

#### Composition of the existing population of Odesa region for 2015–2019

	2015	2016	2017	2018	2019
Available population, thousands of people	2396,4	2390,3	2386,5	2383,1	2380,3
Deviations to the previous year:					
absolute, thousands of people;	-0,1	-6,1	-3,8	-3,4	-2,8
relative, percentage;	-0,004	-0,3	-0,2	-0,14	-0,12
Number of births, thousands of people	29,5	27,4	26,4	25,2	23,1
Number of deaths, thousands of people	34,2	34,6	33,6	33,4	33,6
Natural reduction, thousands of people	-4,7	-7,2	-7,2	-8,2	-10,5
Migration growth, thousands of people	+4,6	-0,99	+3,4	+4,7	+7,7
The density of the existing population	71,9	71,8	71,6	71,5	71,5

Source: (Odesa Regional State Administration, 2022)

Table 2

#### Average life expectancy in Odesa region

Period for which indicators are calculated (years)	Average life expectancy at birth			Difference between life expectancy of men and women
	both genders	men	women	
2015	70,4	65,9	74,7	8,8
2016	70,8	66,4	75,2	8,8
2017	71,1	66,6	75,5	8,9
2018	71,8	66,7	76,7	10
2019	72,0	66,9	76,9	10
2020	71,4	66,4	76,2	9,8

Source: data of the State Statistics Service of Ukraine, 2022

number of children and trends that are unacceptable for ensuring demographic processes of population reproduction.

This indicates the need for the speedy development and implementation of social programs of regional development aimed at increasing the birth rate and improving the level of social guarantees and life of the population. Demographic improvement of the population of Ukraine and its regions, increasing life expectancy is possible through the development of sports and recreation.

In the Odesa region in 2015–2017, the system of children's and youth sports schools (CYSS (children's and youth sports school)) was optimized, the need for which was caused by the abolition of the possibility of financial revenues from the Social Insurance Fund for the activities of CYSS. As a result of such optimization, more than 1000 children were forced to transfer to other sports schools, and more than 600 pupils lost the opportunity or refused to continue their studies in the CYSS. As a result of such optimization, and in fact a decrease in the number of CYSS, at the beginning of 2019 there were again as many as in 2015 – 67 CYSS (Odesa Regional State Administration, 2022).

Comparison of the number of sports facilities in the Odesa and other oblasts allows us to state that the Odesa Oblast ranks second after the Lviv Oblast in terms of the number of sports facilities in general, and second after the Zaporizhzhia Oblast in terms of the number of sports facilities in the AHs (amalgamated hromadas).

"In the period 2014–2018, the construction of sports facilities continued in Odesa region, but the growth in the number of sports facilities is slower than in other regions of Ukraine. There are also practically no large infrastructure facilities being built, except for the construction of the innovative Sports Palace in Izmail and the sports hall of the State University of Applied Sciences in Balta. In 2017–2018, sports grounds for mini-football with artificial turf and multifunctional fields were actively built and reconstructed in AHs of the Odesa Oblast." (Odesa Regional State Administration, 2022)

Trends in the gender distribution of residents of Odesa region engaged in sports correspond to the national trends and are characterized by a slight uniform growth.

As of the beginning of 2020, it was recognized that the level of funding for the sports and recreation sphere of Odesa region from the local budget and other sources, such as trade unions, sponsorships, etc. is insufficient. In addition, problems with the development and condition of sports architectural objects and facilities were noted. Problems with staffing of the physical culture and recreation sphere in Odesa region are related to the low level of wages, which caused the outflow of personnel. A particular

shortage of sports facilities is observed in rural areas. All these shortcomings were declared in the Development Strategy of Odesa region for the period 2021–2027, which made it possible to identify strategic imperatives for the implementation of state policy in the field of physical culture and sports.

The conducted researches proved that the physical culture and health sphere is of strategic importance for the development of the state and its regions for several reasons:

- 1) Formation and development of human potential, which is the basis for building an effective economy, reducing morbidity and combating stress;
- 2) educational influence on the development of society as a whole and each individual in particular through the formation of mass sports culture and satisfaction of the need of the majority of people for involvement and achievements, distraction from bad habits and antisocial behavior, development of international relations and communications and unification of values, social cohesion, formation of a conscious civil society;
- 3) a source of economic growth in the context of the development of the sports industry, the growth of the market of sports and recreation services, as well as related industries;
- 4) an important image component is the element of international integration, participation in international and world competitions.

Sports and recreational activities are also an important component of sustainable development of the country, regions and hromadas. The role of sport in sustainable development is affirmed in the 2030 Agenda for Sustainable Development (para. 37), which confirms the growing contribution of the sport and health sector to the realization of development and peace, the promotion of tolerance and respect, the empowerment of women and youth, people and communities, as well as health, education and social inclusion, which together contribute to the achievement of sustainable development (Vidomosti Verkhovna Rada of Ukraine, 2022).

According to S.M. Tsybalyuk: "In Ukraine, the sustainable development of physical culture and sports is recognized as one of the important vectors of state support and the direction of activity of local executive authorities, local self-government bodies, which is approved by the Resolution of the Verkhovna Rada of Ukraine 'On Ensuring Sustainable Development of Physical Culture and Sports in Ukraine in the Conditions of Decentralization' of 19.10.2016. Taking into account the role of physical culture and recreational activities in the formation of a healthy society, development of productive forces and stimulation of demographic processes, the management of this sphere should be based on clear, qualitatively defined strategic goals, which together

are aimed at building an effective model of development of physical culture and sports as one of the basic institutional foundations of society, which promotes sustainable development and quality reproduction of socio-economic systems." (Tsybalyuk, 2021)

On the basis of the study of the development of physical culture and recreation activities in Section 3 of the dissertation research, it is possible to outline the state of this industry at the end of 2020 and highlight the main positive and negative trends observed within the current model and under the influence of objective factors such as the COVID-19 pandemic, the deterioration of the economic situation in the state, etc. Among the positive factors, it is worth highlighting a number of factors, further support of which can stimulate the development of physical culture and recreation activities, namely:

1) Popularization of mass sports among the population, which led to the development of entrepreneurship in this area, in particular, the creation of new fitness clubs, sports centers, sections, etc. and the development of related industries – production and sale of sports goods, mobile applications, sports equipment, and so on. Under quarantine restrictions, these industries have experienced a slight decline. However, mass sports still remained a trend and a component of the transformation of national culture.

2) Against the background of popularization of sports, the work on construction, modernization and development of sports infrastructure in a number of regions has intensified. At the level of AHs, the work on the support of sports at the local level, creation of sports teams, in particular in popular areas (football, volleyball, tennis), maintenance of sports clubs, etc. has also been intensified.

3) Local executive authorities and local self-government bodies have increasingly (with the exception of the quarantine period) held mass sports micro-events, namely the organization of charity sports runs, sports competitions and sports days, in which all segments of the population participated.

That is, it is possible to talk about a certain revival and development of sports traditions in Ukraine and the formation of mass sports culture.

At the same time, there are significant problems in the system of management of physical culture and recreation activities, which can be divided into political (use of sport as an instrument of influence, struggle for power, problems in the field of judging and organization of various types of competitions), economic (problems of financing sport and investing in sports infrastructure) and organizational (problems with the distribution of powers, resources, responsibility). These types of problems follow from

each other and indicate the insufficient efficiency of the current management model. In addition to the above, there are system-wide problems: lack of management of physical culture and recreation activities as an integral system, imperfection of state regulation mechanisms, insufficiently clear system of priorities.

Experts of the Institute for the Future of Ukraine have formed a strategic vision of the development of physical culture, sports and recreational activities in Ukraine under the condition of gradual implementation of the established trends until 2019. According to their "Vision", the future of sport in Ukraine has the following characteristics:

– Increasing physical activity of Ukrainians is a priority vector of state policy.

– The Strategy of increasing physical activity of citizens is being successfully implemented in the country.

– In 2023, a package of sports laws and by-laws – 'Sports Reform' – was adopted, which contains the Concept, a number of laws, in particular the Law 'On a Physically Active Nation', adopted instead of the Law 'On Physical Culture and Sports'.

– In 2025, the last state secondary school will be transformed into a public sports club. Mass amateur sports and physical activity are separated from sports of higher achievements. An independent agency is established for this purpose in 2022.

– Federations are completely independent from the Ministry of Youth and Sports, develop on the basis of sports clubs and have mutually beneficial relations with business.

– The state policy is aimed at stimulating the development of sport at all levels. A large-scale national survey is conducted annually to assess quantitative and qualitative indicators, in particular, physical activity of the population. This allows adjusting the state policy.

– Every year up to 1% of GDP is allocated from the budget of Ukraine for the development of sports infrastructure and promotion of physical activity.

– Public spending on sport and physical activity in 2030 will amount to 100 euros per capita.

– The standards of necessary conditions for an active lifestyle with long-term geoplanning, financing and prioritization for at least 4 years have been approved at the municipal level." (Ukrainian Institute of the Future, 2022)

Unfortunately, given the current events, it is impossible to implement the proposed "Vision". The war in Ukraine has destroyed a significant part of the economic potential, sports, social and transport infrastructure, caused significant damage to the economy and led to the loss of human resources – this is the opinion of most scientists (Irtysheva, and etc., 2022; Popadynets, et al. 2021; Yakymchuk, et al., 2021; Pletsan, et al. 2021).

#### 4. Conclusions

The experience of the leading countries of the world in organizing the management of physical culture and recreation activities has been studied and systematized, and the possibilities of implementing individual mechanisms and tools in the national model at the present stage of its reorganization have been determined. It is noted that currently the basic condition for the development of the system is the search for the most optimal balance of powers between the state, regions and the private sector in managing this area, which includes the advantages of the American model on the one hand (primarily in terms of creating favorable conditions for attracting private capital) and the European model, which provides for a moderate transfer of powers by the state through setting priorities, coordination of business entities and targeted financing of priority areas. It is noted that the defining features that are inherent in the system of management of physical culture and recreation activities in all countries that have achieved

high results in this area are, first of all: a developed legal framework and institutions, clear state priorities for the development of sports, diversified sources of funding and tools to stimulate entrepreneurship, as well as high attention to training and development of science and technology in this area.

It is proved that the development of sports and recreation should be carried out at different levels: state, regional, territorial communities. The possibilities of development of sports and recreational activities on the example of Odesa region are analyzed. As of early 2020, it was recognized that the level of funding for sports and recreation in Odesa region from the local budget and other sources, such as trade unions, sponsorships, etc. is insufficient. In addition, problems with the development and condition of sports architectural objects and facilities were noted. Problems with the staffing of the physical culture and recreation sphere in Odesa region are associated with low wages, which caused the outflow of personnel. A particular shortage of sports facilities is observed in rural areas.

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# SYSTEMATIC APPROACHES TO ENSURING THE STRATEGIC DEVELOPMENT OF THE SPORTS AND RECREATION SECTOR

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**Abstract.** *The subject of the study* is systematic approaches to ensuring the strategic development of the sports and recreation sphere. *Methodology.* General scientific methods were used in the research, in particular: theoretical generalization; methods of positive-normative analysis and statistical analysis. The *aim* is to substantiate systematic approaches to ensuring the strategic development of physical culture and recreation activities in Ukraine. *Conclusions of the study.* Particular attention in the context of strategic development of physical culture and recreation is focused on the creation of an effective system of financial and economic support of the industry as a basic factor in the functioning of other subsystems. The financial and economic subsystem of the development of physical culture and recreation in the work is understood as a set of structural and dynamic characteristics of economic relations within the industry (between all participants in the processes of physical culture and recreation) and beyond (with government agencies, scientific organizations, foreign partners), which includes a set of certain property relations, systems of financial resources flow and management methods regulated by the relevant legal norms, embodied in organizational and economic mechanisms that allow to function effectively in a changing environment. In the context of improving the mechanisms of financial support for the development of physical culture and sports in the strategic perspective, the following elements need to be finalized and improved: the formation of state and regional financial preferences for extra-budgetary funding of physical culture and sports; settlement of issues related to the formation of funds for the development of physical culture and sports at the expense of part of the profits of domestic and foreign producers of tobacco and alcohol products; stimulation of investments (especially foreign ones) in the development of sports infrastructure; development of public-private and municipal-private partnership projects; improvement of sponsorship and patronage institutions; development of modern financial instruments that facilitate the attraction of public funds to the development of sports of higher achievements and joint investment institutions.

**Key words:** sports and health activities, financing, national characteristics, World Health Organization.

**JEL Classification:** G18, H30, H51, H61, I10

## 1. Introduction

The development of physical culture and recreation in Ukraine in recent years has been significantly underfunded, as evidenced by the dynamics of reducing the total amount of funding for physical culture and sports.

The imperfection of the modern system of management of physical culture and recreation activities is explained primarily by the fact that the existing (built for non-market conditions) financial and economic system is applied to the subjects of this sphere.

In the conditions of budget financing deficit, the problem of attracting additional resources to all spheres of physical culture and sports development (including those that carry out exclusively social activities) becomes quite obvious. The solution to this problem, according to the authors, lies in the formation of certain economic relations between the subjects of this sphere, which is facilitated by granting them certain economic rights.

Economic rights of business entities are the right to establish external (with suppliers, consumers,

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customers, other organizations, the state, financial structures) and intra-industry relations, to balance them according to the criteria of efficiency, to form relevant contracts, to provide services and to influence their price.

Determination of strategic guidelines for sustainable development of the physical culture and recreation sphere in the regions requires its comprehensive assessment. The use of a comprehensive analysis for these purposes allows to compare and contrast the potential capabilities and results of the functioning of the physical culture and recreation sphere in the regions, to identify the main shortcomings and to substantiate the possibilities of improving the organizational and economic support of its sustainable development. The physical culture and recreation sphere is recognized as a priority area of socio-economic development of the state and in the context of decentralization should take its rightful place in the policy of local governments through financial, resource, organizational and infrastructural support.

The main work on stimulation and coordination of physical culture and recreation activities is carried out at the local level and is entrusted to the territorial authorities. In Ukraine, as a result of the reform, a broad legislative framework has been formed that provides local governments with sufficient powers to develop this sphere. At the same time, financial support and the need to find additional funds for the development of high-quality sports infrastructure remains a problematic issue, due to the significant

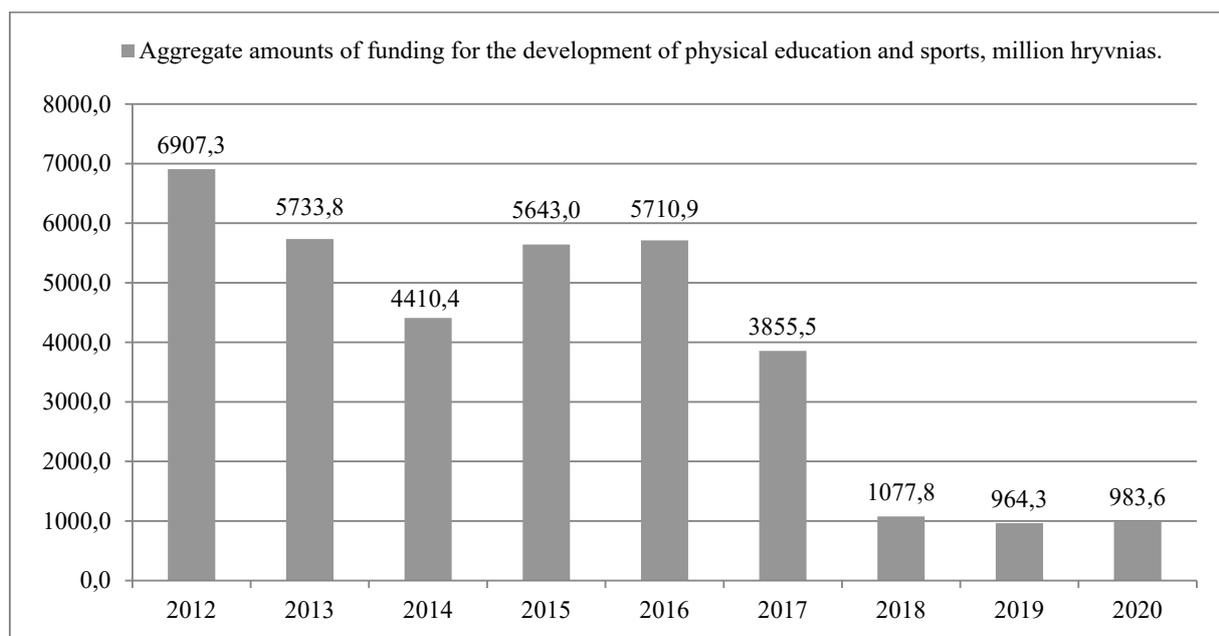
differentiation of the newly formed hromadas in terms of their financial capacity (Tsymbalyuk, Pavlikha, Tsymbalyuk, 2022).

**The purpose of the article** is to substantiate systematic approaches to ensuring the strategic development of physical culture and recreation activities in Ukraine.

## 2. Financing of physical culture and health sphere as a factor of strategic development

According to O. V. Ivanova, "the state should ensure diversification of sources of financing of the industry in two main directions. The first is the activation of commercial and non-governmental non-profit structures in providing physical culture and sports services to various categories of consumers (from professional athletes and athletes of international level to services for the population to maintain physical fitness and active longevity). The second is to transfer the functions of management and support of physical culture and sports to the regional and local levels of government. That is, diversification of managerial powers both within the state vertical: federation – region – municipality, and in the direction of the sectoral structure of the economy (economic entities): public (state and municipal forms of ownership) sector – non-governmental non-profit sector (public organizations and foundations)." (Ivanova, 2006)

The dynamics of the total amount of funding for the development of physical culture and sports in Ukraine is shown in Figure 1.



**Figure 1. Dynamics of total financing of physical culture and sports development in Ukraine**

Source: (Sports Ukraine, 2020)

According to the information directory "Sport Ukraine", the dynamics of financing of physical culture and recreation activities in 2012–2020 decreased by 7 times. In 2012, the amount of funding for sports and recreational activities amounted to UAH 6,907.3 million, and in 2020 it decreased to UAH 983.6 million, while it should be clarified that the amount of funding has decreased not due to the coronavirus pandemic.

When forming subsystems of financial support for the development of physical culture, sports and recreational activities, it is also necessary to distinguish between the activities of organizations whose main goal is to achieve social effect. And for which it is primarily commercial. Thus, according to the Law of Ukraine "On Physical Culture and Sports", the organizations and institutions that primarily perform socially important functions include specialized educational institutions of sports profile, children's and youth schools, schools of higher sports skills, Olympic training centers, centers of sports rehabilitation of the disabled, etc. In the authors' opinion, this category also includes the organizations proposed by the author that provide military sports training for boys and girls. This group of institutions and organizations is a priority in terms of budget funding. At the same time, it is necessary to expand opportunities for additional revenues through: grants, sponsorship, expanding the scope of paid services and other sources.

Based on current realities, it is also worth reviewing the degree of state participation in ensuring the process of expanded reproduction in the sports and recreation industry. In particular, the content of economic activity of the central executive bodies in physical culture and sports, which should be exempted from the functions of operational distribution of budget funds to ensure the maintenance of national teams in sports, requires qualitative reorientation. Instead, this body, as an authorized representative of the state, should primarily ensure the implementation of the function of regulating economic relations in the field of physical culture and sports.

Improving the efficiency of non-profit organizations in the sports sector requires: revision of the mechanism for managing public funding and coordination of activities; granting more powers to sectoral federations; encouraging participation in social and sports projects. As for the business entities operating in the field of professional and mass sports, it is possible to increase the efficiency of their activities by increasing the quantity and quality of services provided, developing partnerships with non-profit sports organizations and other business structures for the joint implementation of social and sports projects in order to advertise their goods

(services) and increase the number of consumers. Thus, people's desire for an active lifestyle, the fashion for sports, the development of socially responsible business contribute to investing in various sports social projects. And although they are not profitable, entrepreneurs receive economic benefits in the form of advertising, increasing the value of the company by creating a positive image, increasing the productivity of employees, assistance from the state in further development of entrepreneurship in the sports industry (Sports Ukraine, 2020).

Based on the experience of countries with developed economies, it is also worth paying attention to the formation of motivational financial instruments that will stimulate the business sector in the field of sports and recreation services. To date, Ukraine has not created financial preferences for extra-budgetary funding of physical culture and sports. It is necessary to regulate the issue of formation of funds for the development of physical culture and sports at the expense of part of the profits of domestic and foreign producers of tobacco and alcohol products as a compensation for the negative consequences for human health from their use. These funds can be used primarily for the development and restoration of sports infrastructure in the regions, in particular for the development of mass sports.

Revenues from sports lotteries, sweepstakes and bookmakers are also an important source of funding for sports organizations. However, the issue of raising funds from their profits directly to finance sports organizations is not regulated at the proper level, which gives grounds for speculation and the formation of shadow schemes in this area.

According to O. V. Ivanova, "when forming an economic mechanism for the development of physical culture and sports, it is necessary to clarify that the sphere of providing sports services is a sphere of production, and, as you know, production consists of labor, means of labor and objects of labor. The subject of work in the field of service provision is a service. Reasonable pricing in the field of sports services is an important area of development of physical culture and sports and requires additional research". (Ivanova, 2006) In this context, an important direction of the state policy remains the formation of measures to support small and medium-sized businesses in the production of sports equipment and the provision of other related services to sports organizations. Another useful example is the strengthening of communication ties between domestic manufacturers of sports goods and sports organizations on the terms of mutual benefit, which will create additional opportunities for financing organizations through the provision of marketing services.

### 3. Subsystems of strategic development of physical culture and recreation activities

Considering the sports and recreation sector through the prism of business opportunities in Ukraine, one should take into account the measures taken by the Government of Ukraine to support business.

In the strategic perspective, the following elements of financial support for the development of physical culture and recreational activities need to be improved: the formation of state and regional financial preferences for extra-budgetary funding of physical culture and sports; settlement of issues related to the formation of funds for the development of physical culture and sports at the expense of part of the profits of domestic and foreign producers of tobacco and alcohol products; stimulation of investments (especially foreign ones) in the development of sports infrastructure; development of public-private and municipal-private partnership projects; improvement of sponsorship and patronage institutions; development of modern financial instruments that facilitate the attraction of public funds to the development of sports of higher achievements (blockchain technology) and joint investment institutions.

The development of public-private partnership is also one of the modern mechanisms for increasing investment activity in the development of social, sports and municipal facilities. In this context, consider reasonable the opinion of scientists Dudorova L. Yu. and Bondarenko B. O. that "the socio-economic result of PPP should be ensured by coordinated and balanced management of a special body to support and develop PPP in the field of physical culture and sports, the activities of which should be aimed at coordinating actions in the preparation of projects and decision-making on their implementation, in particular, determining the participation of participants in project financing, providing methodological assistance on management and financing, developing regulations, conducting expert analysis of project implementation, etc." (Dudorova, Bondarenko, 2018)

According to the Law of Ukraine "On Public-Private Partnership": "Public-private partnership is cooperation between the state of Ukraine, the Autonomous Republic of Crimea, territorial communities represented by the relevant state bodies, local self-government bodies, the National Academy of Sciences of Ukraine, national branch academies of sciences (public partners) and legal entities, except for state and municipal enterprises, institutions, organizations (private partners), which is carried out on the basis of an agreement." (Verkhovna Rada of Ukraine, 2010)

International experience expands the boundaries of public-private partnership: "it includes various forms of concessions and partnerships, and the basis of PPP is the investment attractiveness of the project." "A concession is a form of public-private partnership, which provides for the granting by the concessor to the concessionaire of the right to create and/or construct (new construction, reconstruction, restoration, overhaul and technical re-equipment) of the concession object, and/or management (use, operation, maintenance) of 'the concession object and/or provision of socially significant services in the manner and on the terms and conditions specified in the concession agreement, and also provides for the transfer to the concessionaire of most of the operational risk covering the demand and/or supply risk'" (Verkhovna Rada of Ukraine, 2019).

Therefore, the organizational and economic model of increasing investment activity in the sports and recreation sector is based on the use of public-private partnership and active interaction between the state, business and the public. Concession – transfer of rights to sports facilities and/or operation of sports and recreation facilities – can be considered as a type of such interaction.

Public-private partnership has a number of advantages that are important for the development of sports and health sector.

At the same time, having advantages, public-private partnership, according to experts of the Institute for Strategic Studies under the President of Ukraine, has a number of disadvantages:

– firstly, there is no minimum share of private partner participation in the project (in particular, in developed countries the minimum share of private financing is 25%). In this regard, even a minimal share of private financing in a joint project allows it to be classified as a PPP, shifting most of the responsibility to the state;

– secondly, there are no clearly defined mechanisms for practical implementation (determining the stages of PPP projects implementation, creating motivation for foreign investors, etc.);

– thirdly, according to Art. 7, public-private partnership is applied to objects that are in state or communal ownership or belong to the Autonomous Republic of Crimea, which makes it impossible to implement such projects as construction of objects by a private partner with their subsequent transfer to a state (communal) partner;

– fourth, the role of the State Fund for Regional Development in financing PPP projects remains uncertain." (National Institute of Strategic Studies, 2019)

Public-private partnership in Ukraine is built and implemented on the principles of equality before the law, non-discrimination of rights, mutually

beneficial coordination of partners' interests, efficiency of activity, immutability of purpose, recognition of rights and obligations of Ukraine, fair distribution of risks and recognition of partners on a competitive basis.

Public-private partnership in Ukraine, despite the insufficient pace of development and penetration in most areas of economic activity, already demonstrates certain positive results, in particular in such areas as transport, energy, communications, utilities, etc.

Currently, public-private partnership in the field of sports and recreation services is underdeveloped due to the imperfection of regulatory support that does not take into account the specifics of the industry. However, taking into account international experience, it is worth developing this area, in particular at the regional level. According to the authors, public-private partnership in sports and recreation activities provides a number of advantages, namely:

- more efficient management of project implementation, saving time and resources by combining the potential of partnership participants;
- improving the efficiency of management decisions that will be made taking into account different approaches to project selection and finding the most optimal ways of their implementation based on a wider set of alternatives;
- improving the efficiency of operational project management, based on the experience of private business, introduction of market instruments for project development (social networks, advertising, marketing communications);
- increasing the social responsibility of business through its integration into public life through involvement in the implementation of socially significant projects;
- improving the quality of sports and recreation services, their better integration with other sectors of the sports industry, as well as the IT sector.

In order to fairly distribute risks and recognize partners on a competitive basis in the process of implementing public-private partnerships in the field of sports and health, an important issue is the selection of pilot projects and the formation of criteria for this selection.

Within the framework of public-private partnerships, public sports organizations and local governments can cooperate by concluding agreements on the long-term use of communal property, land plots, etc. based not only on lease agreements, as is common, but on the targeted joint use and development of physical culture, sports and recreational activities with the provision of benefits for both parties. Where it will allow, on the one hand, to distribute risks and costs, and on the other – to ensure the development of sports organizations in a particular region.

Thus, this section outlines the issues related to the formation and balanced development of subsystems that are necessary to support the effective functioning of the sports and recreation industry in the strategic perspective, the implementation of state policy and the achievement of strategic goals. The formation and development of these subsystems should be carried out taking into account global trends in the field of sports and recreation activities, as well as the limitations dictated by the socio-economic situation of the country after the war. It is obvious that the industry will need new projects and strategies, as well as the formation of models for their implementation in the new realities. In this context, the main functions and tasks of subsystems in the context of existing problems are defined. However, the tools and mechanisms for their implementation will require additional analysis and research, taking into account the post-war situation in the country and its regions.

The war in Ukraine has destroyed a significant part of the economic potential, sports, social and transport infrastructure, caused significant damage to the economy and led to the loss of human resources – this is the opinion of most scientists (Irtysheva, and etc., 2022; Popadynets, et al. 2021; Yakymchuk, et al., 2021; Pletsan, et al. 2021).

#### 4. Conclusions

Particular attention in the context of strategic development of physical culture and recreation is focused on the creation of an effective system of financial and economic support of the industry as a basic factor in the functioning of other subsystems. The financial and economic subsystem of the development of physical culture and recreation in the work is understood as a set of structural and dynamic characteristics of economic relations within the industry (between all participants in the processes of physical culture and recreation) and beyond (with government agencies, scientific organizations, foreign partners), which includes a set of certain property relations, systems of financial resources flow and management methods regulated by the relevant legal norms, embodied in organizational and economic mechanisms that allow to function effectively in a changing environment.

In the context of improving the mechanisms of financial support for the development of physical culture and sports in the strategic perspective, the following elements need to be finalized and improved: formation of state and regional financial preferences for extra-budgetary financing of physical culture and sports; settlement of issues related to the formation of funds for the development of physical culture and sports at the expense of part of the profits of domestic

and foreign manufacturers of tobacco and alcohol products; stimulation of investments (especially foreign ones) in the development of sports infrastructure; development of public-private and municipal-private partnership projects; improvement

of sponsorship and patronage institutions; development of modern financial instruments that facilitate the attraction of public funds to the development of sports of higher achievements and joint investment institutions.

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# BALANCED DEVELOPMENT OF TOURISM AND RESORT AND RECREATIONAL SPHERE: INTERNATIONAL, NATIONAL AND REGIONAL VECTORS

Inna Irtysheva<sup>1</sup>, Marianna Stehnei<sup>2</sup>, Nod Orshoia<sup>3</sup>

**Abstract.** The *subject* of the study is international, national and regional vectors of balanced development of tourism and resort and recreational sphere. *Methodology.* The study used general scientific methods, in particular: theoretical generalization; methods of positive and normative analysis and statistical analysis. The *aim* is to substantiate the process of balanced development of tourism and resort and recreational sphere using international, national and regional vectors in modern conditions. *Conclusion of the study.* International experience of balanced tourism development has shown that among the leading countries in tourism are France, USA, China, Spain, Italy, Turkey, Mexico, Thailand. It is emphasized that these countries are annually visited by 30 to 100 million tourists. It was noted that France ranks first among the countries that attract tourists, the tourist flow to which in 2019 amounted to 217.8 million people, in 2020 it decreased to 117.1 million people, or almost 1.86 times; in second place among the leading countries is the United States of America, where in 2019 the tourist flow amounted to 167.4 million people, and in 2020 it decreased by almost 3.7 times and amounted to 44.7 million people; China ranks third in terms of tourist visits in 2019 – 167.5 million people, in 2020 it decreased to 30.4 million people, or 5.3 times. Analysis of the national experience of tourism development showed that the pandemic of viral infection also had the most significant impact on the reduction of tourist flows in Ukraine. It is noted that in 2019, the reduction of inbound tourists was almost 4 times, while the reduction of tourists in 2014 at the beginning of military aggression was 1.8 times. The authors consider it appropriate to predict a slight reduction in tourist flows during a full-scale war between Russia and Ukraine and to ensure the development of an innovative model of balanced development of national tourism. The creation of an innovative model of balanced development of tourism and resort and recreational sphere with the use of international, national and regional vectors is quite relevant in modern conditions. It is proved that such a model should ensure the achievement of public interests, short-term and long-term goals in solving alternative tasks of obtaining quick and maximum profit by the tourism business and meeting the needs of international tourist traffic and international capital in solving the problem of geographical promotion of tourist flows to new territories.

**Key words:** international tourism, tourist flows, coronavirus pandemic, military aggression.

**JEL Classification:** E20, H56, O10

## 1. Introduction

Recently, the conditions for tourism development have been extremely unfavorable. In early 2020, tourism was globally affected by the coronavirus pandemic, which led to a reduction in international tourist flows, and in some cases almost to a standstill. The gradual recovery of tourism took place against the backdrop of severe pandemic restrictions. It should

be noted that even the leading countries in tourism were unable to restore tourist flows to the forecasted level.

Unfortunately, the development of tourism in Ukraine was affected not only by the coronavirus pandemic, but also by Russia's military aggression. It is noted that we will have to use the crisis situation to implement unexpected tourist ideas and take care

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of the restoration of the industry before the end of the war. That is why the analysis of tourist flows of the leading countries of the world, the use of their best experience of restoration will allow to build world-class tourism in Ukraine.

They recognize that "international tourism is becoming a powerful factor in establishing ties between countries and peoples, contributes to solving political, economic, social, foreign economic, trade, cultural problems in the world. In the field of international tourism, cooperation between countries is manifested in the form of: bilateral and multilateral cooperation, which affects the establishment of long-term tourist ties, their use for the development of profitable economic relations, establishing close contacts in the field of cultural, scientific and technical organizations, improving the exchange of tourist information, developing common methods of standardization, tourist services. International tourism is defined as the sphere of production and sale of tourism product, thus forming the international tourism industry. Tourism enterprises are the main participants of international tourism as a business." (Aleksandrovoy, 2009)

Therefore, the justification of balanced development of tourism and resort and recreational sphere with the use of international, national and regional vectors is quite relevant in modern conditions.

## 2. International experience of balanced development of tourism and resort and recreational sphere

According to the World Tourism Organization, the dynamics of tourist flows in the leading countries

for 2010–2021 decreased from 2.5 times to almost 40 times. In general, the drop in tourist flows was caused by the coronavirus pandemic in 2020–2021, as we can see from the statistics (Figure 1).

According to the data, France, USA, China, Spain, Italy, Turkey, Mexico, Thailand are the leading countries in tourism. In general, these countries are annually visited by 30 to 100 million tourists. The first place among the tourist countries is occupied by France, the tourist flow to which in 2019 amounted to 217.8 million people, in 2020 it decreased to 117.1 million people, or almost 1.86 times. In second place among the leading countries is the United States of America, where in 2019 the tourist flow amounted to 167.4 million people, and in 2020 it decreased by almost 3.7 times and amounted to 44.7 million people. The third place is occupied by China in terms of tourist visits in 2019 – 167.5 million people, in 2020 it decreased to 30.4 million people, or 5.3 times, it should be noted that it is from this country that the coronavirus infection originates.

In general, it is necessary to note the world experience of tourism development. The principle of decentralization has a special influence on the French tourism policy. Delegation of powers to local governments, support of local initiatives, development of all forms of social tourism, the principle of comprehensive cooperation between the authorities, local communities and entrepreneurs in the field of tourism. French experience shows that the maximum effect in tourism development can be achieved only with the cooperation of executive authorities, local governments, public and professional organizations and business structures (Kryvenkova, 2016).

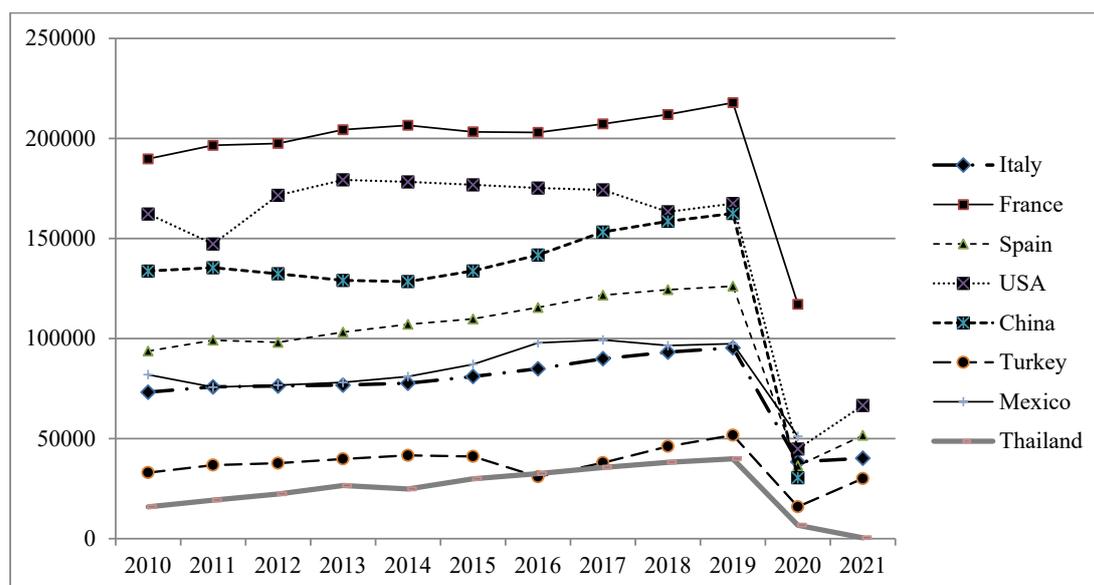


Figure 1. Dynamics of tourist flows in the leading countries of the world for 2010–2021, thousands of people

Source: grouped by data UNWTO

World experience gives us examples of mainly market regulation of investment processes in the tourism sector (USA). The combination of factors of production in the investment process is carried out by tourism companies. But this is possible only under the following conditions:

- Incomes of firms from market activities allow them to form the necessary accumulation of financial resources or use loans;
- effective demand in the country is growing;
- the costs of construction of the facility and the current costs of production activities at the facility are acceptable to the market;
- the investment project differs from others in that it has a fairly quick payback.

At the same time, taxes on the income of enterprises in the tourism industry should be minimal, and the state should not interfere in the functioning of the tourism sector of the economy, should not participate in financing this activity (Stoyka, 2011).

The attractiveness of China around the world is explained quite simply: the great attractiveness of the Celestial Empire for business circles forms a constant influx in the MICE segment – mainly to Chinese exhibitions, fairs, production facilities, etc. An extremely rich culture, the age of which is determined by thousands of years, a huge number of architectural, historical, cultural and natural monuments attract millions of tourists to China who go on sightseeing tours. Another attractive destination for Chinese tourism is an amazing variety of authentic cuisine of different regions, folk medicine and recreation at seaside resorts (for example, Hainan Island off the southeast coast of mainland China). (Shapovalova, 2017)

Thus, in general, the experience of leading countries in the field of tourism determines the need to form an innovative model of inclusive tourism development at the national level.

### 3. National and regional vectors of tourism and resort and recreation development

According to the World Tourism Organization in Ukraine, the dynamics of tourist flows in Ukraine in 2020 decreased almost to the level of 1995 (Figure 2).

The coronavirus pandemic also had the most significant impact on the reduction of tourist flows to Ukraine. In 2019, the reduction of inbound tourists was almost 4 times, while the reduction of tourists in 2014 at the beginning of military aggression was 1.8 times. In general, it is possible to predict a slight reduction during a full-scale war of Russia against Ukraine and the need to develop an innovative model of balanced development of national tourism.

The balanced development of the tourism industry potential means the balanced development of all sectors of the tourism complex, which is achieved in the triad "economy – social sphere – nature management". From the point of view of "tourism-economy" interaction, balance implies effective development of the tourism industry potential due to the balance of supply and demand. The balance of the tourism industry within the social environment means the maximum satisfaction of tourists' needs. The development of the tourism industry's potential while preserving natural resources ensures a balance in the relationship "tourism – nature management" (Yukhnovska, 2020).

The main components of balanced national and regional tourism development are economic, financial,

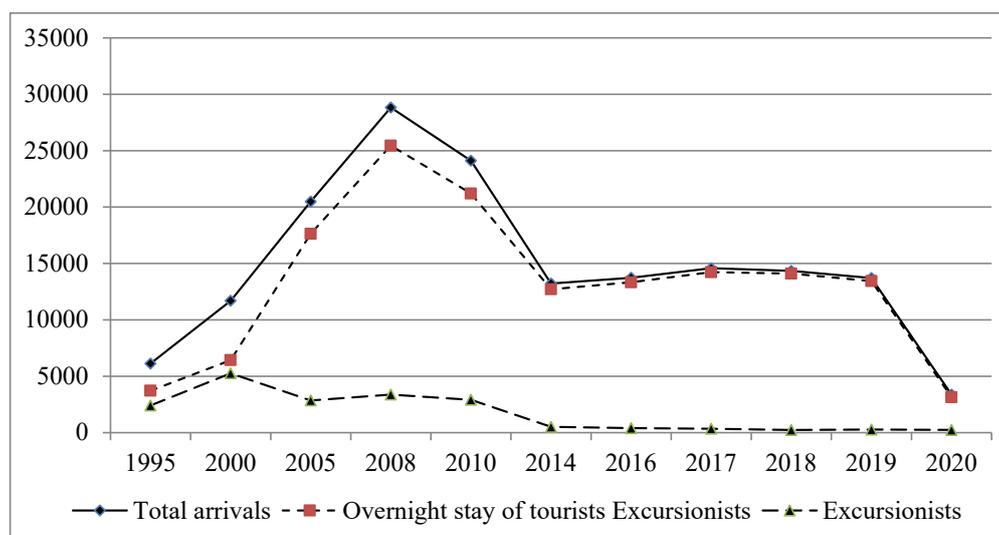
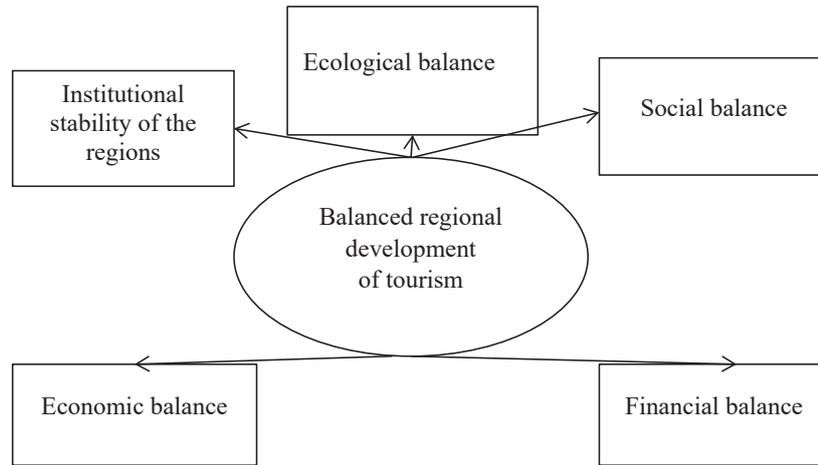


Figure 2. Dynamics of tourist flows in Ukraine for 1995–2020, thousands of people

Source: grouped by data UNWTO



**Figure 3. Components of balanced national and regional tourism development**

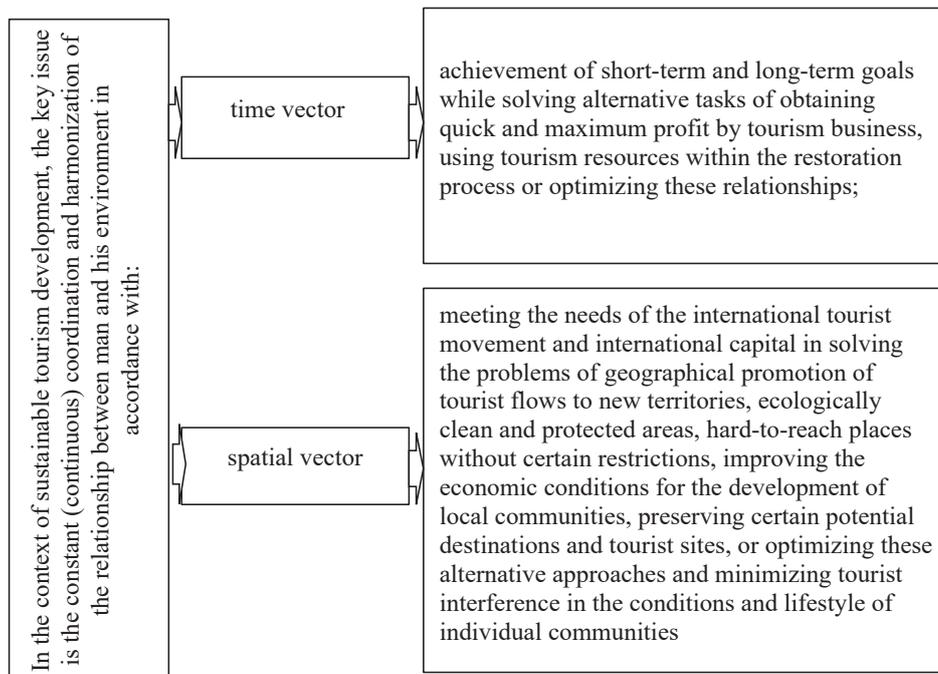
Source: grouped by the authors (Yukhnovska, 2020)

environmental, social and institutional balance. The relevant innovation model should take into account the components of balanced national and regional tourism development in accordance with modern conditions. As the world experience of tourism leaders has shown, the relationship between society and the environment in the context of sustainable tourism development is important in the context of an aging innovation model (Figure 4).

In general, the innovative model of balanced tourism development should take into account the public interests of achieving short-term and long-term

goals in solving alternative problems of obtaining quick and maximum profit by the tourism business and meeting the needs of international tourist traffic and international capital in solving the problems of geographical promotion of tourist flows to new territories.

In the current conditions of economic development, tourism is an area that brings not only income, but also has great potential for progress. Possessing significant natural resources, good geographical location of the country, a large number of tourist facilities, having highly qualified personnel,



**Figure 4. The relationship of man with the environment in the context of sustainable tourism development**

Source: grouped by the authors (Tkach, 2019)

overcoming infrastructure and investment problems, tourism can develop according to an optimistic scenario, thereby increasing not only its efficiency, but also the efficiency of related industries. However, the abandonment of tourist heritage sites, irrational use of available natural resources, lack of investment in the development of not only infrastructure, but also tourism in general, the outflow of personnel abroad can be key factors in choosing a pessimistic path of development (Tkach, 2019).

The development of the strategy for managing the development of the region is based on the main directions of environmental protection policy and requires significant adaptation of existing norms and requirements in our country to European standards. This requires a combination of all the positive that has been acquired by the national and international community in the field of theoretical, methodological, practical principles of rationalization of the use of natural resource potential of tourism and recreation, optimization of the functioning of the ecological and economic system, preservation of environmental quality in the context of environmentally sound spatial development. It should be noted that the theoretical framework, which is the basis of the new course of the modern economy, declared in the UN policy documents, provides for the concept of "green economy" as a system of economic activity related to the production, distribution and consumption of goods and services that lead to human well-being in the long term, do not expose future generations to significant environmental risks or environmental deficit, and are aimed at creating new jobs in the regions (Nezdoymynov, 2012).

The attractiveness approach allows to effectively develop the territory, i.e., to produce those goods and provide those services that will be most in demand by tourists visiting the destination. This will make it possible to make the right management decisions to attract investments in the development of not just the infrastructure of the region, to build not just accommodation, entertainment, etc., but to invest them purposefully, according to the needs, with the attractiveness that makes most tourists visit the destination. At the same time, a systematic approach to the management of tourist areas will have a great synergistic effect and significantly increase the competitiveness of the territories as tourist destinations. (Koshkald, Kalinichenko, Groholskyi, Hrybinyk, 2022)

The infrastructure of tourist facilities is poorly developed, and in some regions it is absent at all, this is the reality of modern tourist and recreational areas of Ukraine. During the years of independence, unfortunately, Ukraine has not only failed to improve its tourist infrastructure, but over time, Soviet projects have become outdated and should have

been modernized and made competitive, but this has not happened. Most of the health resort fund of Ukraine is abandoned, depleted and in a very difficult situation. The development of regional tourism in Ukraine is closely connected with the tourist infrastructure, which in turn acts either as a constraining factor in the development of the industry, or determines the positive dynamics of the development of tourism and recreation. At the same time, for most regions of Ukraine, infrastructure problems are the main reason for the decline in the competitive advantages of the territory in the market of tourist services. (Symonenko, 2020)

In general, as most authors emphasize, for the prospects of national and regional tourism development it is necessary to take into account the mechanism of attracting investments, motivation to create innovations, transformation of infrastructure in modern conditions (Irtyshcheva, and etc., 2022; Popadynets, et al. 2021; Yakymchuk, et al., 2021; Pletsan, et al. 2021).

#### 4. Conclusions

International experience of balanced tourism development has shown that France, USA, China, Spain, Italy, Turkey, Mexico, Thailand are among the leading countries in tourism. It is emphasized that these countries are annually visited by 30 to 100 million tourists. It was determined that France ranks first among the tourist countries, the tourist flow of which in 2019 amounted to 217.8 million people, in 2020 it decreased to 117.1 million people, or almost 1.86 times; the second place among the leading countries is occupied by the United States of America, where in 2019 the tourist flow amounted to 167.4 million people, and in 2020 it decreased by almost 3.7 times and amounted to 44.7 million people; the third place in terms of tourist visits is occupied by China – in 2019 167.5 million people, in 2020 it decreased to 30.4 million people, or 5.3 times.

Analysis of the domestic experience of tourism development has shown that the most significant impact on the reduction of tourist flows in Ukraine was also caused by the coronavirus pandemic. It was determined that in 2019 the reduction of inbound tourists was almost 4 times, while the reduction of tourists in 2014 at the beginning of military aggression was 1.8 times. It is appropriate to predict a slight reduction in tourist flows during a full-scale war between Russia and Ukraine and the need to develop an innovative model of balanced development of national tourism.

Creation of an innovative model of balanced development of tourism and resort and recreational sphere using international, national and regional

vectors is reasonable and quite relevant in modern conditions. It is proved that this model should take into account the public interests of achieving short-term and long-term goals in solving alternative problems of obtaining quick and

maximum profit by the tourism business and meeting the needs of international tourist traffic and international capital in solving the problems of geographical promotion of tourist flows to new territories.

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## CREATIVE INDUSTRIES AS A MECHANISM OF CREATIVE ECONOMY AND STRATEGIC COMMUNICATIONS\*

Viktoriia Kovpak<sup>1</sup>, Nataliia Lebid<sup>2</sup>

**Abstract.** In a period of crisis – namely, a pandemic and martial law – the economy is transforming into a system where the main driving forces are the exchange of knowledge, its mutual evaluation, where creativity and creative industries play a significant role, which ultimately form the creative economy, which economist and sociologist Richard Florida called "the new economic era of the 21st century". *The purpose* of the scientific work is to analyze the tools of Ukrainian creative industries that contribute to the production of a new cultural product or service, have a semantic load, are a resource for strategic communications and increase the potential of the creative economy in martial law (on the examples of successful Ukrainian cases of creative industries in the crisis period). *The methodology* of the study is based on a combination of systemic and value-based approaches, as well as discourse analysis, which together contribute to the disclosure of structural relationships in the ecosystem of the creative economy (in particular, social capital, entrepreneurial culture, state and international support, innovation potential, reputational capital of Ukraine in the world), their correlations with the peculiarities of national political and economic development and global trends, in particular in times of crisis, such as pandemic and wartime. The scientific work traces the genesis of the formation of a conceptual understanding of the creative economy and creative industries in the Ukrainian dimension, which contains legislative (Order of the Cabinet of Ministers of Ukraine No. 265-r "On Approval of Economic Activities Related to Creative Industries", the Law of Ukraine "On Amendments to the Tax Code of Ukraine and Other Laws of Ukraine on State Support of Culture, Small Business and Creative Industries in Connection with the Implementation of Measures Aimed at Preventing the Occurrence and Spread of Coronavirus Disease (COVID-19)", etc.), terminology (the meaning of the concepts of "creative product", "creative industries", "project", "institutional support grant", etc. was clarified), social and institutional (creation of the Public Union "Center for the Development of the Creative Economy", the National Bureau of the EU program "Creative Europe" in Ukraine, the Startup Fund, the Ukrainian Cultural Foundation (UCF), etc. Special attention in the scientific work is paid to the anonymous online survey of the UCF together with the Ministry of Culture and Information Policy of Ukraine of creative entrepreneurs and creative professionals, which was conducted among UCF 2020–2022 applicants on the state of culture and creative industries during the war (June 2022) in order to form a recovery and strengthening plan. *The analysis* of successful Ukrainian cases of creative industries allowed to outline the tools for the development of the creative economy in the crisis period: monetization of hobbies, innovative entrepreneurship, business clustering (in particular, the idea of a cluster of creative industries), brand collaboration, craft production, creation of cultural products such as books, grant/fund support and others, on the terms of donation to support the humanitarian and military needs of Ukrainian society. And the recently created podcast "Frontline of Creative Industries" about the success stories of representatives of this industry, who with their projects resist Russian aggression and support the economy and the institution of national identification of Ukraine, opens up prospects for further analysis of such tools as crowdfunding, revitalization, development of creative clusters of Ukrainian business.

**Key words:** creative economy, creative industries, strategic communications, cultural product, intellectual capital, wartime.

**JEL Classification:** H11, H76, J48

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*"The main fuel of the XX century  
Was oil, and the fuel of XXI century is creativity"*  
**John Newbiggin**

## 1. Introduction

In connection with the introduction of martial law in Ukraine in accordance with the Presidential Decree No. 64/2022 of 24.02.2022 due to the military aggression of the Russian Federation against Ukraine, the economy of Ukraine faced the risks of developing a humanitarian and economic crisis, as the press service of the Ministry of Finance of Ukraine reports that "for eight months of this year, the state budget was executed with a deficit of 416.9 billion UAH, in particular, the general fund – 418.1 billion UAH against the planned deficit of 864.2 billion UAH for this period." (Zharykova, 2022) It is obvious that today, when the war is in full swing and Ukraine's economy has already suffered large-scale losses from Russian armed aggression in the sectors of GDP, logistics, exports/imports, inflation, investments, banking sector, business activity, huge losses in metallurgy, fuel and energy, agriculture, migration and human capital (Biz. censor. net, 2022), the state of the economy and the ideas of the anti-crisis plan should be analyzed constantly, because business continues to work and support the economic background, Western partners support and agree to participate in the implementation of Ukraine's recovery. Thus, in the context of anti-crisis measures in April, President Zelenskiy stressed the need for creativity to restore the economy: "The economy is also the front on which we fight for our freedom, for our state and for our people, so we need to find ways to constantly adapt to the existing circumstances. Now we need to be as creative and bold as possible in solving economic issues." (Koval, 2022) Therefore, there is a growing demand for the possibility of using creative potential to create innovations, the need for intellectual capital, structural capital (consumer capital and organizational capital), the demand for knowledge, which, in turn, is reflected in the scientific terminology of the economic sphere, in particular, along with the definition of "creative economy" the terms "knowledge economy", "innovation economy" are used. This fact is connected "with the development of high-tech sectors of goods and services, wide availability of information and communication technologies and higher education in the second half of the 20th century. Thus, the creative economy, the knowledge economy and the innovation economy are components of each other, and each of them is part of the concept of the new economy, which can be interpreted as a high-tech economy that requires business entities to constantly innovate in the context of globalization." (Ushkarenko, 2018)

## 2. Concepts of creative economy and industries in the context of pandemic and war: Ukrainian dimension

In general, the concept of creative economy was first formed in the 1960s. "In 2001 John Hawkins, a member of the United Nations Creative Economy Advisory Council, a British writer and media manager, for the first time used this term in his book 'The Creative Economy: How People Make Money from Ideas', where he defined the creative economy as "the creation of value from ideas." (Creativeeconomy. center, 2022)

But before the challenges of the "wartime economy", people felt the challenges of the "pandemic era economy". Two years ago, COVID-19 as an economic crisis of natural origin greatly affected the recreational sphere of life, the life of the cultural industries. This fact prompted the Verkhovna Rada on April 22, 2020 to register the draft Law No. 3379 "On Amendments to the Tax Code of Ukraine and Other Laws of Ukraine on State Support of Culture, Small Business and Creative Industries in Connection with the Implementation of Measures Aimed at Preventing the Occurrence and Spread of Coronavirus Disease (COVID-19)" (Volos, 2020). This law proposed to introduce the concept of a grant, regulate the procedure for its taxation, temporarily exempt creative industries and cultural institutions from paying VAT on services, income tax and personal income tax (personal income), which would increase the amount of liquid capital. Law of Ukraine "On Amendments to the Tax Code of Ukraine and Other Laws of Ukraine on State Support of Culture, Small Business and Creative Industries in Connection with the Implementation of Measures Aimed at Preventing the Occurrence and Spread of Coronavirus Disease (COVID-19)" (Bulletin of the Verkhovna Rada (BVR), 2020, No. 43, Article 371) the meaning of the following concepts was clarified accordingly: "creative industries – types of economic activity aimed at creating added value and jobs through cultural (artistic) and/or creative expression" (Zakon.rada.gov.ua, 2020); "creative product – goods and services that have high added value and are created/provided as a result of cultural (artistic) and/or creative expression" (Zakon.rada.gov.ua, 2020). Providing institutional support was identified as one of the tasks of the Ukrainian Cultural Foundation among others; it is also emphasized the need to support and develop projects in the fields of culture and arts, creative industries and cultural (domestic) tourism, to provide grants of institutional support to legal entities of all forms of ownership to ensure competitiveness and job creation in the conditions of restrictions on economic activity imposed by law caused by an emergency or state of emergency, or the

implementation of administrative and (or) health measures (quarantine); providing grants to support and develop projects in the fields of culture and arts, creative industries and cultural and educational (domestic) tourism (Zakon.rada.gov.ua, 2020). According to this law, the project should be understood as "the activities of individuals and legal entities aimed at creating a certain cultural product, cultural good or cultural service (their combination); product or service (their combination) from cultural (domestic) tourism; a product or service (their combination) from the main economic activity in the types of creative industries approved by the Cabinet of Ministers of Ukraine, or institutional support of legal entities, ..., to achieve clearly defined goals within a certain estimate (budget) and the implementation of which requires actions within the agreed time frame provided by the contract concluded with the Ukrainian Cultural Foundation" (Zakon.rada.gov.ua, 2020), and the term "institutional support grant" means "the provision of financial resources on a gratuitous and irrevocable basis to legal entities of all forms of ownership in the field of culture, cultural (domestic) tourism and those persons whose main activity belongs to the types of economic activity related to the creative industries..." (Zakon.rada.gov.ua, 2020) The law adjusts the work of the National Council on Television and Radio Broadcasting, state support for cinematography in Ukraine, for example, in the form of temporary state subventions for the development of film projects, state support for book publishing in Ukraine, etc.

And in wartime, this sphere, the sphere of creative industries, is able, in addition to commercial benefits, to generate intellectual capital as a resource of strategic communications, such as archetypal roots, national identification meanings, national cultural values, historical myths and is able to scale them on the civilizational map of the world. As noted in the study of the creative economy of Ukraine and international experience, conducted in 2021 by the NGO GoLocal together with the think tank CMD Ukraine and the Center for the Development of the Creative Economy, it is "the DNA of the creative economy is the ability to generate intellectual capital with high profitability potential, create jobs and exports, while promoting social inclusion, cultural diversity and human development." (Rivchachenko, 2022) This study has proved the strong potential for the development of the creative economy in Ukraine, in particular, a noticeable dynamics has been recorded since 2016, when the creative sphere began to rapidly increase its weight in most key macroeconomic indicators, when the added value created by the creative industries of Ukraine increased by 32.7% and, according to analysts' forecasts, tends to increase. According to the head

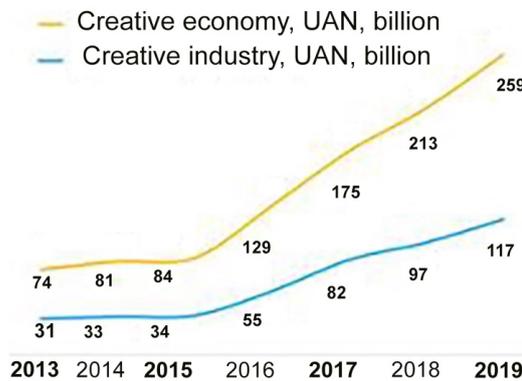
of the NGO GoLOCAL Ihor Komend, "state business support programs, such as Diia City, 5-7-9 loans, Startup Fund, support from donor and international organizations, specific projects in the regions, such as Creative Economy Centers, create a unique ecosystem for youth development, smart earnings and, as a result, for the development of the regions." (Rivchachenko, 2022) (Figure 1) Therefore, the national genesis took place in accordance with global markers, where international organizations, creative hubs, society (consumers and creators of creative products), the state (active state and regional policy can be traced in the UK, China, South Korea, the Netherlands and other countries that are leaders in this issue), business (especially in the context of cooperation between small, medium and large enterprises), public organizations, local governments, educational and research institutions are identified as key stakeholders of the creative economy (Creativeeconomy.center, 2022).

The indicators in Figure 1 suggest a more precise definition of the term "creative economy" as "a set of economic activities based on knowledge, creativity, intelligence, technology and innovation, with a high potential for profitability and job creation, and including creative industries and other creative economic activities (research, education, fashion, tourism, services, creative products, etc.)." (Creativeeconomy.center, 2022) The measurable structuring of the creative economy by the Center for Creative Economy Development is presented in Figure 2.

The National Bureau of the EU program "Creative Europe" in Ukraine distinguishes the following 12 sectors of cultural and creative industries: performing arts (theater, dance, ballet, opera and musical performances); visual arts (painting, sculpture, graphics, printing, photography); crafts (textiles, ceramics, wood, metal, glass, graphics); cultural heritage (tangible and intangible heritage, cultural heritage sites; archaeology, museums, libraries, archives); audiovisual sector (films and videos); interactive software/IT/training programs; computer and video game development; music (live and reproduced); design and fashion (clothing manufacturers and others specializing in the fashion industry and interior design); literature and publishing (books, magazines, periodicals); architecture (construction and landscape architecture); mass media, advertising (television, radio, newspapers) (Prostir.ua, 2022).

From June 1 to 13, the Ukrainian Cultural Foundation (UCF) together with the Ministry of Culture and Information Policy of Ukraine conducted an anonymous online survey among creative entrepreneurs and creative professionals – applicants for the Ukrainian Cultural Foundation 2020–2022 on the state of culture and creative industries during the war in order to form a plan for the restoration and

The growth of the creative economy in Ukraine from 2013 to 2019



The main producers of added value

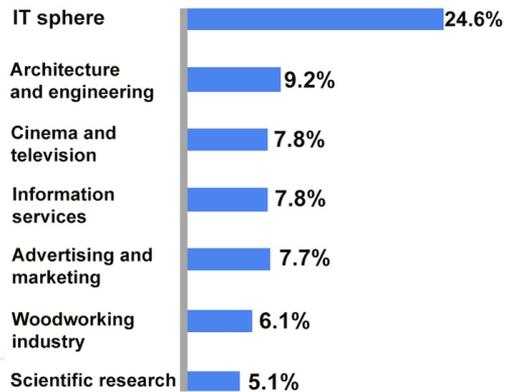


Figure 1. The main producers of added value of the sector of creative economy in Ukraine. The growth of the creative economy in Ukraine from 2013 to 2019

Source: (Rivchachenko, 2022)

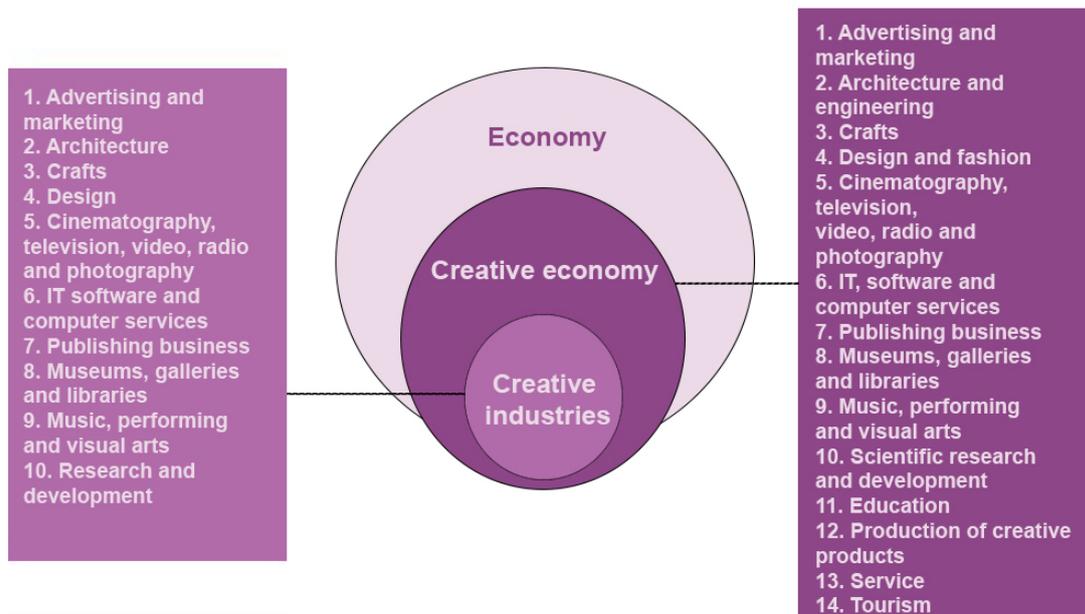


Figure 2. Dimension of creative economy

Source: Creativeeconomy.center (2022)

strengthening of the sphere, to engage partners and donors, taking into account that the outflow of human capital, along with the reorientation of funding to the Armed Forces of Ukraine, reduced demand and other factors may disrupt the positive dynamics shown in Figure 1 (UCF.in.ua, 2022). The survey revealed that the incomes of employees and their employment decreased along with the demand for cultural services and products; one third of the participants recorded a decrease in sales of products and services by more than 90% compared to last year; but the vast majority of enterprises and institutions continued to pay taxes in full, by reducing the volume

of work and sending employees on unpaid leave. There was a lack of awareness among industry professionals about receiving state support, while at the same time, according to 61% of respondents, the restoration and development of the creative industries in the postwar period is possible through project grants. Interestingly, 92% of respondents, being abroad, do not stop "donating" to the Armed Forces of Ukraine, participate in various events and actions in support of Ukraine from abroad. And the collection of open responses highlighted the following markers: transparent competition for senior positions, restructuring of the management vertical

of the industry, international educational trainings and exchange programs for artists and managers of the creative sector; co-production and cooperation in international projects; emphasis on cultural factors in state international policy; state support strategy, minimization of document circulation.

### 3. Successful Ukrainian cases of creative industries as tools for the development of creative economy in the crisis period

Examples of successful cases of creative industries in the crisis period provide an opportunity to try to identify tools that contribute to the production of a new cultural product or service, carry a semantic load and increase the potential of the creative economy in wartime.

Among the first tools is the monetization of hobbies, because thousands of Ukrainians today are trying to develop small business ideas to enable them to make a systematic "donation" to help the Armed Forces, to implement volunteer initiatives: creation of jewelry, including patriotic themes, sale of clothing, including patriotic prints, sale of cosmetics, designer toys, repair of electronics, etc. For example, Hanna Horlenko, a Methodist teacher, honored with "Excellence in Education of Ukraine", with the help of the Armed Forces brigade, makes jewelry from beads for sale. In particular, the Career Hub community on its Telegram channel (<https://t.me/careerhub>) within the framework of the marathon of useful tips #ВсеБудеУкраїна created a helpful infographic (<https://careerhub.in.ua/wp-content/uploads/2022/05/self-employment-1.pdf>) about monetizing a hobby with tips on where to start, how to find one's niche, what one needs to know before starting one's own business (Yagodka, 2022). Experts name the top five of the most popular niches for self-employment: cooking/confectionery; floristry; artistic creativity, painting on objects, walls, showcases, decoupage; making candles, jewelry, perfume, soap, tableware, leather goods or cosplay costumes.

Among the tools for the development of the creative economy in the conditions of war is innovative entrepreneurship in the creative sector, or creative entrepreneurship is "a social technical and economic process that promotes the creation of best-in-class goods, services or technologies through the commercial use of innovation" (Bukatseli, 2018), which is often based on creative production, is very mobile, based on project activities. So, for example, Daria Shapovalova (founder and creative director of "Mercedes-Benz Kiev Fashion Days") and Natalia Modenova, Ukrainian experts in the modern world of fashion, created in 2020 the project "DressX" – an online platform for selling digital clothes –

"clothing models that designers develop according to the same patterns as traditional ones, but with the help of 3D technologies and computer programs. Such digital versions of things are used to fill the profile on Instagram or on online gaming platforms." (Nikishova, 2022) The mission of the project is as follows: "The new approach should solve the problem of overproduction and overconsumption, returning purchases. According to Barclays Bank, about 9% of clothes are bought for photos and then returned, and this is with a market volume of \$1.3 trillion per year." (Bukatseli, 2018) The creators were able to prove to investors the need for people to get closer to the usual realities limited by quarantine restrictions during the pandemic, in particular, online fashions that the computer technology industry should respond to in clothing – thus, the project received \$2 million in venture capital investment from Alpha Edison and Artemis Fund, which was aimed at creating a mobile application and launching an NFT marketplace for clothing. The idea of selling a billion digital fashion items outlines the prospect of creating new jobs – virtual clothing designers, product promoters around the world. "Now the popularity of the project makes it possible to raise funds for the defense of Ukraine in the context of Russian armed aggression. In the digital store "Support Ukraine" appeared a collection of clothes, all proceeds from the sale of which the co-founders transfer to the Armed Forces of Ukraine." (Nikishova, 2022)

In addition to personalized examples, it is appropriate to mention regional cases, in particular, the clustering of business, the idea of a cluster of creative industries in the context of the development strategy of the Carpathian region under martial law, which was presented by the head of the Agency for Regional Development of Ivano-Frankivsk region, member of the board of the Ivano-Frankivsk Business Association Viktor Vintoniak.

In an interview with the "Firtka" news agency, he emphasized the prospects for the development of creative industries in their region, where there are no powerful industrial capabilities, and this industry can provide almost the greatest added value (Darmograi, 2022). As an example, he cited the English model, where the contribution of creative industries in 2019 amounted to one hundred and eleven billion pounds, and emphasized the legislative basis for understanding creative initiatives in Ukraine: Resolution of the Cabinet of Ministers of Ukraine No. 501 of May 19, 2021 established the Creative Economy Development Council, which includes the head of the expert group on creative industries of the Directorate of Book Publishing, Creative Industries and Tourism of the Ministry of Culture and Information Policy of Ukraine. Thus, among the diversity of creative industries,

V. Vintoniak noted the breakthrough of Ukrainian film production since 2015 as the most meaningful, qualitative, value-forming and, according to him, "Galician film production as a film industry can unite at least fifteen professions from the list of creative industries," (Darmograi, 2022) since Ivano-Frankivsk region has been a popular location for filmmakers since S. Parajanov's "Shadows of Forgotten Ancestors" was filmed in 1964. V. Vintoniak states that Hungarians, that have positive experience in the creative industries of film production with more than 30% of gross national income, are ready to help in creating pavilions for the production of audiovisual products. Norwegian, Italian and Indian experts see the potential of a creative industries hub in the region with a focus on film production.

There are cases when a cultural product is not only a mechanism for obtaining reputational, image and semantic capital, but becomes a tool for conveying a true picture of the world, in particular, the project created by the Ukrainian studio Starni Games – the online game Ukraine War Stories, where players are offered to survive the occupation, save their relatives and leave for a safe place from Bucha, Gostomel and Mariupol in three "visual novels". These "novels" are based on real events, with real photos. One of the creators of this game experienced this occupation in Bucha firsthand. It is planned that the game will be released in October 2022 in free access. "We will not get anything from this project. Our goal is to tell the world audience about the experience of the people of Ukraine," the developers say (Barsukova, 2022).

The mechanism of brand collaboration today is also extremely effective and successful in the context of the creative economy. Namely, the collaboration of fashion and sports, for example, the Ukrainian sustainable brand from designer Andre Tan RDNT. "And despite the realities, RDNT continues to give light and broadcast national messages about independence, individuality, freedom of expression and lust for life. In the first spring drop... the main codes of the young brand are transmitted, which include environmental friendliness, manufacturability, relevance. The author's water print on clothes symbolizes life, because water is an integral part of our life and water polo." (Cases.media, 2022) The proceeds from the sale of T-shirts of this collaboration will be directed to the charity platform dobro.ua to help children who are being treated in medical institutions of Ukraine during the war.

Another example of a successful case is regional craft production: "support for local producers and craftsmen, promotion of quality goods made from natural raw materials, integration of villages into creative industries, modernization of Ukrainian cultural heritage – these are the tasks of the

"This is Craft" trading platform created in Nova Kakhovka for producers and craftsmen from Ukraine, who even during the full-scale war continued their work online, evacuating to Uman, where they opened their first offline store (Boychenko, 2022). Having started a business at the height of the pandemic, a team of two activists working at the Regional Development Agency of the Tavria Union of Amalgamated Hromadas set out to create an online platform for entrepreneurs and craftsmen. Cooperation with 52 producers allowed to organize a creative service instead of a store. Tasting evenings were organized in cooperation with a local promoter of movie nights with the introduction of gift sets in wooden boxes with a variety of food and drinks. They allowed to expand the customer base from individuals to businesses and local authorities. The team invests 50% of the marketplace's profits in its own charity fund "This is Craft", which takes care of several programs:

- 1) "Revolving fund" provides entrepreneurs with returnable money for them to scale up their activities, then people return funds;
- 2) "Permanent competition of creators" is a micro-grant competition that can be spent on an expert's consulting from or creating a test model (for example, we made details for a necklace and author's packaging for massage bags made of healing herbs);
- 3) "Centavrida" is a program that appeared during the full-scale war to provide funds for the production of a minimum amount of copies of children's books that would present the South of Ukraine, Tavria as an interesting legendary region of Ukraine. Eventually, when this territory was occupied, the team strategically reoriented the business to volunteering, and as a result of the evacuation, the relocation and arrangement of the offline store was carried out with the support of the Ukrainian Venture Social Fund. Today their strategic idea, according to the co-founder of "This is Craft" Victoria Kulakova, is to create an all-Ukrainian network of "This is Craft" stores with local and all-Ukrainian gastro and regular souvenirs, which will work on the basis of a franchise, when the team is responsible for brand promotion, creation of a single marketplace, product placement on the website and its marketing, and local partner entrepreneurs saturate regional "This is Craft" stores with high-quality local products.

#### 4. Conclusions

Comparing the performance of the creative industries with the same pandemic first quarter of 2021, when the "contact" sectors suffered the greatest losses, while others continued to grow, the Ministry of Culture and Information Policy of Ukraine, together with representatives of the World

Bank, showed not just a drop in economic activity, but also its closure: "The total number of taxpayers decreased by 60% and the amount of declared income in the creative industries decreased by 41% in the first quarter of 2022 compared to the first quarter of 2021," (Tax Revenues, 2022) which is common to all sectors in the creative industries.

"Russia's war of aggression is destroying Ukraine's creative economy. Many objects of cultural and industrial infrastructure have been destroyed or seriously damaged by missile strikes. Supply and demand chains are disrupted by the fighting. Creative professionals are leaving the country – the problem of brain drain is becoming especially acute for preschoolers." (Tax Revenues, 2022) However, the formation of a successful Ukrainian creative economy sector in the conditions of a promising creative environment and in the conditions of crisis socio-economic preconditions, in particular during the war, requires, as the considered successful cases have shown, the use of certain tools: monetization of

hobbies, innovative business (in particular, the idea of a cluster of creative industries), brand collaboration, craft production, creation of cultural products such as books, grant/equity support and other activities that involve donations to support humanitarian and military needs of Ukrainian society. In the conditions of war, creative industries as an environment of economic activity are considered as a segment of the social economy that generates and promotes intellectual, value, semantic capital, which reveals its potential in the context of strategic communications. The podcast "Frontline of Creative Industries" has been recently created to collect stories of how representatives of this field oppose Russian aggression and support Ukraine and each other.

A more detailed consideration of such tools as crowdfunding, including the use of Patreon, the creation of merch, revitalization, the so-called "Second Chance – from Industrial Use to Creative Impulse", and creative clusters of Ukrainian business may also be promising.

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# THE ROLE OF LAW ENFORCEMENT AGENCIES IN ENSURING NATIONAL AND ECONOMIC SECURITY OF UKRAINE

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**Abstract.** *The subject* of the study is the institutional, theoretical and methodological aspects of the activities of law enforcement agencies to ensure national and economic security of the state. *The methodological* foundations of the study of national and economic security in legal science are based on the interdisciplinary nature of this category. *The purpose* of the study is to determine the role of law enforcement agencies of Ukraine in ensuring national and economic security on the basis of research, analysis of current legislation and practice of its application, taking into account the current conditions in Ukraine. The publication presents the views of scientists on the definition of the concept of "national security of the state" and the participation of law enforcement agencies of Ukraine in its provision. The state, development and ways of reforming the national and economic security of Ukraine are one of the most pressing issues for the state today. It is emphasized that the state legal policy in the sphere of national security is based on the provisions of the Constitution on the defense of the state, on the definition of the strategic development of Ukraine, which is the course towards European and Euro-Atlantic integration. The problems of determining the place and role of law enforcement agencies in ensuring national and economic security of Ukraine are considered on the basis of the analysis of the system of normative legal acts and the results of law enforcement agencies. The main law enforcement agencies that ensure the national security of the state are: the Prosecutor's Office, the Ministry of Internal Affairs of Ukraine, the National Police of Ukraine, the Security Service of Ukraine, the National Anti-Corruption Bureau of Ukraine, the State Bureau of Investigation, the Military Law Enforcement Service in the Armed Forces of Ukraine, the state border protection agencies and others. It is emphasized that all law enforcement agencies of Ukraine indirectly ensure the national security of the state. It is concluded that the system of ensuring national security of Ukraine, built during the years of independence, has shown its unpreparedness to neutralize real threats to national interests during the armed conflict in Ukraine. Therefore, in modern conditions, it is necessary to restructure the system of guaranteeing the national security of Ukraine, improve the legislative framework of Ukraine and the practical activities of law enforcement agencies.

**Key words:** strategy, security, national security, economic security, national interests, state legal policy, law enforcement agencies.

**JEL Classification:** L10, F52

## 1. Introduction

Further legal development of Ukraine as a democratic, independent and sovereign state is primarily related to ensuring its national security. Modern global challenges and military threats have caused a radical transformation of the world economic and social order, which is accompanied by a change in political configurations.

Threats to the realization of national interests arise in various spheres of life of society and the state. Thus, in the analytical report of the National Institute for Strategic Studies to the extraordinary address of the President of Ukraine to the Verkhovna Rada of Ukraine "On the Internal and External Situation of Ukraine in the Sphere of National Security" in 2014, it was noted that the system

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of ensuring the national security of Ukraine was unable to effectively counter Russian aggression. Among the main reasons for this situation is the inconsistency of the management system of both military formations and law enforcement agencies with the requirements of modern military conflicts, low level of their material, technical and personnel support, etc. (Analytical Report of the National Institute, 2014, p. 7) Understanding the need to ensure national security is the most important fundamental value of any society and acts as an object of social activity, embodies and determines its orientation, meaningfulness and effectiveness.

Taking into account the geopolitical and internal situation, the activities of all state authorities in Ukraine should be aimed at forecasting, timely detection, prevention and neutralization of external and internal threats to national security, protection of sovereignty and territorial integrity of Ukraine, guaranteeing personal security, constitutional rights and freedoms of man and citizen.

Law enforcement officers are forced to respond to modern challenges and threats, because the issue of national security in the context of the hybrid war unleashed against us by the Russian Federation is very important today. Given the above, it is obvious that modern law enforcement agencies of Ukraine are the subjects of ensuring the national security of the state.

Currently, in the Ukrainian scientific literature there are heated discussions on the essence of national security, the content of the main threats and responses to them. Analysis of recent publications shows that the following scholars have studied the issue of ensuring national security of Ukraine by law enforcement agencies: V. Antonov (2017), O. Holovkin (2017), L. Kazakova (2021), O. Kovalova (2020), M. Korniienko (2020), V. Makarchuk (2021), Yu. Mykhailova (2017), O. Reznikova (2022), I. Skazko (2017), O. Sosnin (2021), O. Cherednychenko (2022), O. Shevchenko (2021) and other.

## **2. State legal policy in the field of national and economic security**

The defining principle of the state legal policy in the sphere of national and economic security is the rule of law. The prospects of national development of Ukraine are based on the system of national interests and priorities and include the national security strategy of the state, which defines the principles, priority goals, objectives and mechanisms for ensuring the vital interests of the individual, society and the state. The state legal policy in the field of national security has a certain structure that demonstrates the integrity of the system itself and its functional orientation.

It is believed that the phrase "national security" was introduced into the political discourse in 1788 by A. Hamilton, one of the "founding fathers" of American democracy (Reznikova, 2022, p. 55). Currently, there are different approaches to the interpretation of this term in scientific and expert circles due to its complex, multicomponent and interdisciplinary nature.

Formulated and enshrined by the legislator in Paragraph 9 of Article 1 of the Law of Ukraine "On National Security of Ukraine" is an authentic definition of the definition of "national security of Ukraine", which means the protection of state sovereignty, territorial integrity, democratic constitutional order and other national interests of Ukraine from real and potential threats (On the National Security of Ukraine, 2018).

Scientists provide different views on the meaning of this term. Thus, O. Sosnin understands national security as an indicator of the ability of society and the state, independently or jointly with other friendly countries (peoples, nations), to protect national interests, to deter or eliminate internal and external threats to national sovereignty, territorial integrity, social order and economic development, other important elements of spiritual and material life; the degree of protection of the interests of the individual, society and the state from external and internal threats (Sosnin, 2021). The phrase "national security", according to the author, can be interpreted as: the security of the people, the nation, that is, the population of the country, including both mono-ethnic and multi-ethnic people, when representatives of different nationalities act as fellow citizens; security of society, i.e., the totality of people united by historically determined conditions of common life; security of the state, that is, the organizational and legal form of the union of peoples, the nation, which is a means of conducting common affairs (Sosnin, 2021).

L. Kazakova proposes to understand the national security of Ukraine not only in terms of its military component, that is, the actions of the state to protect the state sovereignty, territorial integrity, democratic constitutional order and other national interests of Ukraine from real and potential threats, but also as the activities of the state to ensure the protection of human and civil rights and freedoms within the national territory and at the international level (Kazakova, 2021, p. 131).

National security of the Ukrainian state is the subject of V. Antonov's monographic study "Constitutional and Legal Foundations of National Security of Ukraine", in which national security of Ukraine is considered as a state of protection of vital interests of a person and a citizen, society and the state, which ensures sustainable development of

society, timely detection, prevention and neutralization of real and potential threats to the national interests of the Ukrainian state (Antonov, 2017, p. 33).

The goal of ensuring national security in general is the absence of threats and dangers or their overcoming. If under the influence of a threat society or the state suffered significant losses and destruction, it can be assumed that the ultimate goal of the national security system is not achieved, and the system itself is ineffective (Reznikova, 2022, p. 58–59).

The system of ensuring national security of Ukraine is created and developed in accordance with the Constitution of Ukraine and other normative legal acts regulating public relations in the field of national security management. In accordance with the Law of Ukraine "On the Fundamentals of National Security of Ukraine", the legal basis of the state policy in the spheres of national security and defense is the Constitution of Ukraine, laws of Ukraine, international treaties ratified by the Verkhovna Rada of Ukraine, as well as other normative legal acts issued in pursuance of the Constitution and laws of Ukraine. This policy is aimed at protection:

- of human and citizen, their life and dignity, constitutional rights and freedoms, safe living conditions;
- of society, its democratic values, welfare and conditions for sustainable development;
- of the state – its constitutional order, sovereignty, territorial integrity and inviolability; territory, natural environment, from emergency situations (On National Security of Ukraine, 2018).

The National Security Strategy of Ukraine defines the general principles, priority goals, objectives and mechanisms for protecting the vital interests of the individual, society and the state from external and internal threats. The current National Security Strategy of Ukraine "Human Security – Security of the Country" was approved by the Decree of the President of Ukraine No. 392/2020 of September 14, 2020. Taking into account the fundamental national interests defined by the Constitution of Ukraine and the Law of Ukraine "On the Fundamentals of National Security of Ukraine", the priorities of national interests of Ukraine and ensuring national security are:

- protection of independence and state sovereignty;
- restoration of territorial integrity within the internationally recognized state border of Ukraine;
- social development, primarily the development of human capital;
- protection of rights, freedoms and legitimate interests of citizens of Ukraine;

European and Euro-Atlantic integration (National Security Strategy of Ukraine, 2020). It should be

noted that the National Security Strategy defines the current threats to the national security of Ukraine.

Among the main directions of foreign and domestic policy activities of the state to ensure its national interests and security are the following:

- The direction of foreign policy of the state is primarily aimed at ensuring independence and state sovereignty, restoration of territorial integrity of Ukraine;
- Ukraine's active participation in the fight against terrorism, proliferation of weapons of mass destruction, international crime, drug dealing, trafficking in human beings, political and religious extremism, illegal migration, cyber threats, negative consequences of climate change, as well as in preventing and overcoming the consequences of natural and man-made emergencies;
- Ukraine's full membership in the European Union and the North Atlantic Treaty Organization (National Security Strategy of Ukraine until 2020). It should be noted that the President of Ukraine is the guarantor of the implementation of the strategic course of the state for Ukraine's membership in the EU and NATO.

The implementation of the National Security Strategy of Ukraine is ensured by the Cabinet of Ministers of Ukraine, executive bodies, bodies of the security and defence sector of Ukraine, other state bodies in accordance with their competence. The state authorities are guided by the Strategy during the development and implementation of legislative acts, concepts, doctrines, strategies, programs, plans and individual measures, conclusion of international treaties and agreements, other international legal documents.

The Strategy is the basis for the development of planning documents in the areas of national security and defense, which will determine the ways and tools for its implementation. This involves the creation of 15 separate "sectoral" strategies that specify the main directions of the state security policy of Ukraine, such as: human development strategy; military security strategy of Ukraine; strategy of public security and civil protection of Ukraine; economic security strategy; energy security strategy; information security strategy; cyber security strategy of Ukraine; foreign policy strategy; state security strategy and others (National Security Strategy of Ukraine, 2020).

According to O. Shevchenko, Ukraine's national security strategy largely eliminates existing conceptual uncertainty and inconsistency in assessments of real and imagined threats and challenges facing our country, as well as ways and means of effective countermeasures (Shevchenko, 2021, p. 158). The implementation of the strategy by all state institutions should ensure not only the cessation of aggression

and restoration of the territorial integrity of Ukraine within its internationally recognized state border on the basis of international law, but also guarantee a high level of human rights protection.

Thus, the state legal policy in the sphere of national security is based on the provisions of the Constitution on the defense of the state, on the definition of the strategic development of Ukraine, which is the course towards European and Euro-Atlantic integration. And in generalized form, national security is the protection of national interests and national values from external and internal threats.

### 3. Legal activities of law enforcement agencies in the field of national and economic security

Ensuring national security in the context of globalization changes in the world order is a systematic impact on potential and real threats. The legal activity of state institutions belonging to the security and defence sector is to implement the mechanism of ensuring national security. Institutions of state power should act exclusively within their powers, implement the duties defined by law. And here a natural question arises regarding the activities of law enforcement agencies in the field of national security. The legislation of Ukraine does not contain a clear list of state bodies that are law enforcement agencies, and does not directly define their functions in ensuring national security.

The activities of law enforcement agencies are multifaceted, their legal activities are aimed at blocking social deviations, localization of social tensions, legal conflicts. The state of internal security of the state and its ability to withstand external threats depend on how effectively the law enforcement system functions (Cherednychenko, 2022, p. 27–28).

The national security of Ukraine is ensured by a significant number of entities with different legal status, structure and competence. Thus, modern researchers include the Prosecutor's Office, the Ministry of Internal Affairs of Ukraine, the National Police of Ukraine, the Security Service of Ukraine, the National Anti-Corruption Bureau of Ukraine, the State Bureau of Investigation, the Military Law Enforcement Service in the Armed Forces of Ukraine, the state border protection bodies and others among the main law enforcement agencies that have a significant impact on ensuring the national security of the state. Each of these bodies has a significant impact on ensuring the proper functioning of the national security system of the state (Makarchuk, 2021, p. 24).

The Prosecutor's Office of Ukraine should be considered as a special subject in the system of ensuring national security, since, in addition to the powers common to all subjects, it exercises:

- organization and procedural management of pre-trial investigation, resolution of other issues in criminal proceedings in accordance with the law, supervision of covert and other investigative and search actions of law enforcement agencies in accordance with the Constitution of Ukraine;
- coordination of activities of law enforcement agencies in the field of combating crime, especially in the fight against organized crime, corruption, which pose a real threat to national security in the field of state security;
- functions of the authorized (central) body of Ukraine on sending requests for international legal assistance in criminal proceedings during pre-trial investigation and consideration of relevant requests of foreign competent authorities;
- representation of the state interests in court in exceptional cases and in the manner prescribed by law (Holovkin, Skazko, 2017, p. 48).

The Ministry of Internal Affairs is the main body in the system of central executive authorities that ensures the formation and implementation of state policy in such areas:

- Ensuring the protection of human rights and freedoms, interests of society and the state, combating crime, maintaining public safety and order;
- protection of the state border of Ukraine and protection of the sovereign rights of Ukraine in its exclusive (maritime) economic zone;
- civil protection, protection of the population and territories from emergencies and prevention of their occurrence, elimination of emergencies;
- migration (immigration and emigration), in particular combating illegal (illegal) migration, citizenship, registration of individuals, including refugees and other categories of migrants defined by law (On Approval of the Regulation on the Ministry of Internal Affairs, 2016; On the Fundamentals of National Security of Ukraine, 2018). The Minister of Internal Affairs of Ukraine is an ex officio member of the National Security and Defence Council of Ukraine (Constitution of Ukraine, 1996).

Defining the National Police as a subject of the security and defence sector, the legislator in the law on national security did not prescribe the tasks of the police as a subject of this sector. The main tasks of the National Police of Ukraine are to ensure public safety and order, protection of human rights and freedoms, interests of society and the state, combating crime, as well as to provide certain types of assistance to persons who for personal, economic, social reasons or as a result of emergency situations need such assistance (On the National Police, 2015). The participation of the National Police in ensuring territorial security, and territorial defence in particular, is rather vague. Among the main areas of territorial defense provided by the police are: strengthening the

protection of public order and security of citizens; preparation for the fight against sabotage and reconnaissance forces, other armed groups, anti-state illegal armed groups and looters; advance preparation in peacetime for the protection and defense in a special period of important objects and communications of vital activity; maintenance of the legal regime of martial law; ensuring the interaction of territorial defense subjects (On Approval of the Regulation on the Ministry of Internal Affairs, 2015). Together with the Armed Forces of Ukraine and other military formations, the units of the National Police of Ukraine participate in the Joint Forces Operation to repel and deter the armed aggression of the Russian Federation on the territory of Ukraine.

The Security Service of Ukraine occupies a special place in the system of law enforcement agencies, due to the specific range of issues within its competence and the wide opportunities that can be used both to establish the rule of law and ensure state security, and to improperly protect the interests of individual politicians. The Security Service of Ukraine is vested with law enforcement functions that directly affect the formation and implementation of state policy in the field of national security. The tasks entrusted to the Security Service of Ukraine significantly distinguish it from other bodies dealing with law enforcement, security and law and order. The legally defined status of the Security Service of Ukraine is a special-purpose state law enforcement agency that ensures the state security of Ukraine" (Article 1) (On the Security Service of Ukraine, 1992).

In today's difficult conditions, there is an urgent need for the existence and effective operation of specialized anti-corruption institutions that have a wide range of powers in the field of combating corruption, the negative consequences of which pose a real threat to the national economic security of Ukraine. The task of the National Anti-Corruption Bureau of Ukraine is to combat corruption and other criminal offenses committed by senior officials authorized to perform the functions of the state or local self-government and pose a threat to national security, as well as to take other measures provided by law to combat corruption (On the National Anti-Corruption Bureau of Ukraine, 2014).

The significance of the State Bureau of Investigation for national security lies in the fact that it solves the tasks of preventing, detecting, suppressing, solving and investigating the most dangerous crimes committed by officials who hold a particularly responsible position (On the State Bureau of Investigation, 2015). The establishment of such a body indicates that the state seeks to overcome the criminality of officials of the highest state authorities and law enforcement agencies of Ukraine.

Despite a fairly wide range of subjects of ensuring the national security of Ukraine, threats in the foreign policy sphere, in the sphere of state security, threats in the military sphere and in the sphere of state border security of Ukraine are of particular concern today (Mykhailova, 2017, p. 154). The duty to protect the state sovereignty of Ukraine, its territorial integrity, protection and reliable defense of the state border is entrusted to the State Border Guard Service of Ukraine. The implementation of the legally established functions is, in its essence, the operational and service activity of the State Border Guard Service of Ukraine. The priority task of ensuring national security by the state border guard agencies is to protect and secure the state border, including from manifestations of international organized crime in the form of illegal migration, smuggling, human trafficking, etc. (On the State Border Guard Service of Ukraine, 2003) The increased attention to the State Border Guard Service is related to the current threats to national security and violation of the territorial integrity of Ukraine.

In the conditions of martial law, the Military Law Enforcement Service of the Armed Forces of Ukraine is of particular importance for ensuring national security, which ensures law and order and military discipline among the servicemen of the Armed Forces of Ukraine in the places of deployment of military units, prevents offenses in the Armed Forces of Ukraine; protects the life, health, rights and legitimate interests of servicemen, persons liable for military service and employees of the Armed Forces of Ukraine; protects the property of the Armed Forces of Ukraine from theft and other illegal encroachments; participates in counteracting sabotage and terrorist acts at military facilities (On the Military Law Enforcement Service in the Armed Forces of Ukraine, 2002).

Law enforcement agencies also play an important role in ensuring the economic security of the state. Therefore, for a long time the reform of law enforcement agencies of Ukraine was aimed at creating a single law enforcement agency in the field of economic security. Such a central executive body is the Bureau of Economic Security of Ukraine, which is tasked with counteracting offenses that affect the functioning of the state economy. The main tasks of the Bureau of Economic Security of Ukraine are: identifying and assessing risks and threats to the economic security of the state; ensuring the economic security of the state by preventing, detecting, suppressing and investigating criminal offenses that infringe on the functioning of the state economy; analysis of information on offenses that infringe on the economic security of the state; preparation of analytical conclusions and recommendations for state bodies in order to improve the

efficiency of their management decisions on the regulation of relations in the economic sphere and others. It is important to emphasize that the activities of such a law enforcement agency are aimed not only at investigation, but also at preventive response measures and in-depth analysis of economic processes in our country.

Thus, it can be argued that law enforcement agencies play an important role in the system of subjects ensuring national and economic security of the state. This is due to the fact that law enforcement agencies, taking into account their specific sphere of activity, occupy one of the leading places in the fight against threats to the national and economic security of Ukraine. It should also be noted that the effectiveness of ensuring national and economic security of Ukraine by law enforcement agencies depends on proper interaction and coordination of their legal activities.

#### 4. Conclusions

National and economic security is extremely important for any state. The system of ensuring national and economic security of Ukraine, built during the years of independence, has shown its unpreparedness to neutralize real threats to national interests during the armed conflict in Ukraine.

Ukrainian scientists define the national security of the state as the protection of vital interests of man and citizen, society and the state, which ensures sustainable development of society, timely detection, prevention and neutralization of real and potential threats to national interests.

Conducting military operations, temporary occupation of the territories led to the emergence of so many social, economic, legal and other problems, which did not exist in all previous years of Ukraine's independence. Both the subjects of national security and the legislative framework of their activities were not ready for these challenges. Analysis of the state of the legislative framework and practical activities of law enforcement agencies on ensuring national security, the current socio-political and economic situation in Ukraine allows us to state that today a profound restructuring of the system of guaranteeing national security of Ukraine is necessary, which will be based on improving both the legislative framework of Ukraine and the practical activities of law enforcement agencies. And in connection with the radical change in the security situation that occurred as a result of the military aggression of the Russian Federation against Ukraine, there is a need to review the powers of law enforcement agencies and expand their operational capabilities.

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# THE ROLE OF CROWDFUNDING SYSTEMS DURING CRISES AND MILITARY ACTIONS

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**Abstract.** This article is about how crowdfunding and crowdinvesting systems can be used during crises and hostilities. This article provides examples of different types of possible crowd-system. *Research subject.* Crowdfunding and crowdinvesting systems as the institutional instruments (P2P) which are used during crises and hostilities, among them are as follows: Violence Crowdfunding systems, General Crowdfunding Systems, and Crowdinvesting Systems alike. *Methodology.* The authors used a complex of research methods and approached as interdisciplinary approach, evidence-based approach, and practical business cases. Also, general scientific research methods were used (analysis and synthesis of information), as well as an inductive and deductive research methods. *The goal* of the article is to consider the prospects for the use of crowdfunding platforms as an element of solving the military crisis on the territory of Ukraine. *Conclusions.* The Special attention was paid to the war crises in Ukraine and the situation of the crowdfunding and crowdinvesting systems in Ukrainian society. It is provided detailed examples of the use of crowdsourcing systems in Ukraine during the war nowadays and explained the need for the creation of an independent Ukrainian crowdfunding platform. Additionally, the ways of the creation of such a platform are clarified. Ukrainian society during the military crisis gained experience in crowdfunding that was not familiar or even available. However, Ukrainian society is very actively popularizing crowdfunding or rather its foundations. Crowdfunding is currently most common when looking for funding for military needs: from mass arms purchases to financing individual soldiers. In a short time, thanks to the stress of war, many people have made crowdfunding a part of their lives and instilled this habit in society. The first crowdfunding platforms are already appearing to give Ukrainians the opportunity to fund some Ukrainian startups, companies, and ideas. One of the most difficult elements in creating and launching a crowdfunding platform is not building the platform itself, but integrating it. A decade ago, the creation of a crowdfunding platform and integration of the entire crowdfunding system, was a complicated and costly procedure. The most difficult thing is to integrate the platform into society so that mass use can begin.

**Key words:** crowdfunding, crowdinvesting, war in Ukraine, solution for crises, solution for hospitalities, COVID-19.

**JEL Classification:** O15, H12

## 1. Introduction

Over the past few years, COVID-19 has shaped our world and changed the economy in which people live today. No sooner had Ukraine recovered from the pandemic than it plunged the country into a military crisis that has now brought some new parameters to the economy.

The changes showed the transition from the conventional economy to the war economy, which changed industries, laws, and social structure. During this three-year transition, pandemic and war, there was an opportunity to explore these changes and see how new P2P systems, such as crowdfunding, could fit into these rather challenging coming years.

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The purpose of this article is to examine the prospects for the use of crowdfunding platforms as an element of resolving the military crisis in Ukraine.

General scientific methods of research (analysis and synthesis of information on the topic), as well as the inductive method of research, the deductive method and the comparative method were used in writing the article.

One of the first uncertainties that appear in the economic picture of a country at war is the erratic behavior of the financial market. (Schneider, et al., 2006, p. 625–628). Then stocks start to suffer, and brokers look for more stable investments. The first thing that discourages major financial players from investing is government bonds and gold. In addition, stocks of domestic corporations are becoming less attractive in international stock markets, and traders are changing their priority to stocks of corporations that do not come from national economies at war. Investors will sell stocks and move to less risky options if the market expects a protracted conflict. Thus, a negative collective view of the likely course of events reduces the overall value of the stock market, while the expectation of a favorable course of events makes stocks more attractive.

According to the International Monetary Fund, Ukraine's economy, based on GDP, has fallen by about 30-50%, and the war appears to have lasted longer than the world community imagined in its early stages (Irtyshev et al., 2022, p. 80). One way to smooth things over is to introduce new types of crowdfunding systems that can allow small and medium-sized entrepreneurs and talents to find funding for their projects, survive wartime, and develop their projects on a large scale. Such projects can support and provide sustainability for the project owners, their families, and the economy of the country in which these projects are developed.

## **2. Crowdfunding systems that can be used during crises and military actions**

Based on the current economic picture, we can conclude that the economy is feeling the transformation in all sectors, and prices are experiencing severe inflation at all stages and in all industries. High rent prices, high food and fuel prices are all hitting the middle class in Ukraine hard. If one considers the business sector, the total direct losses of small and medium-sized businesses in Ukraine during the full-scale Russian invasion are estimated at \$64-85 billion. Only 15% remained unchanged or even increased from what they were as of February 23 ("During the war, small and medium-sized businesses lost up to \$85 billion – experts", 2022). Despite such shocking figures, it was noted that after the initial shock had passed, small and medium business in Ukraine began to actively renew itself: "since Russia's full-scale invasion of our land, almost

150,000 new enterprises have been registered in the country, of which 132,000 are individual entrepreneurs." (Schwartz, 2022) The indicators demonstrate once again that small and medium-sized businesses can begin to actively develop during wartime to compensate for the lack of resources and services. As an example, during the war in Ukraine, one of the largest shipping companies, Nova Poshta, opened two branches of its company in Poland (Eismunt, 2022). However, in addition to these large companies, many individual entrepreneurs have also begun to provide similar services, ahead of large companies. Since the beginning of the year, Ukrainian citizens have created 10,207 companies in Poland ("Ukrainians opened 10,000 companies in Poland in six months", 2022).

And it is when an individual entrepreneur plans to launch a company providing needed services or products that he can find support and funding through a crowdfunding platform. Continuing with the delivery service example, imagine Ukrainian refugees in Europe who would like a safe and familiar delivery service. Of course, people would support such an initiative to get a much-needed service. Crowdfunding systems are helpful in two scenarios: when people are enjoying a good economy and have some bonus funds to spend on projects, or when people are suffering from a shrinking and falling economy and are looking for a way to use the remaining funds to find a way to survive. Probably the second scenario is the most effective for developing a mindset and habit of crowdfunding. This is especially true for funding military purchases. For example, "in the course of the "Road of Victory" initiative, initiated by Kyivstar, Okean Elzy group and the "Come back alive" charitable fund, 14,818,840 hryvnias were collected for 15 pickups by Ukrainian military." ("Ukrainians collected funds for 15 new pickup trucks for the Armed Forces", 2022) There are many examples of fundraising and they range from 1,000 hryvnias to six-figure sums. "As of March 5, 2022, a total of almost 10 billion UAH equivalent was transferred to the special account opened by the National Bank to support the Armed Forces of Ukraine," ("More than UAH 10 billion was collected to support the Army and humanitarian aid", 2022) and it is worth noting that funding is also actively received on other accounts of various charitable foundations and individuals.

The types of crowdfunding (P2P) systems that are used during crises and warfare are as follows:

Violence crowdfunding systems – began during the war against ISIS, when crowdfunding systems gave people a psychological opportunity to send financial aid to the U.S. army and thus support actions in the war zone (Sunday Grove, 2019, p. 89). In Ukraine there is a perfect example of the actor Serhii Prytula, who raised money through the media and the

Internet for the power systems under the name Bayraktar. He did not use any crowdfunding platform to do this, but he did use the media to raise the funds needed for the war. In the case of the U.S. Army and the U.S. society, they used the media and a specific crowdfunding system platform.

General Crowdfunding systems – such as Kickstarter, IndieGoGo or GoFundMe are systems that can marketplace your project or talent, but these projects or talents can't have a violent purpose. In the case of these three aforementioned platforms, it functions and promotes projects through so-called bakers and rewards. Bakers are platform users, and rewards are offered by project creators (sometimes recommended by the platform itself) (Shengsheng et al., 2014, p. 2–3). In Ukraine, these platforms cannot be used because these platforms are integrated with the country's financial systems, and in the case of Ukraine, because of the large number of fraudulent activities on the Internet before and during the war, these organizations have not taken steps towards the Ukrainian market.

Crowdinvesting systems – these are systems that use platforms to bring venture capitalists together and invest in the equity of a project by obtaining some kind of benefit or equity. The best examples are the British platforms Crowdcube and Seeders (this last one is also a Portuguese-based corporation). These platforms offer investors shares in a future or already established limited liability company. But in the case of some countries, where notarized share transfer procedures are more expensive, projects use profit-sharing notes, silent partnerships and profit-sharing loans. The direct difference between crowdfunding and crowdinvesting is that in crowdfunding, the backers receive some reward, while in crowdinvesting, the backers are not backers, but venture capitalists who expect to receive some monetary and equity contributions (Binda, 2017, p. 8–9). In Ukraine, such systems also do not yet exist.

All three of these systems can be used in times of crisis and during warfare. The first system has some ethical problems that should be dealt with separately. But in the case of the crowdfunding and crowdinvesting systems, it is clear how they could smooth out a falling economy and rising prices in all sectors. The fact that such systems do not exist in Ukraine, and that those that exist in Western markets cannot be activated in Ukraine, testifies to the incredible niche market, which is absolutely free from competition.

During the war in Ukraine, the AirBnB platform was used to raise money for people affected by shelling. The apartments and houses that were present on the platform were financed by bookies, even without any further sense of actually coming to live there (Comerford, 2022). The platform owners and directors permitted this and the bakers used, an absolutely non-crowdfunding platform, to crowdfund for the sake of the citizens of Ukraine.

Now one can only imagine what will happen when Ukraine has its own, real system of crowdfunding and crowdinvesting, which will make it possible to support this country in times of war, during any impending crisis, as well as in times of peaceful and positive dynamics. After all, examples of mass fundraising are already actively taking place during the seven months of the war. Military crowdfunding under the slogan "Donate for the Armed Forces of Ukraine" has become part of the lives of many citizens, there are constantly raising funds for various things: cars, weapons, drones, bulletproof vests, tents, etc. The pace of fundraising, governed by the war, became very fast: "in one day the special account of the National Bank, opened to collect funds to support the Armed Forces of Ukraine, received almost 300 million hryvnia (in equivalent)." ("In one day, almost UAH 300 million was deposited into a special account for collecting funds for the needs of the army", 2022)

### 3. How to create and integrate crowdfunding systems in a crisis and hostile environment?

One of the most difficult elements in creating and launching a crowdfunding platform is not the creation of the platform itself, but its integration. For example, ten years ago, creating a crowdfunding platform and integrating the entire crowdfunding system was a complicated and expensive procedure. However, this has changed dramatically in the last 3 years, and now you can create a crowdfunding platform using WIX, WordPress, Themeum, WooCommerce, etc.

The hardest part is to integrate the platform into society so that mass use begins. The advantage of international platforms, such as Kickstarter, is that the platform works in many countries, which means it generates trust among users and receives a mass turnover of users (both innovators and backers). One of the reasons why Ukraine as a country cannot use any of the already existing crowdfunding platforms around the world is that these platforms are companies that have to be very responsible for transactions and show their actions very transparently. The Ukrainian market is still not cleared of the high level of fraud and digital security problems, which is the reason why for the last year none of the existing crowdfunding platforms allowed Ukrainian citizens to register on the platform. This is one of the weighty reasons why there is no big platform in Ukraine yet. However, more and more enthusiasts are creating crowdfunding platforms in Ukraine like Spilnokosht, RazomGo, GoFundEd (Tolub, 2021), however, none of these platforms can be called a full-fledged ultimate crowdfunding platform in Ukraine, also due to the volume of money turnover within the platforms.

Empathy, happiness, guilt, and identity are psychological factors that drive backers to fund various projects posted on various crowdfunding

platforms (Gerber, et al., 2012, p. 2–3). Interpersonal communication and a spark between the one who is needed and the one who supports is a must in such an environment. It can be said that crowdfunding platforms create a sense of community, a sense of ecosystem and belonging to this or that problem, to this or that trend, to this or that moment of happiness, to this or that type of movement.

One of the crises that showed the effectiveness of crowdfunding was before the war in Ukraine, the COVID-19 pandemic. During 2 years of the worst pandemic in the world we expected crowdfunding platforms to appear on the Ukrainian market, but it did not happen. Meanwhile, in different countries of the world crowdfunding still had a chance to show itself as a well-deserved place of help.

Just in France, nationwide platforms like Leetchi, Ulule and KissKissBankBank organized themselves to embrace the different new problems which appeared all through France with the coming of the COVID-19 crisis (Moine, 2020, p. 1–5). People across the country used these platforms to donate and support the necessary organizations or individuals to adapt to the new reality of the pandemic and confront the problems that began to pile up throughout the region. This case showed how well crowdfunding platforms can solve problems, even hidden ones, and help people band together to create projects and donate the necessary funds to support these projects and help solve problems.

Crowdfunding platforms were also used during the last COVID-19 crisis in China (Ho, 2021, p. 4–10). The Chinese experience has shown that it is necessary to become emotionally and personally attached to the problems that a particular project solves. The use of photographs, the use of external sites to support the project, the use of social media, and the creation of a problem-solving community were all steps toward success and powerful support for various projects during the pandemic. Also, the feeling that these projects were not forgotten and active was a big factor for supporters. Crowdfunding platforms are just platforms, they are places where people can meet for a specific purpose, but at the end of the day the users (backers or supporters) are the ones who create a community, upload videos and information about the success of the money invested and the positive results that these money and projects have produced.

Crowdfunding can be adapted to any type of society, religion, gender or ideology. Fintech has opened the door to unite crowds into communities and societies and made it possible to be together and face any crisis or enmity as one nation, one gender, one party, one race, or one group of people.

In Malaysia, during the COVID-19 pandemic, there was created a special Islamic crowdfunding

system with its own type of rules, which were Halal, based on the Al Shariah and the Quran (Dzuljastri, 2021, p. 92–99). This shows that crowdfunding can be adapted to a very strict and conservative society with high standards in the area of rules and restrictions.

Many examples are related to gender crowdfunding. There are many cases in the field of entrepreneurship where women have created their own crowdfunding platforms and systems to continue their projects and fight gender discrimination and specific problems together.

During the COVID-19 pandemic in South America, there were many cases where women collectively organized their own crowdfunding systems to promote and advance their innovative projects (Alva, 2021, p. 2–5).

Under Kovid-19 in Ukraine it is difficult to find striking examples of the use of crowdfunding in any form, but during the war there are already striking examples of co-financing, not even directly related to the purchase of military equipment. In addition, a whole trend to support Ukrainian entrepreneurs and small businesses under the slogan "Pidtrymui ukrainske" ("support Ukrainian"). At this point, the war has motivated Ukrainian society to actively support and develop Ukrainian projects, businesses and manufacturers. This trend is great for popularizing crowdfunding, as society is particularly interested in supporting local businesses.

#### 4. Conclusions

As discussed in this article, Ukrainian society during the military crisis had an experience with crowdfunding that was not familiar or even available. However, Ukrainian society is very active in popularizing crowdfunding, or rather its basics. Currently, crowdfunding is most common when seeking funds for military needs, from massive weapons purchases to funding for individual soldiers. In a short time, thanks to the stress of war, many people have made crowdfunding part of their lives and instilled the habit in society.

The first crowdfunding platforms are already appearing to give Ukrainians the opportunity to fund some Ukrainian startups, companies and ideas.

A review and analysis of various fundraisers suggests that a full-fledged crowdfunding platform can become very popular. This is important, among other things, for the popularization of Ukrainian arbitrage, which is a popular trend in Ukraine.

It should be noted that motivation through military stress, combined with pro-Ukrainian trends and the digitalization of Ukrainian society can give incredible results and possibly bring crowdfunding to a new level of development.

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# INSTITUTIONAL SUPPORT FOR THE REGULATION OF SCIENTIFIC ACTIVITY IN THE CONTEXT OF DIGITALIZATION

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**Abstract.** *The subject of the study* is the principles of the use of information and telecommunication technologies in the regulation of public relations in the field of scientific activity in terms of institutional support. *Methodology.* General scientific methods were used in the research process. The method of comparison was used in the selection and grouping of international standards related to the field of digital transformation. The *analysis* identified quantitative and qualitative parameters that characterize the specifics of the management activities of the Cabinet of Ministers of Ukraine, the Ministry of Science and Education of Ukraine, the Ministry of Digital Transformation of Ukraine in modern conditions. Induction and deduction were used to determine approaches to the main dominants of the main areas of activity of central executive bodies in the field of scientific activity. The *results* of the study showed that the introduction and use of digital technologies in the field of scientific activity is a natural and necessary phenomenon, which is an integral element of the functioning of public authorities, creates conditions for the effective exercise of their powers, and contributes to the public interest in general. *Conclusion.* The characteristic of the state of provision of the sphere of scientific activity in terms of digitization in the existing institutional mechanism is established. The system of entities that are empowered in the field of scientific activity and / or authorized to use information and telecommunication means in the field of scientific activity is distinguished. The formation of science that stimulates the socio-economic development of the state was defined, achieved and tested through: the launch of the Telegram-bot "Info Science Bot", conducting free webinars in Ukrainian by Clarivate, opening of the ERA4Ukraine portal to provide information and support services to Ukrainian scientists, Ukraine's membership in the COST Association for the Financing of Innovation and Research Networks, implementation of the project "Advisory Fund to Support the EU-Ukraine Association", etc.

**Key words:** the field of science, legal influence, public administration, digital technologies, institutional support, management entities, "E-Science" project.

**JEL Classification:** H83, O14

## 1. Introduction

Regardless of the sphere of social relations subject to legal influence, the choice of measures and areas of regulation will depend on existing globalization trends and international standards. One of such areas is digitalization, which transforms the usual ways of influence of power entities, methods of their activities, forms of consolidation of decisions. This thesis will be confirmed by international standards in the field of digitalization in the public sector, namely: the provisions of the Okinawa Charter on the Global Information Society (2000), the Declaration on European Policy on New Information Technologies (1999), the European Code of Electronic Communications (2018), the European

Union Directive "On Measures for a High Common Level of Security of Network and Information Systems in the Union" (2016), etc. The sphere of scientific activity and its regulation, including the institutional level of support, has undergone appropriate adjustments, which is partly due to the inclusion of the scientific environment of Ukraine in the single European space. At the same time, any applied innovations are implemented against the background of revision of the initial theoretical postulates of public administration and regulation. At the same time, one of the central categories by which the managerial influence and the way of organizing social relations is interpreted is the category of "institutional support".

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Given the challenges of today, it is important to identify the possibilities of using digital tools for the organization of scientific activities. Thus, the key problems in the field of scientific activity, which can be solved with the help of digital tools, and which were identified by the Ministry of Education and Science of Ukraine (hereinafter – the Ministry of Education and Science of Ukraine), are as follows: lack of up-to-date and reliable information about scientific and pedagogical and scientific workers for making managerial decisions; bureaucratization of internal document flow processes of institutions and educational and scientific institutions; insufficient transparency in the distribution of research funding for Ukrainian scientists; inaccessibility of scientific resources and digital infrastructures; absence of effective electronic reporting systems in educational and scientific institutions (*Project Concept of Digital Transformation of Education and Science for the period until 2026, 2022*).

At the same time, the phenomenon of outflow of scientific potential abroad has become permanent. This is, among other things, due to the level of provision of the material and technical base of scientific institutions and higher education institutions. Thus, over the past five years, the number of researchers in Ukraine has almost halved: from 101,440 people in 2014 to 51,121 people in 2019. In the total number of employed population in 2018, the share of scientists was 0.54 percent, including researchers – 0.35 percent (*On Approval of the Concept of the State Target Program for the Development of Research Infrastructures in Ukraine for the period up to 2026 2021*).

Therefore, the purpose of the study is to determine the state of institutional support for the regulation of scientific activity, taking into account the capabilities of digitalization tools by analyzing: a) the role of information and telecommunication technologies in the field of scientific activity; b) the status of the Cabinet of Ministers of Ukraine, individual ministries and other authorized entities that regulate the sphere of scientific activity.

## **2. Information and telecommunication technologies in the field of scientific activity and their institutional support**

Regardless of the type of social relations in the field of scientific activity, public administration in this area should be carried out taking into account the concept of digitalization. The idea of using information and telecommunication technologies in the sphere of scientific activity streamlining became vividly expressed with the adoption of the Resolution of the Cabinet of Ministers of Ukraine "Some issues of digital transformation" (2021). Accordingly, the

idea of digital transformation in the chosen field is reflected through: a) the creation of an information system designed for competitive funding of scientific research; b) the creation of an electronic system of access to existing scientific information resources, an electronic scientific information system; c) creation of a register of Ukrainian research infrastructures; d) development of the Ukrainian Science Citation Index; e) creation of an electronic system for awarding academic degrees and academic titles; f) modernization of the systems of submission of documents and state certification of scientific institutions and higher education institutions in terms of their scientific activities; g) ensuring the development of the repository of academic texts and connecting local repositories to it.

Analysis of the report of the Ministry of Education and Culture for 2020 shows the urgency of increasing public investment in research and innovation and creating demand for innovation (*Pysarenko, Kuranda, Kvasha, 2021: 33*). The idea of using information and telecommunication technologies in the field of streamlining scientific activities has received a vivid expression with the adoption of the Resolution of the Cabinet of Ministers of Ukraine "Some Issues of Digital Transformation" dated February 17, 2021 No. 365. Accordingly, the idea of digital transformation in the field of science is reflected in: 1) automation of the admission campaign; organization of recruitment and training (internships) of foreigners and stateless persons; ordering educational documents and annexes to them of the European standard; introduction of electronic licensing; modernization of the Unified State Electronic Database on Education; creation and modernization of a unified electronic system for monitoring the employment of graduates; 2) creation of an information system designed for competitive funding of scientific research; creation of an electronic system of access to existing scientific information resources, an electronic system of scientific information; creation of a register of Ukrainian research infrastructures; development of the Ukrainian scientific citation index; creation of an electronic system for awarding academic degrees and academic titles; modernization of the systems of submission of documents and state certification of scientific institutions and higher education institutions in terms of their scientific activities; ensuring the development of the repository of academic texts and connecting local repositories to it.

It should be noted that the use of information and telecommunication technologies in the regulation of social relations in the field of education indirectly affects the implementation of scientific activities. However, such aspects as: automation of the admission campaign, organization of recruitment

and training (internships) of foreigners and stateless persons, ordering of educational documents and annexes to them of the European standard, modernization of the Unified State Electronic Database on Education, creation and modernization of a unified electronic system for monitoring the employment of graduates (in the future this direction will be called "E-University"), will not apply to the digitalization of public administration in the field of scientific activity.

Establishing the state of provision of the sphere of scientific activity in terms of digitization should be based on the existing institutional mechanism and administrative tools used by authorized entities.

The entities authorized in the field of scientific activity and / or allowed to use information and telecommunication means in the field of scientific activity are proposed to include the following:

- 1) state executive authorities: Cabinet of Ministers of Ukraine and its advisory bodies (National Council of Ukraine for the Development of Science and Technology), Ministry of Education and Science of Ukraine, Ministry of Digital Transformation of Ukraine, other central executive authorities, local executive authorities;
- 2) subjects of delegated powers: scientific institutions, scientific (scientific, scientific-technical, technical) council of a scientific institution, expert group for evaluation of the effectiveness of scientific institutions, scientific self-governing organizations (National Academy of Sciences of Ukraine, national branch academies of sciences), public scientific organizations, regional scientific centers;
- 3) local self-government bodies;
- 4) other entities that are not classified as public authorities (for example, the President of Ukraine, the educational ombudsman).

Consider separately the applied role of some subjects in the introduction of the latest technologies in scientific activity, which is reflected in certain legal forms (doctrinally can be used as a synonym for the concepts of "form of public administration", "instrument of public administration"). It is an external expression of homogeneous in nature and legal nature groups of actions of public administration entities, which are implemented within the competence defined by law in order to achieve the desired legally significant result (Averyanov, 2004: 169).

### **3. The Cabinet of Ministers of Ukraine as a subject of regulation of the sphere of scientific activity**

The Cabinet of Ministers of Ukraine is a subject of general competence, which ensures the implementation of state policy in the relevant spheres of public and state life, the implementation of the Constitution

and laws of Ukraine, acts of the President of Ukraine, observance of human and civil rights and freedoms (*About the Cabinet of Ministers of Ukraine, 2014*). The sphere of scientific activity is no exception. In detail, the powers of the highest central executive body in the field of scientific activity are contained in Article 41 of the Law of Ukraine "On Scientific and Scientific-Technical Activity" (2015). It seems possible to group the powers of the Cabinet of Ministers of Ukraine in the following areas: 1) political (implementation of the state scientific and technical policy, development and strengthening of the scientific and technical potential of Ukraine); 2) organizational (ensuring the development and implementation of state targeted scientific and scientific-technical programs, ensuring the interaction of central executive bodies with the National Council of Ukraine for the Development of Science and Technology); 3) regulatory and legal (approval of state target scientific and scientific-technical programs, adoption of normative acts related to the use of digital technologies); 4) personnel (approval of the personnel of the National Council of Ukraine for the Development of Science and Technology, which is approved by the Chairman of the National Research Foundation of Ukraine); 5) representative (negotiating and signing international treaties of Ukraine, in accordance with the powers granted). In addition, the Cabinet of Ministers of Ukraine exercises constant control over the implementation of the Constitution of Ukraine and other acts of legislation of Ukraine by executive bodies, takes measures to eliminate shortcomings in the work of these bodies.

With regard to the introduction of the latest technologies in scientific activities, within the powers available to the Cabinet of Ministers of Ukraine, the main role is assigned to the adoption of regulatory legal acts on: a) the use of digital technologies of a general nature; b) the use of digital technologies directly in the field of scientific activity.

In the first case, for example, we are talking about: approval of the Concept for the Development of e-Governance in Ukraine (2017), intensification of the activities of units for digital development, digital transformation and digitalization operating at central and local executive authorities, Kyiv and Sevastopol city state administrations (*Some issues of the activities of units for digital development, digital transformation and digitalization of central and local executive authorities and deputy heads of central executive authorities, regional, Kyiv and Sevastopol city state administrations on digital development, digital transformation and digitalization, 2020*), application of the principles of the state policy of digital development by executive authorities in the process of preparing drafts of new regulatory legal acts and exercising official powers through the use of

digital technologies (*Some issues of digital development, 2019*), the allocation of digital competencies and their implementation in the educational process in order to improve the quality and development of all spheres of public life, etc. (*Concept of development of digital competences, 2021*)

Regarding the introduction of digital technologies directly into the sphere of scientific activity, the Cabinet of Ministers of Ukraine approved a number of progressive changes. For example, the relevant resolution of the Cabinet of Ministers of Ukraine provides for the use of information and telecommunication means when holding a competition for vacant scientific positions in a state scientific institution: the announcement of the competition with information on the conditions of its holding is placed on specialized Internet resources, published on the official website of the state scientific institution; documents for the competition can be submitted by e-mail; information on the results of the competition is subject to mandatory publication on the official website of the state scientific institution (*On Approval of the Standard Regulation on the Procedure of Competition for Vacant Scientific Positions of the State Scientific Institution, 2018*). A similar conclusion can be drawn in the aspect of analysis of the regulation of the mechanism of formation and use of funds provided for the National Research Fund in the state budget under the program "Ensuring the activities of the National Research Fund, grant support for scientific research and scientific and technical (experimental) developments". Accordingly, the budget funds are envisaged, among other things, for the purchase, creation, operation and technical support of the official website of the Fund, software for the formation of an electronic database of experts who carry out the examination of projects submitted for the competition, an electronic information system for the submission and processing of such projects, an electronic database of research and development funded or financed by the Fund (*On Approval of the Procedure for Formation and Use of Funds of the National Research Fund of Ukraine, 2019*).

The influence of the Cabinet of Ministers of Ukraine on the reform of public relations in the field of scientific activity in the direction of digitalization is expressed in the relevant draft legal acts. For example, the Government of Ukraine has developed a draft resolution "On Approval of the Regulation on the National Electronic System of Scientific Information" (2021), which was submitted for public discussion on October 22, 2021. In general, the national electronic scientific and information system is a multifunctional tool for organizing scientific activities based on the use of information and telecommunication technologies, which will ensure the collection, formation, processing,

storage, use of data and information on: registration procedures of scientific institutions supported by the state and scientific objects of national heritage; procedures for state accreditation of individuals and legal entities for the right to conduct scientific and scientific-technical expertise; electronic catalogues of scientific libraries; procedures for certification of researchers and state certification of higher education institutions in terms of their scientific (scientific and technical) activities; registration of scientific and scientific-practical events; registration of professional publications, etc. However, as of today, these provisions have not become binding. First of all, this is due to the fact that some of the above-mentioned registers are not available in paper form, and given the digitalization of certain aspects of scientific activity, there are no comprehensive requirements for their standardization.

It is appropriate to pay attention to the draft decree of the Cabinet of Ministers of Ukraine "On Approval of the National Action Plan for the Implementation of the Principles of Open Science for the Period up to 2030" (2022), which outlines the following areas of science development in Ukraine:

- 1) ensuring open access to scientific results and scientific and technical information by implementing the following measures: placing in the public domain scientific results and scientific and technical information obtained during the implementation of fundamental and applied scientific research funded from the budget; regulating the mechanisms of registration and accounting of research, development and dissertations using an electronic system with remote access; implementation of the strategy for the implementation of open access; ensuring access of higher education institutions and scientific institutions to international electronic databases of scientific information at the expense of the budget; development of mechanisms to stimulate the registration of Ukrainian scientific publications (journals) in international databases of open access journals; conducting a comprehensive analysis of the legal basis for placing monographs in open access;
- 2) ensuring open access to research infrastructure, which is ensured, among other things, by approving the concept of state policy for the development of e-infrastructures;
- 3) creation of conditions for effective work with scientific and technical information and objects of research infrastructure that are in the public domain, which should be achieved in the following ways: by improving legislation in accordance with the standards and norms of the European Union in terms of applying the principles of good management of scientific data (FAIR principles) and the use of optimized scientific data (FAIR data); ensuring standardization and certification of data warehouses

in international data storage systems; ensuring data exchange with EU countries, in particular through integration into European data spaces; creation of a single database on the results of scientific and scientific-technical activities;

4) popularization of science, dissemination of scientific knowledge and involvement of citizens in scientific and scientific-technical activities by conducting information and communication campaigns to promote scientific achievements among the population, informing about the possibilities of using scientific achievements in professional activities and everyday life, etc.

The proposals contained in the draft order are progressive and cover all priority areas of scientific activity development in terms of the use of digital technologies. Therefore, their regulatory approval as mandatory seems urgent.

Special attention should be paid to the entity that promotes the introduction of the latest technologies in scientific activities – the National Council of Ukraine for the Development of Science and Technology, which is at the same time a permanent advisory body established under the Cabinet of Ministers of Ukraine to ensure effective interaction of representatives of the scientific community, executive authorities and the real sector of the economy in the formation and implementation of a unified state policy in the field of scientific and scientific-technical activity (*Regulations on the National Council of Ukraine on Science and Technology Development, 2017*).

At first glance, the optional nature of this body does not have a pronounced practical significance, but the involvement of experts in the scientific field and practitioners in solving the problems of the scientific sector creates a flexible mechanism for implementing urgent changes. Among such priority innovations should be the dissemination of the practice of using digital technologies in scientific activities through 1) preparation and submission of proposals for the formation of the principles of state policy in the field of scientific and scientific-technical activity, determination of priority areas of science development and measures for their implementation; 2) preparation of proposals for the integration of national science into the world scientific space and the European research area, taking into account national interests; 3) providing conclusions on draft concepts of state target scientific and scientific-technical programs and projects of such programs; 4) providing recommendations on the formation of the state budget in terms of determining the total amount of funding for scientific activities; 5) preparation of an annual report on the state and prospects of development of the sphere of scientific activity, as well as on the state of implementation by Ukraine of the priorities of the European Research Area and

submission of proposals for their implementation plan for the next year; 6) initiation and ordering of forecast and analytical studies in the field of science and scientific expertise of decisions of central executive authorities related to the scientific sphere; 7) development of proposals for the creation of mechanisms for commercialization of research results, etc. Analytical reporting on the activities of the National Council of Ukraine on the Development of Science and Technology shows that this body pays attention to the importance of using digital technologies in the field of scientific activity. In particular, this concerns the recommendations on Ukraine's accession to the European Research Area, namely the European Open Science Cloud, participation in the EU program for research and innovation "Horizon Europe", creation of a legal framework for Ukraine's participation in the European Research Infrastructure Consortia (ERIC), recognition of priority areas for Ukraine and joining the EU program "COST" (*Minutes No. 3 of the meeting of the National Council of Ukraine on Science and Technology Development, 2019*).

#### **4. The role of individual ministries as subjects of regulation of the sphere of scientific activity**

The legal status of the Ministry of Education and Science of Ukraine (hereinafter – the Ministry of Education and Science of Ukraine) is a multidimensional characteristic of the position occupied by this central body of state executive power in the organization of regulation of public relations and in the system of state authorities as a whole. The functioning of the Ministry of Education and Culture of Ukraine in the field of science is aimed at the proper regulation of social relations related to scientific activity, which is achieved by performing such tasks as: formation and ensuring the implementation of state policy in the field of science, scientific and scientific-technical activity, innovative activity in these areas, transfer (transfer) of technologies, as well as ensuring the formation and implementation of state policy in the field of state supervision (control) over the activities of entities engaged in activities related to the provision of services in the field of science, regardless of their subordination and forms of ownership (*On Approval of the Regulation on the Ministry of Education and Science of Ukraine, 2014*).

The powers of the Ministry of Education and Science of Ukraine in the field of scientific activity, depending on their content, should be classified as follows (*On Scientific and Scientific-Technical Activity, 2015*):

– organizational and administrative (e.g., ensuring the development of the national system of scientific and technical information, management of the

system of scientific and scientific-technical expertise, management of the system of state certification of scientific institutions on the basis of the principles developed by the National Council of Ukraine for the Development of Science and Technology);

– coordination (e.g., elaboration of the principles of scientific and scientific-technical development of Ukraine and submission of relevant proposals to the Cabinet of Ministers of Ukraine and the President of Ukraine, interaction with the National Council of Ukraine for the Development of Science and Technology, coordination of implementation by other central executive authorities, the National Academy of Sciences of Ukraine and national branch academies of sciences of the state policy in the field of scientific and scientific-technical activity, development together with the National Council of Ukraine for the Development of Science and Technology of the state policy in the field of scientific and scientific-technical activity);

– globalization-oriented (for example, ensuring the integration of national science into the world scientific space and the European research space with the preservation and protection of national priorities, coordination of international scientific and technical cooperation, development of draft interstate programs to ensure the implementation of international agreements in the field of scientific and scientific-technical activities);

– auxiliary (for example, the formation of the subject of the state order for the most important scientific and technical (experimental) developments and scientific and technical products, financial support for the implementation of the state order for the most important scientific and technical (experimental) developments and scientific and technical products, financial support for scientific and scientific and technical activities of higher education institutions that belong to the sphere of its management);

– control and supervision (for example, approval of the procedure for the formation of the list of scientific professional publications of Ukraine, approval and cancellation of the decision of specialized academic councils on awarding a degree to an applicant.

Institutionalization as a priority goal – the use of digital technologies in the field of science – is of great importance in the activities of the Ministry of Education and Culture of Ukraine. Currently, this goal is achieved through the recognition of the main goals in the field of regulation of scientific activity – the formation of science that stimulates the socio-economic development of the state (*Action plan of the Ministry of Education and Science of Ukraine for 2021, 2021*). Under such conditions, the Directorate of Digital Transformation, which is an independent structural unit of the Ministry of Education and Culture of Ukraine, will need to reformulate a number

of established principles of work, which is a practical basis for further research on the selected issues. Among the priority tasks of the Digital Transformation Directorate, for example, is to ensure the formation of state policy based on a constant analysis of the state of affairs in the field of digital transformation and digital development of science by finding alternative solutions to existing problems; monitoring and evaluation of the results of the implementation of state policy in the field of digital transformation and digital development of science, etc. (*Bilous-Osin, 2021: 26*)

Institutionalization as a priority goal – the use of digital technologies in the field of science – is of great importance in the activities of the Ministry of Education and Culture of Ukraine. Currently, this goal is achieved through the recognition of the main goals in the field of regulation of scientific activity – the formation of science that stimulates the socio-economic development of the state (*On Approval of the Decree of the President of Ukraine "On the Introduction of Martial Law in Ukraine", 2022; On the Legal Regime of Martial Law, 2015*). Projects and initiatives of the Ministry of Education and Culture of Ukraine aimed at supporting science in these conditions are positive. However, most of these innovations are based on the use of, for example, digital technologies:

– the Telegram-bot "Info Science Bot" was launched, which provides: prompt informing of scientists, innovators about modern opportunities for scientists, current news and diplomatic steps of the authorities and the scientific community to counter Russian aggression, as well as sanctions against the Russian Federation imposed by our international partners; information on opportunities for scientists from foreign universities in scientific institutions regarding grant support, mobility and temporary employment (*Official website of the Ministry of Education and Science*);

– free webinars in Ukrainian were held by Clarivate on scientometrics and bibliometrics, which will consider the peculiarities of publishing the results of scientific activities of scientists in publications indexed by the Web of Science database, the possibility of using Web of Science and platform tools (*Official website of the Ministry of Education and Science*);

– The European Commission has launched the ERA4Ukraine portal to provide information and support services to Ukrainian researchers who are forced to go abroad due to the war. The portal brings together initiatives at the level of the EU, individual countries and non-governmental institutions. The portal contains information on: recognition of diplomas, current vacancies, social assistance, housing offers for scientists and their families (*Official website of the Ministry of Education and Science*);

– Ukraine became a member of the COST Association of Innovation Funding and Research Networks. Among the strategic priorities of COST are the following: promoting and disseminating cutting-edge science and best practices, empowering and supporting young innovators and researchers, promoting interdisciplinary research for breakthrough science. In addition, membership in this organization provides an opportunity to join COST Actions research networks, which offer an open space for international cooperation of scientists, as well as give impetus to the progress of innovation and research (*Official website of the Ministry of Education and Science*);

– the project "Advisory Fund to Support the EU-Ukraine Association", which is implemented in Ukraine by the federal company Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), has started its work. In general, it is an online platform for communication and effective interaction between representatives of business and the scientific community, which aims to achieve scientific results by business and realize the potential of scientists (*Project "Advisory Fund to Support the EU-Ukraine Association"*).

Thus, the Ministry of Education and Culture of Ukraine is a specially authorized entity that has the necessary powers to regulate the sphere of scientific activity, taking into account the spread of digital technologies.

Particular attention should be paid to the Ministry of Digital Transformation of Ukraine, whose competence is primarily aimed at digital development of regulation of public relations, dissemination of the latest technologies in various spheres of public relations, formation of the state policy of digitalization in general and digital development (with an emphasis on the formation of digital skills and digital rights of citizens). Among the priority tasks of the Ministry of Digital Transformation, a prominent place is given to the implementation of measures aimed at forming high-quality methods of electronic interaction of state electronic information resources and an integrated approach to electronic identification; preparation of the legal framework for digital transformation; formation of the state policy of cryptographic and technical protection of information, cybersecurity; ensuring the introduction of virtual assets, blockchain and tokenization, artificial intelligence, etc. (*Questions of the Ministry of Digital Transformation, 2019*)

The adaptation of digital tools to the sphere of scientific activity is relatively slow. The project "Digital Transformation of Funding and Services in Science (E-science)" announced by the Ministry of Digital Transformation of Ukraine aims to: create

electronic systems that will reflect the funding of scientific research; providing access to scientific digital services; introduction of a register of research infrastructures; formation of an electronic system for awarding degrees and academic titles; creation of an electronic mechanism for certification of scientific institutions, as well as the formation of a repository of academic texts (*Projects of digital transformation*). To implement the E-Science project, the Ministry of Digital Transformation of Ukraine cooperates with the Ministry of Education and Science of Ukraine, which is a sustainable approach to the work of the relevant central executive authorities.

## 5. Conclusions

The study found that the state of provision of the sphere of scientific activity in the conditions of digitalization should be based on the existing institutional mechanism and administrative tools used by authorized entities. The system of entities that are empowered in the field of scientific activity and/or authorized to use information and telecommunication means in the field of scientific activity is distinguished. These include state executive authorities: Cabinet of Ministers of Ukraine and its advisory bodies (National Council of Ukraine for the Development of Science and Technology), Ministry of Education and Science of Ukraine, Ministry of Digital Transformation of Ukraine, other central executive authorities, local executive authorities; Subjects of delegated powers: scientific institutions, scientific (scientific, scientific-technical, technical) council of a scientific institution, expert group for evaluation of the effectiveness of scientific institutions, scientific self-governing organizations (National Academy of Sciences of Ukraine, national branch academies of sciences), public scientific organizations, regional scientific centers; local self-government bodies; other entities that are not attributed to public authorities (for example, the President of Ukraine, the educational ombudsman).

The importance of adopting regulatory legal acts on: a) the use of digital technologies of a general nature; b) the use of digital technologies directly in the field of scientific activity, as tools for introducing the latest technologies into scientific activity within the powers of the Cabinet of Ministers of Ukraine. Attention was drawn to the need for urgent regulatory approval as mandatory proposals contained in the draft acts of the Cabinet of Ministers of Ukraine.

The praxeological significance of the use of digital technologies in the field of science in the activities of the Ministry of Education and Science is determined. Today, this goal is achieved through the recognition of the main goals in the field of regulation

of scientific activity – the formation of science that stimulates the socio-economic development of the state, which has been tested in practice: launching of the Telegram-bot "Info Science Bot", conducting of free webinars in Ukrainian by Clarivate on scientometrics and bibliometrics, opening of the

ERA4Ukraine portal to provide information and support services to Ukrainian scientists, Ukraine's membership in the COST Association for Financing Innovation and Research Networks, implementation of the project "Advisory Fund for the Support of the EU-Ukraine Association", etc.

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# THEORETICAL FOUNDATIONS OF COMPETITIVENESS MANAGEMENT OF HEALTH CARE INSTITUTIONS

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**Abstract.** Increasing the competitiveness of health care institutions is an urgent issue for health care in the new funding environment. *The purpose* of this work is to analyze the existing tools for competitiveness management in the healthcare sector. The problems of competitiveness management development are investigated. State regulation, political dynamics, changing socio-demographic characteristics and constant technological development cause significant changes in the healthcare sector, but despite this, state restrictions, conservatism of Ukrainian healthcare and lack of management specialists are the main problems of Ukrainian healthcare. This necessitates the use of the principles of competitiveness management of modern health care institutions. *The main methodological* approach used in the work is a review of literature sources. The analysis of scientific literature revealed the absence of unified methodological approaches to measuring competitiveness, and many of the proposed methods do not take into account the specifics of the health care system, as well as the areas of activity of the medical organization. The existing models of competitiveness management tools differ from each other, and their use is conditioned by many factors. The role and impact of competition in the healthcare sector is considered separately. The theoretical basis of the study is a systematic approach to understanding the relationship between different levels of health care. Important conceptual issues of measuring competition in healthcare, including S.W.O.T. analysis, competitive advantages, human resources assessment, benchmarking, etc. are considered. The results of this study form the methodological and practical basis for improving the competitiveness management system of health care institutions in Ukraine, which operate in difficult socio-economic conditions.

**Key words:** competitiveness, competitiveness management, healthcare institution, medical services market, health care.

**JEL Classification:** I11, I15

## 1. Introduction

In the context of the ongoing transformation of the healthcare system of Ukraine, the task of finding a model of an effective national healthcare system, adequate to the modern realities of society and competitive in the global space, remains extremely relevant. Before proceeding to the analysis of the competitiveness management system of health care institutions, it is necessary to conditionally characterize the current state of the national health care system. Unfortunately, the existing health care system in Ukraine does not allow to implement the desired principles of marketing relations in the emerging market of medical services.

It is well known that a market economy cannot be imagined without such concepts as "competition" and "competitiveness". In countries with developed market economies, public and private health care institutions have existed for many years in conditions of sectoral competition, but in Ukraine the competitive environment is still not developed. The main factors of low and sometimes even absent competitiveness among Ukrainian healthcare institutions are as follows: – a revolutionary transition from the administrative and planning system of the Semashko healthcare model to the uncontrolled process of forming marketing relations in the context of the evolutionary formation of the healthcare market;

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- conservative form of ownership of health care institutions, as well as uncertainty of the formation and development of small and medium-sized businesses in the existing health care system. This does not correspond to classical economic laws and conditions of competition and competitiveness;
- the predominance of the public sector in health care in Ukraine, which is absolutely regulated and financed by the state. This creates a state monopoly in the healthcare sector;
- lack of modern managers in the public health system who are able to competently solve organizational, financial and other management problems and tasks of the health care institution;
- absence in the educational programs of Ukrainian medical universities of such discipline as "Management of competitiveness in health care", and unfortunately, as a rule, even the absence of the discipline "Management in health care";
- unjustified caution in the implementation of evidence-based planning methods, such as system analysis, forecasting, optimization of medical activities, etc. in the context of the formation of the health care market;
- lack of political will in making sound management decisions to bring to the logical implementation of modern mechanisms, methods and forms of continuous improvement of the quality of medical care.

Other factors contributing to the inefficiency of the competitive environment in Ukrainian healthcare are the following:

- gaps in legislation (permitting and incentive mechanisms, such as licensing and accreditation);
- poor access to medical information, for example, on the quality of services provided;
- high differentiation of services, which leads to significant variation in prices and the need of the population for different health services, as well as interference in pricing;
- heterogeneity of patients (level and structure of morbidity and disability, socio-economic characteristics, etc.

When studying the problem of formation and management of the competitive environment of production and consumption of medical services, it is necessary to understand the negative role of incentives in the health care system, which contribute to the creation of conditions for the absence or unproductive competition.

Some factors that cause this problem and in principle do not allow to form a competitive environment in health care are listed below.

1. Multilevel system of consumers (intermediaries) of medical services, such as:

- a) the state (program of state guarantees of free medical care);

- b) patients (exclusion of the consumer of medical services from the system of active influence on the quality of medical care);
- c) management of health care institutions (bureaucratic directive-command regulation of relations between patients and health care workers);
- d) physicians (making decisions about treating their patients and providing that treatment takes place in a competitive and economic vacuum);
- e) health insurance organizations (in the Ukrainian healthcare model there is just voluntary medical insurance).

2. Conflicting interests of the subjects of production and consumption of medical services.

3. Patients are responsible for paying for medical services, and doctors are not responsible for the quality of medical services provided.

4. Lack of objective indicators of the quality of medical care for patients and doctors.

5. Impossibility of establishing an unambiguous link between the price and quality of the provided medical service.

6. A specific feature of the patient as a consumer of medical services, which distinguishes him from consumers of other (non-medical) goods and services, is a kind of absolute priority of preserving life and health, without regard to possible costs.

7. Lack of opportunity and extremely insufficient awareness of patients about the prices of medical services from different doctors. Certain sensitivity in obtaining such information directly from the attending physician;

8. Lack of financial resources for the majority of the population to pay for quality medical care according to their wishes and choices;

9. Subjectivity of the decision-making process among the population regarding the choice of institution, specialist, treatment and preventive measures, based only on their own impressions and opinions of friends, image, reputation and ability to persuade doctors. (Fuch, 1988; Greenberg, 1991; Soltman, Busse, Mossialos, 2002)

In general, health care is of great importance for society and has a number of features that distinguish it from other spheres of socio-economic activity, which greatly complicates the transition of this sphere to market conditions and creates preconditions for a number of reservations in the application of market principles.

**Unresolved aspects of the problem.** All of the above leads the researchers to the conclusion that in the current state of domestic health care (more precisely, in the emerging sphere of production and consumption of medical services), there is no fundamental management system. And, consequently, there are no relevant relations of subjects, such as competition. This makes it virtually impossible to

implement such a mechanism to improve the quality of medical services.

**The purpose of the article.** Thus, the challenge is to offer theoretical tools for creating a system of competitiveness management of health care institutions that will ensure their sustainable growth and market stability.

## 2. Theoretical foundations of competition in the healthcare sector

Analyzing various literature sources, starting with Adam Smith, it can be argued that there are many definitions of the concept of competition. Much less research is devoted to competition in the healthcare sector.

Thus, it is necessary to adapt the existing definition of competition to this practical area. While analyzing different definitions, the authors came to the following understanding of the term competition in the healthcare sector: is a state and process of relations between the subjects of production and consumption of medical services within the framework of a specific civilized form of competition between medical workers (doctors) to achieve the highest degree of satisfaction of the patient's target needs.

Today, competition in the field of health care exists both between state, municipal and private health care institutions, and between state and municipal institutions (district and regional polyclinics, hospitals, etc.), as well as between doctors themselves as specialists providing medical services. Its accessibility is ensured by law, based on the patient's right to choose a doctor and medical institution, as well as in fact, as evidenced by modern medical practice.

Thus, competition is an objective and necessary function of the activity and development of the health care market (Porter, 2005). The key role of competition in health care is the potential to provide a mechanism for reducing health care costs (Rivers, Glover, 2008).

According to the authors, many aspects and factors of functioning and development of health care institutions and medical practice can be synthesized in competitiveness. At the same time, the competitive environment itself is ambiguous and contradictory.

Researchers identify some contradictions that arise in the functioning of competition in the healthcare sector. In particular, they include the following:

1. Contradiction between the incentive system in health care and the fundamental laws of competition. This is reflected in the fact that high prices for medical services are maintained even in conditions of excess supply.

2. Tension between expensive medical technologies and universal access to medical services. The high price of medical technologies has a direct impact on price growth, which in turn reduces the access of consumers (patients) to medical services (even without improving the quality of medical care).

3. The conflict is manifested in the fact that the current system of incentives for medical work encourages the introduction of innovations, increase in costs or quality without a corresponding reduction in the cost of quality medical services. At the same time, the key role of competition in health care is the potential to provide a mechanism for reducing health care costs.

Thus, the above contradictions indicate a low possibility of introducing free market rules in health care while maintaining its social orientation, namely universal access to quality medical services for the entire population. But, nevertheless, the main idea of competition – "ensuring the provision of the best goods and services to meet the needs of consumers" – is being implemented.

Competition in the healthcare sector is divided into certain levels. Thus, it is logical to distinguish the following levels of the competitive environment in the production of medical services (Figure 1):

- 1) Competitiveness of national healthcare at the international level, which is influenced by medical innovations, high technologies, etc.
- 2) Competition between consumers of quality medical services.



Figure 1. Levels of competition in Ukrainian healthcare

- 3) Competition between pharmaceutical companies.
- 4) Competition between private healthcare institutions.
- 5) Competition between public healthcare institutions.

But it should be noted that in the state sphere of medical care there is no competitive environment of production and consumption of medical services, as well as real conditions that would allow to form such an environment. This is where the social orientation of health care is manifested.

Thus, in Ukraine competitiveness management can be applied to private healthcare institutions and pharmaceutical companies. The latter are not the subject of this study.

### 3. Competitiveness and competitiveness management of healthcare institutions

Competitiveness, as well as competition, are universal concepts for any market of goods and services (Rivers, Glover, 2008).

Competitiveness refers to the ability of a healthcare institution to compete in the healthcare market in terms of such parameters as:

- professional level of medical staff;
- quality of medical services;
- cost of medical services;
- features of service provision;
- ability to meet the requirements of consumers (patients) to the maximum extent possible;
- ability to introduce medical and technological innovations in the process of service provision.

Thus, the authors are confident that the quality of medical services, based on the high professional level of medical staff and the ability of the health care institution to introduce medical and technological innovations in the process of their provision, is the main competitive advantage of any health care institution.

At the same time, the healthcare sector imposes specific restrictions on the formation of a competitive environment in the medical services market.

According to the authors, the competitive environment in the health care sector is a complex economic category characterized by the interaction of the state, public and private health care institutions, external and internal factors of influence on the conditions of economic activity in the health care sector, which determine the appropriate level of economic competition and the importance of individual business entities on the overall market situation.

It may be noted that unlike goods, the competitiveness of which is easy to assess directly, the competitiveness of medical services is usually assessed indirectly.

Some features of the assessment of competitiveness of medical services are as follows:

- the object of evaluation is the activity of the organization (namely, a health care facility, medical practice, etc.) that provides medical services;
- evaluation of the service is related to the assessment of the quality of the process and technology of service provision;
- evaluation of healthcare professionals is carried out directly by the consumer;
- it is necessary to assess the time characteristics of the provision of medical services;
- evaluation of the service provided is carried out for compliance with the quality standards of service (conditions and culture of service);
- assessment and integration of subjective opinions of patients who received a single medical service should be ensured. (Mark, Coffey, 2001; Miller, 1996)

From the point of view of systematic and integrated approach, the competitive advantages of medical services are provided by legal, professional, technological, market, scientific, economic, organizational, psychological and other aspects, as well as their systematic interconnection.

The field of moderate competition in the health care market can be formed if a number of mandatory conditions are met, some of which are listed in Table 1.

Competitiveness management of a health care institution is considered as one of the aspects of management aimed at the formation, development and implementation of competitive advantages and ensuring the viability of a health care institution as a subject of economic competition. It requires a set of measures aimed at systematic improvement of 4P marketing.

Managing the competitiveness of a healthcare institution requires the following actions:

1. Diagnosis of the external competitive environment.
2. Assessment of the level of competitiveness of the health care institution in the market.
3. Development of a clear competitiveness management strategy based on the results of diagnostics and assessment.
4. Implementation of the formed strategy.
5. Continuous monitoring of the strategy implementation.
6. Improving the competitive advantages of the health care institution.

Thus, the creation and improvement of competitive advantages of health care institutions (which is the task of competitiveness management), the formation and development of competitiveness of medical services and medical labor is an effective tool for qualitative changes in industrial relations in health care itself and, most importantly, an absolutely necessary condition for the formation of modern marketing relations between the consumer (patient) and the doctor.

Table 1

**Conditions for the formation of a competitive environment in the medical services market**

Types and levels of competitiveness management	Conditions and possible measures
Patient-level	<ul style="list-style-type: none"> <li>– The right to free choice of a doctor;</li> <li>– Ensuring free access of patients to health care facilities and medical practice;</li> <li>– Equal guaranteed access to the choice of health care providers;</li> <li>– Protection of patients' rights;</li> <li>– Highly developed health insurance system;</li> <li>– A system of quality control of medical care.</li> </ul>
Physician-level	<ul style="list-style-type: none"> <li>– Licensing of doctors;</li> <li>– Standardization of medical practice;</li> <li>– The right of health care institutions and private practitioners to earn and make a profit;</li> <li>– System of fixed contractual fees with prepayment;</li> <li>– Partnership rights of medical staff;</li> <li>– Open recruitment of medical staff;</li> <li>– Adoption of professional ethical standards.</li> </ul>
Healthcare institution-level	<ul style="list-style-type: none"> <li>– Accreditation of health care institutions;</li> <li>– Improving the quality of strategic management decisions;</li> <li>– Freedom of adaptation of functions and organizational structure of health care institutions to dynamic markets of medical services;</li> <li>– Independence of healthcare institutions to self-finance and operate independently;</li> <li>– A system of continuous staff training.</li> </ul>
Scientific and other institutions-level	<ul style="list-style-type: none"> <li>– Scientific substantiation of competitive models in the production and consumption of medical services;</li> <li>– Economic methods of management of health care institutions;</li> <li>– Flexibility of commercial investment in the healthcare sector;</li> <li>– Information openness of the health care market.</li> </ul>
Administrative level	<ul style="list-style-type: none"> <li>– Demonopolization of medical care; elimination of administrative division and vertical integration of health care institutions and services;</li> <li>– Privatization of health care institutions;</li> <li>– Integration of primary health care services; Implementation of optimal and functional solutions for the restructuring of primary health care institutions and services;</li> <li>– Opening of previously closed (departmental) healthcare institutions for all citizens.</li> </ul>
State regulation-level	<ul style="list-style-type: none"> <li>– Creation of legislative conditions for guarantees and incentives for the development of entrepreneurship, competition and restructuring of the health care sector;</li> <li>– Reorientation of new medical programs and projects from vertically coordinated institutions to the level of primary health care centers;</li> <li>– Regulation of the competitive environment in the markets of medical services;</li> <li>– System of targeted social guarantees in obtaining medical care by certain categories of the population;</li> <li>– Regulation of the quality and efficiency of services provided;</li> <li>– Professional training of personnel;</li> <li>– Evaluation of the economic efficiency of medical technologies.</li> </ul>

Source: created by the authors

#### 4. Tools for measuring competition and competitiveness of a healthcare institution

An important link in the management of competitiveness of any organization is the correct assessment of its level. When measuring competitiveness, a number of tasks are solved, namely: (a) establishing the state and peculiarities of increasing/loss of competitiveness; (b) identifying "problem" areas that negatively affect competitiveness; (c) identifying reserves for increasing competitiveness.

Two methodological approaches to the competitiveness are described to the literature:

- 1) operational efficiency;
- 2) strategic positioning.

The operational efficiency strategy is aimed at achieving results that significantly exceed the results of competitors engaged in similar activities.

Strategic positioning is aimed at carrying out activities that are fundamentally different from those of competitors or include alternative approaches to similar activities.

The ambiguity of existing methodological approaches to the definition of competitiveness in modern management theory determines the multiplicity of methods used to assess it.

All methods used to measure and assess competitiveness can be grouped into nine sectors. The first four of them are grouped in chronological order of appearance of approaches in the first half

of the XX century. Later, the theory and practice of strategic management led to the almost identical emergence of a number of methodological approaches to assessing competitiveness in the works of domestic and foreign scientists.

Therefore, the set of methods can be represented as follows:

1. Methods based on comparative advantage analysis.
2. Methods based on the theory of equilibrium of the firm and industry.
3. Methods based on the theory of effective competition.
4. Methods based on the theory of product quality.
5. Matrix methods for assessing competitiveness.
6. Complex methods (including integrated).
7. Method based on the multiplier theory.
8. Method of determining the position in the competition in terms of strategic potential of the enterprise.
9. Methods based on comparison with the standard (modification of complex methods using integral estimates).

Below are the most popular methods that can be used in healthcare.

S.W.O.T. analysis is a classic and widely accepted method of evaluating strategic planning and has found wide application in healthcare. This analysis is aimed at identifying the strengths and weaknesses, threats and opportunities of the organization. It consists of 4 stages: analysis of the internal (the main production process, personnel) and external (threats, opportunities) environments of the enterprise; entering the results into the SWOT matrix; assessment of opportunities and threats identified in the research process (on a 10-point scale); formulation of actions to maintain a competitive advantage. (Baker, 2001; Harris, McDaniel, 1993; Tompson, Strickland, 2000)

The obvious advantages of this method are easy adaptation to any area of the enterprise, the ability to freely choose the elements for analysis in accordance with the goals and use them for both operational control of the organization and strategic planning.

However, due to the subjectivity of the method, the reliability of the results depends entirely on the qualifications of the analyst, and the analysis is only a general goal without specifying measures to achieve it.

Thus, the competitiveness of a healthcare institution can be assessed in two ways:

- 1) in comparison with by-products (competitors);
- 2) within its internal environment.

In this approach, it is possible to use the "system of seven functions" by which the level of competitiveness is assessed: target, licensing, accreditation, deontological, economic, technological and performance functions (Fliaisher, Bensussan, 2005).

The advantages of this approach include: (a) the use of objective indicators based on the assessment of specific parameters and conditions; (b) the possibility of assessing competitiveness with other organizations with a similar profile; (c) the possibility of assessing competitiveness within one health care facility. The disadvantages include the inability to compare public and private healthcare institutions.

Tompson and Strickland proposed to use indicators from a list of key factors of the organization's success of a certain industry, as well as the main advantages and disadvantages of competitors. The sum of these indicators forms a comprehensive indicator of the organization's competitiveness (Tompson, Strickland, 2000). Here the advantage of this approach is the ability to measure competitiveness directly relative to competitors in the industry. But the methodology does not take into account the specifics of budgetary and paid organizations, and there is no possibility to assess competitiveness within the organization itself.

Another approach used to measure the enterprises' competitiveness is the estimation of human resources. It is well known that human resources make a significant contribution to the efficiency of the health care system. Human resources are considered the main determinant of the quality and accessibility of health care and, in general, the competitiveness of health care institutions. In the strategy of improving the competitiveness of health care, the development of human resources in the direction of forming the intellectual capital of the organization and customer-oriented approach is of great importance.

The hierarchy analysis method, which is used in the process of competitiveness assessment, is based on the expert assessment of certain competitiveness criteria by the organization, which form pairwise comparison matrices. Competitiveness is determined both separately for each criterion and for the overall level based on all parameters. This method is both qualitative and quantitative, i.e. suitable for assessing several organizations, and allows for a hierarchical systematization of indicators. However, it should be noted that the method is rather subjective, as it is based on expert assessment and can be applied to a small number of entities and indicators (up to 9).

There is an approach, where five directions of evaluation of competitors of health care (sources and types of funding, level of healthcare institution, specialization, location and price segment) are developed. The four main criteria of competitiveness are: reputation of the health care institution, attention, speed of service, degree of differentiation of services. The proposed approach takes into account the peculiarities of the market of paid services, where the degree of patient satisfaction with the provided medical services is important.

It should be noted, however, that this approach does not take into account the competitiveness of health care, and the main criterion for the success of the organization is the level of satisfaction of the consumer of the service.

A. Smith, D. Riccardo, proposed an assessment of competitiveness from the standpoint of competitive advantage. Competitive advantages of health services are provided by market, legal, economic, organizational and other aspects (Porter, 1998). The methodology includes an inventory of factors affecting the competitiveness of the organization, the definition of indicators by which the impact of each factor is measured, and the comparison of competitors by the collected indicators. The disadvantage of such a model is the high risk of statistical error when the number of indicators increases.

Benchmarking is "the process of measuring products, services and processes against those of organisations that are leaders in one or more aspects of their activities". It can provide data on how a healthcare facility compares to similar organizations, even if they are in a different business or have a different customer (patient) group. It can also help identify areas, systems or processes that need improvement.

Thus, it can be argued that there are a large number of tools for assessing the competitiveness of a healthcare institution. Each manager can choose for himself the tool that is suitable for the given situation.

## 5. Conclusions

The existence of competition in the provision and consumption of medical services, as well as increasing the competitiveness of health care institutions and medical practices are particularly important for the further development of the national health care system in the context of globalization. Creating

conditions for competition in the healthcare system, launching mechanisms of civilized rivalry between doctors, and finally, managing the competitiveness of healthcare institutions and medical practices are the tasks without understanding and solving which qualitative changes in the current state of domestic healthcare are impossible.

Thus, the analysis of existing tools for assessing the competitiveness of health care institutions has shown a significant interest of researchers. This is due to the ongoing reform of the entire health care system and the active introduction of market mechanisms in the provision of health care services. However, it should be noted that currently there is no unified methodological approach to measuring competition and competitiveness that would take into account the specifics of the health care system and the scope of activities of the health care organization (types of medical care and services provided, consumer profiles, etc.).

Measuring competition and competitiveness is an important component of strategic management of health care institutions to understand the impact of market changes and policy initiatives in health care. Ongoing changes in the health care system promise to make it more important to understand the forces influencing competition, as well as the implications of competition for the provision and costs of health care services.

Further progress in the development of competitiveness management in health care is associated with the development of specific common tools for managing the competitive advantages of the organization and assessing its competitiveness.

Future scientific research of the authors should be aimed at studying the competitiveness strategies of health care institutions, as well as finding ways to improve their business activity.

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# HUMAN DEVELOPMENT IN THE CONTEXT OF SOCIO-POLITICAL CRISIS (ON THE EXAMPLE OF MODELING THE COORDINATION MECHANISM FOR REGULATING AGRICULTURAL AND CONSTRUCTION POLICIES)

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**Abstracts.** The goal is to achieve human development through the printed media. Objectives – to study the socio-economic aspects of coordination of the activities of segmental components in the publishing industry; to find out and substantiate the strategic subjectivity of the state institutional regulation of the publishing industry of the national economy. *Methodology.* System-structural approach – in the study of theoretical and methodological aspects of ensuring the development strategy of the publishing industry of the national economy in transformational conditions; comparative analysis – for comparing objects and phenomena, identifying the general and special, for studying the causes of changes that have occurred, identifying development trends. For the implementation of the scientific topic: "Development of norms of consumption and norms of material waste in the production of textbooks and educational/teaching aids" 0122U002363. *Results.* The results of the latest pandemic caused by the COVID-19 virus and the active phase of the military confrontation have a decisive impact on the national economy and human development of our country. The current focus on agricultural development provides partial stabilization of the situation by maintaining an adequate level of food security and increasing food exports. In the long term, it is envisaged to use the existing advantages and revise the agrarian and construction policies, by coordinating them to create conditions for improving the human development situation in the country. To form the necessary theoretical basis for such changes, the definition of the term "state agricultural policy" was clarified and the list of strategic goals of the state agricultural policy was expanded. The current direction of construction policy is critically characterized. The essence of three dominants (continuation of land reform; decentralization; transformational changes in the development of agriculture), which should be taken into account when harmonizing agricultural and construction policies, is considered. The model of the coordination mechanism of agricultural and construction policy regulation was developed in order to create conditions for sustainable development of rural areas, which, accordingly, should contribute to the progress of human development.

**Key words:** human development, agrarian policy, construction policy, rural area, land reform, decentralization, transformation of agriculture.

**JEL Classification:** O15, Q15

## 1. Introduction

In recent decades, significant progress has been made in the field of human development, which is the development of people through human capacity building, by people and for people. This concept implies the expansion of freedoms for everyone.

These freedoms have two components: freedom of well-being, consisting of functions and potentials, and freedom of subjectivity. In turn, potential capabilities are different sets of functions that a person can achieve. The Millennium Declaration and the formulated development goals, the main directions

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of sustainable development for the period up to 2030, as well as the presented global goals, which were approved by the UN member states, are of great importance for this. Human development is characterized by an index that combines three main dimensions: life expectancy at birth; average years of schooling and life expectancy; and gross national product per capita.

It should be emphasized that human development, in particular in Ukraine, remains uneven. According to the authors of the national report *Innovative Ukraine 2020*: "Ukrainian economy and its society in the next ten or even twenty years will be divided into three, to some extent conditional, parts. The first and the most widespread is the one where the population will be mainly engaged in production, including agro-industrial activities... and for them the prospects of modernization due to innovative activities in traditional sectors of the economy are opening up. The second, relatively small one, is those who will be engaged in high-tech business, which will be integrated into global value chains, will carry out advanced scientific research on request and will be engaged in relevant educational activities. This also includes the development and production of modern weapons, which will lead to successful entry into world markets, including through new cooperation with EU countries. The third part is the impoverished mass of the population, including those who will lose their jobs as a result of structural changes and will not have the resources to receive appropriate education, and therefore will not work for the convergence of the first and second groups..." The pandemic caused by the COVID-19 virus and the active phase of Ukraine's military confrontation with the aggressor, in addition to the negative impact on the national economy, also affected the quantitative ratio of the above groups.

Printed products are of great importance for achieving the proper level of human development. The main consumer of information products for a long time was science as a relatively isolated system. But it is especially important for society that information products "circulate" in a much wider range. Previously, the system "science – technology – production" was traditionally considered. According to the authors, the course of scientific and technical development should be supplemented by the component – "education". It is education at the present stage of human and social development that will determine the prospects and life cycle of the production product through modeling the quality level of the potential consumer and the economic system as a whole. Education is an element-communicator of certain classical subsystems.

The current difficult conditions of combating the latest pandemic and the intensification of military

events require the rapid redistribution of all types of resources, the activities of agricultural enterprises contribute to stabilizing the situation in the national economy and directly affect the main dimensions of human development. This is confirmed by the data of the State Statistics Service, according to which in 2020 the net profit of agricultural, forestry and fisheries enterprises amounted to UAH 81,129.2 million, while in general for all types of economic activity – UAH 80,700.4 million, in industry losses were recorded at UAH 39,807.5 million. Another important parameter is the fact that 82.6% of agricultural, forestry and fishery enterprises were profitable, while in general for all types of economic activity this figure was only 71%. Given the positive results, the authors believe that the wrong position is to passively observe the development of events without timely response to the emergence of new challenges. The defined concepts are related to the following dominant factors of rural development: the continuation of land reform, a new stage of which began on July 1, 2021; further decentralization, the first results of which revealed complex problems for which there are currently no effective instruments of state regulation; transformational changes in the development of agriculture, which are aimed at obtaining short-term benefits. Without a timely response to the change of dominants, positive trends in the activities of agricultural enterprises can be stopped with the subsequent emergence of threats and a new crisis. With changes in agricultural and construction policies, these same dominants can contribute to sustainable rural development.

The problems of agrarian and construction policy and rural development in relation to human development are in the field of view of such scientists as: O. Borodina, A. Veremeychuk, P. Hayyduky, V. Gotra, N. Gushtyk, H. Kaletnik, O. Kozich, V. Kravtsiv, V. Melko, V. Myagkokhod, O. Pronina, V. Romaska, Z. Titerenko, O. Chan-hee, O. Cherkasov. Given the importance and depth of scientific research, the issue of comprehensive perception and improvement of agrarian and construction policy in order to create conditions for improving the human development situation in the country remains insufficiently studied.

The study sets a number of tasks that provide for a consistent review of agricultural and construction policies with further clarification of the essence of the determining dominants as a basis for modeling the mechanism of coordination of regulation in order to create conditions for improving the level of human development of the country.

To model the mechanism of coordination of regulation of agrarian and construction policies, the methods of induction and deduction, comparison and systematization were used in the study of the

essential characteristics of agrarian and construction policies; synthesis and analysis – in assessing the results of land reform, decentralization and transformational changes in agricultural development; morphological analysis – to substantiate the content of the components of the mechanism of coordination of agrarian and construction policy; graphic – for clarity of presentation of theoretical and methodological material; abstract-logical – for theoretical generalizations and conclusions of the study.

The study is based on a systematic analysis of materials of the State Statistics Service of Ukraine.

## 2. Presentation of the main material

The complexity of the tasks is determined by the Law of Ukraine "On the Basic Principles of the State Agrarian Policy", which does not define the term "state agrarian policy", which is a significant problem that complicates the development of tactics and strategies by subjects (state and public institutions) to achieve the goals set out in the said legislative act.

Generalization of scientific achievements allowed to reveal the existence of several approaches ("orientation to the application of a set of measures", "direction of the state agrarian policy on the formation of favorable conditions for the development of the agrarian sector", "priority of rural development", "combined") to the interpretation of the essence of the concept of "state agrarian policy", common to which is the emphasis on the term "policy", which determines the actions, that is, the activities of the relevant bodies, with a focus on solving socially important problems. Avoiding a thorough consideration of the essence of each approach, the authors offer their own version, which is formed by taking into account the cornerstone provisions and eliminating contradictions. As understood by the authors, the essence of state agrarian policy can be defined as the activity of the state, in accordance with a scientifically sound strategy, regarding interaction with producers of agricultural and other products and the population to implement a set of tactical measures for the rational use of natural resources, food security and development of rural areas in order to improve human development in Ukraine. The authors made an attempt to combine the key factors of the existing approaches with the priorities of the State Agrarian Policy (hereinafter – SAP), in accordance with the European vector of the country's development. It is about increasing food production, ecologization, rational use of natural resources, social development of rural areas, which is possible due to the intensification of the functioning of agricultural and construction clusters.

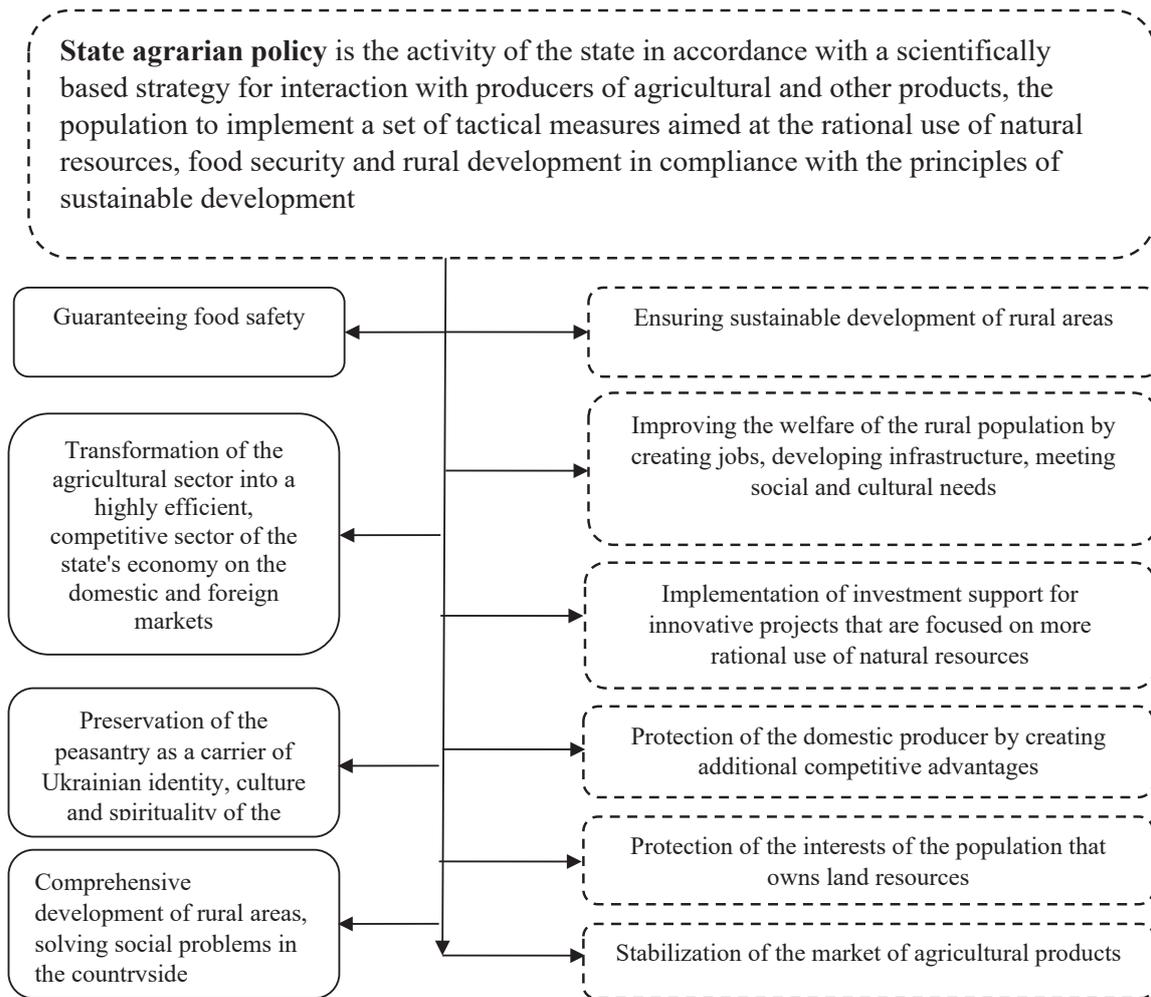
Article 1 of the Law of Ukraine "On the Basic Principles of the State Agrarian Policy for the period

up to 2015" limits the scope of application of the state agrarian policy to "...agriculture and fisheries, food industry and processing of agricultural products, agrarian science and education, social sphere of the village, their material, technical and financial support." The absence of a new law today confirms the lack of flexibility of the state agricultural policy, the lack of strategic guidelines, the inability to respond quickly to new challenges. This is confirmed by the Law of Ukraine "On the Principles of Domestic and Foreign Policy", in particular Article 7, which defines the principles of domestic agricultural policy as follows: "...creation of conditions for the revival of the Ukrainian village, efficient use of agricultural land, formation of a competitive agro-industrial complex, increasing its export potential, ensuring food security of the state; ensuring a high level of quality of agricultural products and food, formation of a transparent market for such products; formation of land market infrastructure, ensuring registration of title documents for land ownership." Despite the fact that the last amendments to the legislative act were made in 2018, some of its provisions can be considered morally outdated and do not contribute to improving the human development situation in Ukraine. The current modernization of the legislative framework of the state agrarian policy should be carried out taking into account the principles of the SAP, in terms of interrelated regulation of agricultural production and rural development, the WTO, on the use of the "green" and "yellow" boxes for financial support of national producers, and the FAO, to ensure access to quality and safe food. In accordance with the above, the authors propose to amend the list of strategic goals of the state agrarian policy, which are defined in Article 2 of the Law of Ukraine "On the Basic Principles of the State Agrarian Policy for the period up to 2015" (Figure 1).

The following positions require further explanation:

- there are some detailed individual goals that are defined in the legislative act, in particular in the social sphere. The position on "preservation of the peasantry" is devoid of any specificity. The position of the authors is in line with the modern SAP, when the population is offered both means and opportunities to meet all needs at a level not lower than in the city;
- the emphasis is on supporting domestic producers;
- the goal of protecting the interests of the population, which is the owner of land resources, is separately highlighted. This problem is related to the current stage of land reform and will be considered further. Even at this stage, it can be argued that without control over the land market, the development of rural areas will not only be threatened, but will also cause a new social crisis.

Therefore, it can be stated that the current legislation is characterized by a significant lag



**Figure 1. The essence and strategic goals of the state agrarian policy**

Source: supplemented by data: On the Basic Principles of the State Agrarian Policy for the period up to 2015: Law of Ukraine of 18.10.2005 № 2982-IV. Information of the Verkhovna Rada of Ukraine. 2006. № 1. P. 17.

behind the current needs of rural development. The erroneous focus solely on increasing agricultural production only complicates the situation, which against the background of economic instability can cause a complex social crisis, the solution of which requires significant resources and time.

In accordance with the defined tasks, in the future the attention will be paid to the state policy in the construction industry. Over the past 30 years, significant changes have taken place in the system of public administration of the construction industry. It is about partial re-profiling, periodic redistribution of functions and powers between state bodies. For example, in 1991–1992 there was the State Committee of the Ukrainian SSR for Architecture, Construction and Protection of Historical Heritage, which in 1992 was reformed into the Ministry of Investment and Construction, with the subsequent creation of the Ministry of Construction and Architecture on its basis. Nowadays, the industry is managed by the Ministry of Communities and

Territories Development of Ukraine, as well as departments within other ministries, in particular, the Ministry of Environmental Protection and Natural Resources of Ukraine and the Ministry of Infrastructure of Ukraine.

In this work, we agree with N. Gushtyk that today "the state policy in the field of construction is carried out through the development, adoption and application of normative legal acts, building codes and regulations." Among the main functions of public administration (forecasting, planning, organization, regulation, coordination and control), the priority is actually given to regulation, which provides for the implementation of measures by state structures to control the economic activities of market participants in order to solve the most important socio-economic problems of society. Along with this actual restriction, which does not contribute to the development of construction in our country at a higher pace, we consider it appropriate to agree with O. Kozych that within the framework of regulation "...formation of

goals and objectives of the construction complex development, determination of objects of regulation, organization of the management system, determination of subjects of regulation and formation of their structure, delimitation of functions and selection of necessary methods of regulation, evaluation of regulation results." All these stages should be accompanied by the application of appropriate forms of state regulation, namely: financial and credit support of business entities, logistics, tax preferences and management assistance, information support. Accordingly, it can be argued about the low level of state regulation. The position of V. Melko is sufficiently well-argued, which proves that "...today we observe a low level of control by state authorities in the field of construction, as well as low efficiency of state regulation of construction activities: illegal construction without appropriate permits and land rights; violation of technical standards of construction; non-compliance with environmental safety standards; insecurity of investors and potential building owners; high level of bureaucracy and difficulty in obtaining permit documentation for construction works; low level of application of the financial and credit mechanism and insurance mechanism, etc." O. Romansko also adds to the facts ... the development of recreational areas and places of rest and leisure, such as playgrounds and sports grounds... corruption, and sometimes fraud, which thousands of citizens fall victim to, left alone with their problems." The authors argue that today the actions or omissions of state structures regarding regulation in the construction industry are used contrary to the interests of society in favor of certain business structures.

Summing up, it is appropriate to emphasize that the state policy in the construction industry today, limited to the implementation of mainly regulatory management functions, does not create favorable conditions for improving the situation with human development in Ukraine. The main investor is the population and business structures. While the population is focused on meeting the need for housing, businesses are interested in industrial infrastructure in accordance with their production needs. In addition, the problem of social infrastructure has a clear tendency to aggravation.

Earlier, three dominant factors that directly affect agricultural and construction policies were identified. The first of them reproduces the land reform that was initiated in the early 90s, in particular due to the adoption by the Verkhovna Rada of Ukraine on December 18, 1990 of the Resolution "On Land Reform", which stated that "...the task of this reform is to redistribute land with its simultaneous transfer to private and collective ownership, as well as to enterprises, institutions and organizations in order to create conditions for equal development of various

forms of land management, formation of a multi-structured economy, rational use and protection of land." It should be admitted that the declared focus on the free ownership, use and disposal by each owner of his part of agricultural land has not yet been fully implemented. The next important stage began on July 1, 2021, when the land market was launched, albeit with significant restrictions. It is important to form a general idea of the changes that directly affected the development of rural areas, for which land remains the most valuable resource. Scientists of Vinnytsia National Agrarian University distinguish four stages of land reform: "... transformational to market environment (1991–1999); reformation (2000–2008); adaptation to WTO membership (2009–2013); the current stage of external influence (since 2014)." According to the authors, the launch of the land market makes it possible to distinguish the fifth stage, which began on July 1, 2021. This phasing is due to the complexity of the transformation processes, which consisted in denationalization, that is, the liquidation of collective and state farms with the formation of new agricultural producers, with the change of ownership of the main resource – land.

The prerequisites of the first one are the determination of the existence of an absolute monopoly of the state on land, the absence of payment for land as a resource that allows to obtain a product, and the lack of responsibility for the results of agricultural activities, when losses were covered by the state budget. The first stage was marked by legislative changes that provided for denationalization with the transfer of property rights to citizens, institutions and organizations. In accordance with the provisions of the Land Code of Ukraine, which was adopted on March 13, 1992, land resources and land used by collective and state farms were transferred to collective ownership to the economic entities created on their basis, i.e. collective agricultural enterprises. Despite this important step, members of the new entities did not become real owners of land resources. With the entry into force of the Decree of the President of Ukraine of August 8, 1995 "On the Procedure of Land Sharing Transferred to Collective Ownership of Agricultural Enterprises and Organizations", the process of issuing certificates certifying the right to a land share began. It was with this step that the process of transformation of collective property into private property began, which was subsequently reflected not only in documents, but also in the actual allocation of land plots.

Along with legislative initiatives, before the implementation of the Decree of the President of Ukraine "On Urgent Measures to Accelerate the Reform of the Agrarian Sector of the Economy" of December 3, 1999 № 1529/99, the main producers of agricultural products remained collective

agricultural enterprises, the results of which had a clear tendency to deteriorate. For example, the total gross agricultural output in 1999 was 137.5 billion UAH. In constant prices of 2010, when in the base year 1999 – 289 billion hryvnias. In the period 1995–1999, the average annual decline in production was recorded at 6.3%. Only Leonid Kuchma's legislative initiatives, which provided for the division of land and property of collective agricultural enterprises, the introduction of compulsory rent and a fixed tax for producers, the allocation of preferential loans, etc. made it possible to change the situation. In 2000 the volume of gross output increased to 151 billion UAH. It should be noted that L. Kuchma in his actions relied on the achievements of scientists and was forced to confront a powerful agrarian lobby, whose representatives tried to adhere to the socialist approach in the state agrarian policy, that is, with the preservation of absolute control over land resources. The main directions of land reform during the presidency of L. Kuchma P. Haidutskyi mentions the following "...1) land reform (land parceling, inventory, valuation, land lease); 2) economic reform (transformation of collective and state farms into private economic structures); 3) reform of the market for products (abolition of state orders, introduction of exchange trade, development of market infrastructure); 4) reform of the state support system (introduction of a fixed tax, preferential lending, targeted grant programs, subsidizing leasing of machinery; 5) reform of the system of social development of rural areas)." About 60 decrees signed by L. Kuchma on reforming, not only in terms of transformation of collective agricultural enterprises into private economic structures, but also on social development of rural areas, are the key point of land reform in Ukraine. Significant progress can be illustrated by the following analytical data, according to which in 2002 "...out of 42.7 million hectares of agricultural land, 32 million hectares were privately owned, 10.5 million hectares were state-owned, and 30 thousand hectares were communally owned." It is reasonable to agree with P. Haidutskyi's position that L. Kuchma stopped one step short of creating a land market, trying to solve this politically complicated issue by creating a land bank, but his initiative was not supported due to the interest of certain circles to take control of unshared land shares, the volume of which in 2002 was estimated at 3 million hectares.

According to the Land Code of Ukraine, which was adopted in 2002, a moratorium on the purchase and sale of agricultural land was established, which significantly slowed down the pace of land reform, effectively depriving 7 million citizens of the right to freely dispose of their property.

Within the framework of the third stage, which is connected with the accession of our country to the

WTO, official statistics indicate that agriculture is not subsidized until 2000, but as a budget-forming sector. Membership in the WTO, along with filling the domestic market, made it possible to increase export potential, and thus stabilize the national economy through the inflow of foreign currency. One cannot ignore the fact that export orientation has led to the emergence of new risks associated with dependence on the world market conditions.

The fourth stage is related to the adaptation of the legislative field of Ukraine to the terms of the "Association Agreement between Ukraine and the EU", which requires changes in the institutions of state regulation of the agricultural sector in accordance with EU practice, in particular in terms of decentralization, development of local self-government and the formation of public policy mechanisms, promotion of human development in Ukraine.

The dominant of them is related to decentralization, but in the context of land reform, it is appropriate to emphasize the fact that since 2014, 1.68 million hectares of agricultural land have been transferred from state to communal ownership (as of 2019, but this process continues), which allows communities to receive additional financial resources for social development through their lease.

This stage is also characterized by the annual postponement of the lifting of the moratorium due to the imposition of certain warnings on the society with which it was associated:

- the possibility of acquisition by individual companies of large areas of agricultural land with further uncontrolled use without taking into account the interests of the population of rural areas;
- speculative purchase of land from the population at low prices with subsequent resale at a higher price;
- loss of land resources due to their acquisition by foreign companies;
- incomplete reform of the land cadastre, which in combination with high centralization and corruption of officials does not provide the necessary level of protection of property rights of owners.

A significant part of owners, not being interested in independent agricultural activities, leased them, which cannot be considered a rational use of the country's land resources. This thesis is based on analytical data, according to which in 2019 the rental price of 1 hectare of agricultural land in Ukraine was 80 USD. While in France it was 165 USD, in Hungary – 194 USD, in Bulgaria – 278 USD and in Italy – 917 USD, which indicates a significant shortfall in income for owners. It is advisable to take into account that large agricultural holdings conclude lease agreements for a period of at least 7 years with the subsequent right of prolongation, which makes it impossible to increase the owners' income by renegotiating the agreement on more favorable terms.

Tenants suffer from the crushing of leasehold shares and cannot ensure further productivity growth. Thus, the average share size is roughly 4 hectares, when "...the optimal size of a grain farm is 300-400 hectares, and animal husbandry is unprofitable with an area of less than 55 hectares." Therefore, the losses from the moratorium are significant.

In this paper, it is agreed with the authors of the article "Strategy for the development of land relations in Ukraine", who confirm that due to the existence of a moratorium on the purchase/sale of agricultural land and the existing state management of land resources, Ukraine is significantly inferior to other countries in terms of agricultural efficiency. Analytical data, according to which: "...the volume of added value of agricultural production per hectare of agricultural land in Ukraine in 2019 amounted to 355 USD, compared to 792 USD in Poland, 502 USD in Brazil, 1316 USD in Germany, 1558 USD and 456 USD in the USA."

The fifth stage, in addition to the launch of the land market, is interesting in relation to the issues under study because, in accordance with the provisions of the Law of Ukraine "On Amendments to the Land Code of Ukraine and Other Legislative Acts on Improving the Management System and Deregulation in the Field of Land Relations", which was signed by the President of Ukraine on May 24, 2021, determines the procedure for transferring land plots located outside settlements to communal ownership to village, settlement, city councils, which creates new resources for the development of rural areas.

According to the results of the study, we argue that over the past thirty years there has been a significant change in approaches to the use of land as the main resource for agricultural production and rural development. The elimination of the state monopoly on land contributed to the formation of a new generation of owners, the transition from inefficient forms of organization in the form of collective and state farms, and later collective agricultural enterprises to private structures, the acquisition by local communities of land resources within and outside settlements as an additional source of income to finance socially important projects. Today's stage, marked by the launch of the land market, is characterized not only by a number of restrictions on free disposal, but also by a high probability of new risks associated with an increase in the number of raider attacks, financial constraints of medium and small farmers in access to land resources, a decrease in diversification in land use due to the increase in land resources owned by agricultural holdings, the release of labor with the deepening social crisis in rural areas. Accordingly, the need to develop mechanisms that would allow to respond to the identified risks in order to prevent their further transformation into real

threats to the agrarian sector of our country, form the basis for improving the situation with human development by using new opportunities that have emerged. One of the mechanisms should be related to the formation and development of agrarian and construction clusters, whose activities are focused on more efficient use of natural resources and creation of conditions for full satisfaction of the needs of the population of rural areas.

The second dominant, defined as the one associated with decentralization. The relevance of administrative and financial decentralization, which actually began in 2014, O. Pronina connects with "...insufficient funding for the development of rural areas, the weak development of the local self-government institute, the lack of effective mechanisms for the implementation of sustainable rural development programs." The importance of the reform is justified by the multidirectional vectors of rural and agricultural development. Since 2000, agricultural production has been characterized by generally positive dynamics, in particular in the cultivation and export of grain, while at the same time there has been a reduction in the number of employees at agricultural enterprises and deterioration of social infrastructure. The state agricultural policy provides support to agricultural producers in connection with the growth of their role in stabilizing the national economy. The Decree of the President of Ukraine "Basic Principles of Rural Social Sphere Development" (2000) and "State Program of Rural Social Sphere Development for the period up to 2005" (2002), "State Target Program of Ukrainian Rural Development for the period up to 2015" (2007) were mainly declarative in nature, as they did not contain a real mechanism of financial support for rural development.

In the short period of time since the start of decentralization, some conclusions can be drawn about its results, but it is difficult to fully assess its impact on sustainable rural development, in particular because of the relationship with the land reform under consideration. Therefore, the authors will focus on two facts: the tasks and expectations from decentralization and the real results for today, which concern rural areas. An important clarification is that decentralization is the whole system of public administration, not just rural areas.

In the most general sense, decentralization is defined as "...the process of redistributing or dispersing functions, powers, people, or things from central control." That is, it is about the transfer of some functions from central government to local self-government bodies. For rural areas, given the analytical data on the level of employment, welfare, the ability to meet the needs of the population, the changes should be positive. It is not only about increasing the financial resources for the

implementation of socially important projects, but also about the fact that local residents participate in the formation of requests for their development, based on real needs, are ready to join the implementation process and, in the future, act as consumers. The following points deserve attention: firstly, the possibility of using the so-called "social mobilization" method; secondly, the focus on the implementation of micro-projects, rather than large projects, i.e., with a clear definition of the end user. Social mobilization consists in uniting different people into groups to meet a common need, based on their own capabilities. Social mobilization is characterized by: a high level of self-organization, the absence of any restrictions for participants, priority in achieving common interests both through coordination and partial personal restrictions. Personalization of needs is the basis for consideration of projects that are relevant within the community, they are inferior in scale to those that can be implemented under conditions of centralized management, but the effectiveness is much higher, in particular, due to passive support and active participation on the basis of partnerships.

Thus, it can be argued that decentralization as a process is designed to solve a number of complex problems related to improving the situation with human development, in particular in terms of multifunctional development within rural areas through the implementation of projects to support non-agricultural production with more efficient use of available resources and compliance with the principles of sustainable development.

Today, the results of decentralization in Ukraine can be assessed only as intermediate, in particular, due to the low speed of changes in the transfer of powers and redistribution of financial resources. The emphasis is only on those points that relate to the development of rural areas as a basis for further development of a mechanism for coordinating the regulation of agricultural and construction policies.

A. Wiremeichyk and O. Ruban offer the following information to characterize the current results of decentralization: "...before the reform, 92% of rural communities had less than 3,000 inhabitants, almost 11% of rural territorial communities had less than 500 inhabitants. At the same time, in more than 50% of rural communities, the subsidy was more than 70%. In general, 483 territorial communities were supported by subsidies for 90%." The above analytical data explains the gradual decline of social infrastructure in rural areas, which was caused by the dispersion of funding from the state budget, and its volumes could not be used for improvement, but only for the minimum level of support for socially important facilities.

According to the Decentralisation website, as of July 2021, 1,470 hromadas have been formed in

Ukraine, including 627 rural ones with a population of 4,926,682 people and a total area of 173,444.0 km<sup>2</sup>, uniting 3,291 councils. The number of amalgamated councils varies significantly – from 2 to 24. Another fact is that the AHs include villages with centers in cities and urban-type settlements, which, accordingly, significantly complicates the analysis of trends in rural development before and after decentralization. For confirmation, the publications of V. Gotra and A. Kovach emphasize the fact that "...at the beginning of 2019, the composition of the united territorial communities included an average of 11 villages, but the majority (55%) with centers in the cities and towns of the city type. On average, there are 14 villages per urban (rural) united territorial community, and 9 villages per rural community." The amalgamation of several villages around a city as an economic, social and cultural center provides such communities with significant advantages compared to rural Amalgamated hromadas (hereinafter – AHs), which leads to an imbalance in the level of development already at the initial stages of the reform. Rural AHs with a small population and area and without functioning producers (taxpayers) are characterized by low capacity. By this term, the authors who prepared the practical guide on decentralization understand "...a hromada in which local sources of budget revenues, infrastructure and human resources are sufficient for local self-government bodies to solve local issues envisaged by the legislation in the interests of the residents of the hromada."

According to the above-mentioned website "Decentralization", during 2015–2021 with a forecast for 2022, there is a positive dynamics of growth of the share of local budgets (without transfers) in the consolidated budget of Ukraine. Thus, this share in 2015 was 18.5%, and in 2019 reached 23.3% with a slight decrease in 2020 to 22.6%. It is also important that the share of transfers in revenues is gradually decreasing – from 59.1% in 2015 to 34.0% in 2020, which is partly due to the growth of local budget revenues. It is appropriate to agree with the position of Z. Titenko on the importance of voluntary amalgamation of more hromadas with a larger population, which due to the deduction of 60% of personal income tax allows to form a larger budget to achieve the goals of the hromada. Small communities do not have the necessary human resources for development, although the exception is those where large budget-forming enterprises are located. In addition, the amount of state support in the form of subventions is carried out taking into account "...the area of the united territorial community and the number of rural population in such a territorial community with equal weight of both of these factors."

According to official sources, today in Ukraine there are signs of increasing disparities in the development of territories. Thus, the average income per capita in January-May 2021 in Ukraine amounted to UAH 3358.4, which is 21.2% more than in the same period in 2020. In addition, in the regional context, the lowest level of this indicator was in Transcarpathian region – UAH 1,921.6, and the highest in the city of Kyiv – UAH 7,305.1. Accordingly, the share of own income in total income in these administrative-territorial units was 49.4% and 90.6%.

In addition to the risk of deepening disparities in the levels of development, the issues of territorial associations have become relevant today, which require the development of appropriate mechanisms. Risks, according to the generalization and clarification, include:

- reduction of the state budget if it is necessary to further perform the function of protection of socially vulnerable groups of the population;
- weakening of control over the efficiency of the use of local budgets by the state in the absence or imperfection of the institution of public control;
- imbalance between the powers and available resources of local self-government;
- regional centres and AHs established with the participation of cities have greater economic and labour potential and developed social infrastructure, and therefore, acting as regional centres, become more attractive for further employment and permanent residence of the rural population, which deepens the demographic crisis in rural areas;
- growing influence of local elites on the process of formation of revenues and expenditures of local self-government bodies in order to lobby the interests of their own business;
- impossibility to meet the social needs of the population within rural AHs due to limited resources;
- failure to take into account the socio-economic needs of AHs in the distribution of subventions;
- the existence of the practice of influence of people's deputies on the distribution of subventions;
- focus on achieving short-term goals, i.e., maintaining an acceptable level of social infrastructure, and lack of understanding of the need to achieve strategic goals in the form of increasing the investment attractiveness of rural areas.

It is difficult to assess the results of decentralization unambiguously, given the fact that since 2014, changes have been made to the implementation process, which have significantly affected the level of capacity of the AHs to meet the socio-economic needs of the population. Decentralization is accompanied by the emergence of a number of risks, the lack of response to which, in the form of the application of corrective mechanisms, can complicate the process of rural development.

The third dominant factor – transformational changes in the development of agriculture – is directly related to the agricultural development of Ukraine. Thus, a group of scientists convincingly argues that the current situation with the lease of land resources has a number of threats associated with "...deformation of the structure of gross agricultural output (in 2014, crop production accounted for 71%, and livestock – 29%); refusal to keep livestock – 56% of enterprises are not engaged in it; large-scale spread of monocultures (the most profitable crops – wheat, corn, sunflower, rapeseed occupy 80% of the area), etc." Updated data, according to the State Statistics Service, indicate that the share of crop production increased to 79.1% in 2019, soybean acreage has increased 13 times in 29 years, and rapeseed – 15.5 times, that is, this disproportion has only increased. The focus on higher profits in the short term leads to a higher level of soil depletion due to non-compliance with crop rotation policy. If to add to this the uncontrolled use of cheap and low-quality agrochemicals, which harms the land and adversely affects the health of villagers bordering the fields, then in the future our country may lose part of the most valuable resource – fertile soils. These actions are partly related to the uncontrolled actions of tenants who are focused on making quick profits, which causes an environmental disaster and deterioration of the quality parameters of soils that remain in the ownership of the rural population, thereby complicating the possibility of achieving and maintaining sustainable development goals and improving the human development situation.

Scientific sources substantiate the need for the integrated application of "...market, state and corporate mechanisms of regulation" of agricultural production. In addition, the connection of tasks with the improvement of the situation with human development is taken into account, which requires the development and application of a mechanism for coordinating the regulation of agricultural and construction policies, taking into account three key dominants: land reform, decentralization and transformational changes." (Figure 2)

The author's position differs from the existing view on the coordination of agrarian and construction policies as the basis for the development of agrarian and construction clusters, which forms the necessary basis for solving a whole range of complex problems that are characteristic of rural areas and are determined by the content of the three dominants.

The integrity of the perception of the content of the identified dominants and the consideration of international experience in sustainable rural development allowed us to substantiate the strategy, goals and objectives that can be achieved through the harmonization of agricultural and construction

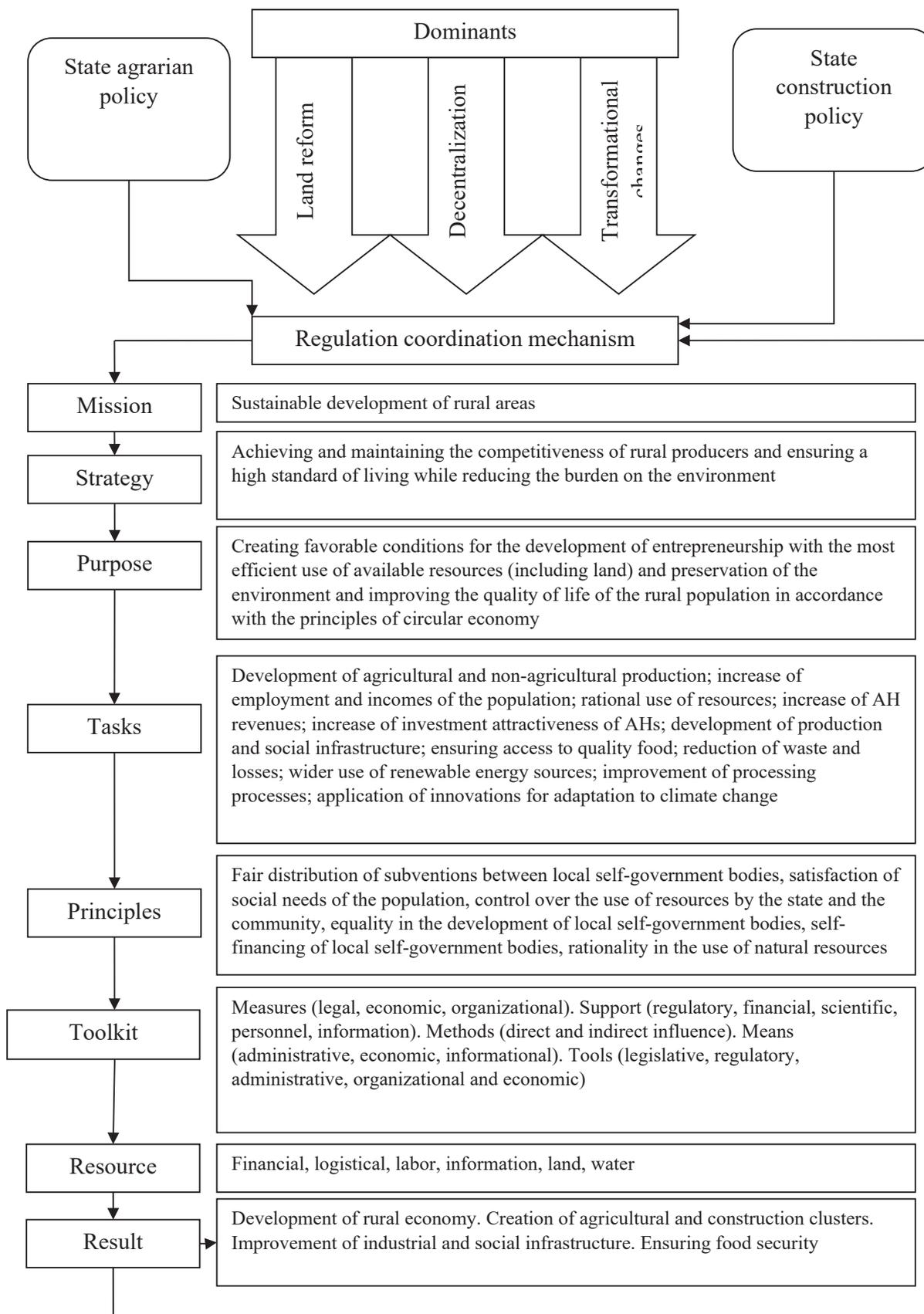


Figure 2. Model mechanism for coordination of agricultural and construction policy regulation as a basis for sustainable rural development and improvement of human development

policy regulation, which, accordingly, should contribute to improving the human development situation in our country.

### 3. Conclusions

The study proves that without harmonization of agricultural and construction policies, taking into account the priority of rural production for further stabilization of the national economy and the need to form social infrastructure and diversification in the use of rural resources, threats may arise in the future, the impact of which will spread to industries of all countries. Land reform, decentralization and transformational changes in agriculture require the prompt application of measures that would ensure

the coordination of the interests of the state, business structures and the population in order to improve the situation with human development. The development of social infrastructure and creation of proper conditions for labor activity will contribute to the stabilization of economic, social and demographic situation in the whole country and individual regions. Each position of the formed model of the coordination mechanism of regulation of agrarian and construction policy is supported by the considered key facts and is based on analytical materials on the activities of agricultural producers, construction enterprises, rural development. Further research can be conducted in the direction of substantiation of ways to intensify the formation and development of agro-industrial and construction clusters.

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# CRIMINOLOGICAL PROVISION OF ECONOMIC SECURITY IN UKRAINE

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**Abstract.** *The purpose* of the article is to disclose the essence of criminological protection of public relations; to differentiate the areas of criminological protection of economic security; to provide proposals for improving criminological science with regard to the protection of public relations in the economic sphere. The scientific discussion on the problem of improving the mechanism of criminological provision of economic security in Ukraine is presented. The author's vision of the essence and content of criminological protection is formulated. Due attention is focused on the institutional provision of economic security protection, which is represented in the totality of activities of regulatory institutions, which is implemented through the performance of specific functions in the economic sphere. The organizational and managerial sphere of criminological protection of economic security is characterized. Its activity is aimed at creating a mechanism for counteracting and protecting the economy from criminal manifestations, which includes a set of measures aimed at timely impact on criminogenic threats and risks in the economy. A number of problematic aspects that hinder the development of the Ukrainian economy are identified: 1) lack of an established system of protection of information activity, which, as a result, can potentially destabilize the economic sphere; 2) absence of specific measures and means of criminological influence on economic criminal unlawful activity; 3) low level of protection against criminal offenses in the sphere of economy committed with the help of computer technologies; 4) lack of a unified approach to the strategy of prevention of economic criminal offenses. *Results.* The definition of criminological protection is proposed. It is established that the criminological provision of economic security should be aimed primarily at eliminating general social determinants, such as increasing the investment attractiveness of the national economy, improving tax culture, simplifying customs procedures, forecasting market conditions, globalization of stock markets, etc. It is proved that the improvement of criminological provision of economic security can be realized through the following: development of the information system in terms of creating a single unified platform for monitoring the economic situation in the country and forecasting potential risks; improvement of coordination of activities of economic security and criminal protection entities in terms of reducing competition and conflict of interest; increasing the level of international and European cooperation in terms of criminological protection and ensuring economic security; synchronization of national and foreign criminological policy in terms of ensuring economic security.

**Key words:** economic security, criminological protection, criminological support, national security, information system, economic situation.

**JEL Classification:** K14, F52

## 1. Introduction

Protection of the national security of Ukraine is a priority task of the state, especially in the conditions of a special legal regime. An integral component of national security is economic security, which is a set of measures and means aimed at ensuring the growth of economic indicators, controlling the economic situation and preventing the impact of destabilizing

factors. The above shows that any unlawful encroachments on economic security can cause a serious "blow" to a number of social relations, and therefore there is an urgent need to create a modern mechanism of criminological provision of economic security in Ukraine.

In the field of domestic scientific research there are a number of works devoted to the problems of

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improving the criminological policy in terms of protecting the economy of the state (P. Andrushko, O. Bandurka, V. Batoryhareieva, T. Denisova, O. Dzhuzha, V. Tuliakov, V. Shakun, etc.). However, the disclosure of the issue of criminological provision of economic security of the state requires additional attention, which emphasizes the relevance of the topic of the article.

**The purpose of the article** is to reveal the essence of criminological protection of public relations; differentiation of directions of criminological protection of economic security; presentation of proposals for improving criminological science in terms of protection of public relations in the economic sphere.

## 2. Criminological protection as an element of ensuring the security of public relations

Criminological protection is an integral element of ensuring criminological security. In modern conditions, criminological protection should be understood as a set of provisions enshrined in normative legal acts and documents that establish the specifics of criminal law regulation of social relations, as well as determine the algorithm for responding to illegal activities by entities whose direct responsibilities include counteraction and prevention of socially dangerous manifestations, as well as the establishment of legal prohibitions and restrictions in case of encroachment on the legitimate rights and interests of Ukrainian citizens.

Measures of criminological protection should solve specific preventive tasks, including:

1) creation of such conditions under which criminal activity will be unprofitable, when the cost of time, effort, means, funds for committing a crime exceeds the expected result. Such conditions include the desire to make it impossible to sell the property obtained by criminal means, applying special and hidden markings that are difficult to remove; creating databases and catalogues of particularly valuable and rare items (antiques, works of art, etc.);

2) development and implementation of elements of direct protection of objects of possible encroachment. This should include technical means of strengthening the objects of encroachment, such as installation of bars on windows, replacement of doors and locks, installation of alarm systems (Mozol, 2021).

Creating conditions that make criminal unlawful activity impossible or make it uninteresting and unprofitable for the criminal is the main task that is entrusted not only to criminal law, but also to criminological, forensic and operational-search policy.

The popularization of the foreign anti-victim model of "zero tolerance to criminal offenses" "works backwards", that is, implements criminological policy

through citizens who suffer from socially dangerous offenses. Timely preventive work on training in the peculiarities of observance of elementary security measures, both personal and property (if it is about local actions, and not such large-scale as economic offenses) is one of the best ways of criminological protection of a number of social relations.

The key issue in this aspect should be the development of special standards of criminological protection in all spheres of human activity. For example: in the financial sphere it is to stimulate the increase of non-cash circulation of funds, development of methods of financial transactions that reduce the possibility of theft and abuse; in the field of high technologies – creation of analytical programs that will detect atypical, suspicious financial transactions, creation of technological means that will allow processing raw materials (precious metals, petroleum products, alcohol, tobacco, etc.) with minimal human intervention, implementation of programs for the administration of administrative services without physical contact with state bodies and institutions (Mozol, 2021).

That is why today the issues of informatization and digitalization of society are becoming increasingly popular. It is worth agreeing that, subject to all conditions for the protection of information prohibited for public access, such an approach will not only simplify the work of a number of organizations, enterprises, institutions, etc. but will also help prevent certain types of criminal offenses. The following measures of criminological protection are:

3) creation of effective barriers and difficulties for criminal activity while informing the public about the work done so that potential criminals realize the futility of their activities. Among them may be measures to introduce various special security regimes at the objects of possible attacks (pass regime, border regime, migration security regime, etc.), as well as the introduction of measures under which the means of committing criminal offenses become inaccessible to criminals (total inspection of weapons owners, inspection of personal belongings of visitors to mass cultural or sports events), etc;

4) spreading the practice of applying measures aimed at increasing the probability of detecting and detaining offenders. Such measures include the organization of rapid interaction with law enforcement agencies through specially installed so-called "panic buttons" in public places, optimization and change of patrol routes by patrol police officers, etc. (Mozol, 2021) Involvement of citizens in the programs of prevention of criminal illegal activity is becoming more and more important every year. Over the past decades, the community as a subject of such prevention has remained outside the attention of the legislator, which is due to the

unproven, in the authors' opinion, position on its ineffectiveness. Moreover, the existing criminal law measures that provide for the involvement of citizens in the interaction with criminal offenders were ignored.

Scientists also note that the widespread installation of video surveillance at the objects of possible encroachment significantly contributes to the detection of offenders (for example, the information space "Safe City", which is a security system of Ukrainian communities, implemented as a set of innovative solutions that provides video recording of traffic and pedestrians and allows monitoring and management of the activities of utilities, police and the State Emergency Service of Ukraine (specified by authors – author's note) in the settlement).

For effective application of criminological protection measures it is necessary to pay attention to specific criminogenic situations and analyze, study and systematize them. This will make it possible to develop standard crime prevention measures depending on the prevalence of certain criminal offenses, which in turn will have a positive impact on the overall crime dynamics.

Thus, even a superficial analysis of the functioning of criminological protection in Ukraine shows that there are grounds for its improvement in terms of unused potential of preventive activities (Mozol, 2021). Therefore, criminological protection involves the application of a number of measures aimed at both interaction with criminal offenders and their victims, and general assistance in improving strategic planning to counter socially dangerous manifestations.

### 3. Main directions of criminological provision of economic security in Ukraine

Criminological protection of economic security should be aimed primarily at eliminating general social determinants, such as, for example, increasing the investment attractiveness of the national economy, improving tax culture, simplifying customs procedures, forecasting market conditions, globalization of stock markets, improving the use of human capital in providing conditions for the development of the national economy, etc. The strategic course in the field of economic security has two interrelated directions – development and security (Economic Security Strategy of Ukraine until 2025). Given the processes of shadowing and criminalization of economic relations, the security direction must necessarily include measures to neutralize threats of a criminal nature (Chernyshov, 2022). According to T. V. Melnychuk, the concept of criminological security of the economy consists of the following elements:

1. Security objects (relations regarding the production, exchange, distribution and consumption of goods and services; the economic system as a whole and its individual components in the field of protection against criminogenic manifestations and the ability to resist them (elimination of victimization)).

2. The goal of criminological security. The real, not utopian (complete elimination of threats) goal can be defined as minimization of external and internal threats to the economy.

3. The main risks (threats) of criminological security.

4. Organizational and legal provision of criminological security of the economy (Melnychuk, 2018).

Thus, by creating a symbiosis of development and security, an effective mechanism of criminological protection of the economy is created, aimed at preventing criminal offenses through the timely detection of risks and their elimination at early stages. In this aspect, it is necessary to pay attention to the institutional support of criminological protection of economic security, which is understood as a set of activities of normatively defined institutions, implemented through the performance of specific functions assigned to them in the field of economy. Criminological support of economic security is also carried out in a number of areas, including regulatory, organizational, managerial, informational, scientific and methodological support.

Regulatory and legal support. Counteraction to crime, including economic crime, is based on the legislative framework that guides the subjects of relevant activities in the implementation of their duties. In essence, it is the creation of material and procedural conditions to ensure the effectiveness of the subjects of combating economic crime.

The legal means of combating crime include the following:

- 1) the Constitution of Ukraine;
- 2) international treaties ratified by the Verkhovna Rada of Ukraine;
- 3) codified normative legal acts;
- 4) laws of Ukraine;
- 5) by-laws;
- 6) acts of application of legal norms;
- 7) judicial precedent and judicial practice. The relevance of the study of this area of criminological support is determined by the reform and constant legislative changes in the legal regulation of economic processes in the country. Legal regulation, legal means, legal phenomena and legal influence form the basis of regulatory and legal support for combating crime, with the help of which the subjects of combating crime carry out appropriate measures (Sazonov, 2019)

In a general sense, most legal acts and documents aimed at protecting economic security are aimed at defining strategies for economic development for

a certain period of time. Another part is aimed at direct legal prevention of encroachments in the economic sphere). Inconsistency and lack of coordination of normative acts on regulation of economic processes led to serious mistakes made at the initial stages of reforms, weakening of the system of state regulation and control, which together with imperfection of the legislative framework, lack of effective state policy in the social sphere, decline of spirituality and morality of society became the main factors that contributed to the growth of crime, especially its organized forms, as well as corruption.

In leading Western countries, the concept of national economic security is the theoretical basis of the country's economic policy. It is formed by the joint efforts of scientists and specialists of certain state structures and reflects in a concentrated form the views on the essence of changes and ways to protect national economic interests.

Analyzing the state of legislative support for combating economic crime, it should be noted that its significant drawback is the lack of a single legal act that would regulate state policy in this area (Sazonov, 2019). Currently, there is no general concept of national economic security in Ukraine, which is due to the lack of a universal legislative vision of the platform for its implementation.

All existing threats and minor problems are solved by applying auxiliary economic measures and means created for direct use in addressing other needs of the Ukrainian economy. That is why every year the latter is increasingly under attack due to the development of economic criminal activity and the growth of "professionalism" of its subjects.

Organizational and managerial support. The effectiveness of the relevant subjects of combating economic crime directly depends on the quality of organizational support, because the organization is a crucial link in any activity. The essence of organization is that everyone should be in their place and perform their duties. This very simple truth is at the same time the basis of the science and practice of management, including in the field of combating crime. In the field of combating crime, as in other areas, management and organization are inextricably linked and interdependent (Bandurka, Litvinov, 2012).

Organizational and managerial sphere of criminological provision of economic security is an activity aimed at creating a mechanism for counteracting and preventing economic criminal manifestations, which includes a set of measures aimed at timely impact on criminogenic threats and risks in the economic sphere. Information support of law enforcement is a qualitatively necessary basis for improving the effectiveness of combating crime. Prevention and minimization of negative consequences, efficiency and effectiveness of combating them depend on the quality and adequacy

of information about potential and real threats to the economic security of the country.

Information support of combating economic crime is a structurally complex activity of the relevant authorities aimed at obtaining, using, storing, processing and transmitting criminologically significant information in order to solve the main tasks of combating criminal manifestations that pose a threat to the economic security of the country.

Modern development of information technologies changes both society and crime as a social phenomenon. Information and network relations in various spheres of life are becoming increasingly important. Cybercrimes are becoming increasingly widespread, which have significant specifics of commission and prevention. In view of this, information support for combating economic crime must meet the requirements of the time (Sazonov, 2019). Unfortunately, modern Ukraine has not yet fully realized itself in terms of information support and information security. The active development of the information society often leads to a deterioration of the criminological situation in the economic sphere, rather than to the improvement of domestic interaction between the subjects of economic policy implementation, which is associated with the increase in the professionalism of criminal offenders. In this regard, according to the authors, it is important to create a unified information platform to ensure economic security, monitoring and forecasting of potential risks and threats.

Scientific and methodological support. The effectiveness of combating crime depends on the degree of scientific and analytical support at all levels, the intensity of interaction between scientists and practitioners of various specialized fields of science in order to form a coherent integrated holistic scientific product. Negative processes and trends taking place in Ukraine require constant scientific monitoring, detailed study of the crime situation and making appropriate adjustments to the strategy and tactics of combating crime (Bandurka, Lytvynov, 2018).

Criminological research plays an exceptional role in this process. They are invaluable for timely identification of gaps in the legal regulation of issues related to economic security and solving problems of law enforcement practice. One of the main goals of criminological research is the practice of their implementation in law enforcement. It is criminological science that is looking for scientifically sound ways to solve problematic issues related to crime and measures to counter it. They are embodied in the development of practical recommendations on organizational and methodological aspects of combating crime in general and economic crime in particular.

These studies provide grounds for such activities as criminological monitoring, criminological forecasting and criminological planning of crime prevention. They are the basis for determining trends in the development of economic crime, substantiating its forecasting, planning measures to counter it, determining the main directions of its development (Sazonov, 2019).

Therefore, the directions of improving the criminological provision of economic security determine its general strategic course, which forms the criminological policy in the field of the state economy.

#### **4. Improvement of criminological provision of economic security in Ukraine**

National economic security requires appropriate changes that will contribute to its improvement. A number of such changes lie in the area of criminological protection and provision. Improvement of criminological provision of economic security can be achieved by: 1) development of an information system in terms of creating a single unified platform for monitoring the economic situation in the country and forecasting potential risks; 2) improving the coordination of activities of economic security and criminal protection entities in terms of reducing competition and conflicts of interest; 3) increasing the level of international and European cooperation in the field of criminal protection and economic security; 4) synchronization of national and foreign criminological policy in terms of economic security. The third and fourth points are especially relevant in connection with recent events. Scientists rightly point out that the main forms of international cooperation of Ukraine, as one of the means of improving the criminological provision of economic security, include the following forms of cooperation: the conclusion of multilateral international legal treaties; joint consultations to develop a national and international strategy for each of the cooperating countries on the criminological provision of preventive activities in the economic sphere; Participation of Ukraine in international organizations specializing in the fight against crime in the sphere of economy and its auxiliary direction – criminological provision of economic security; development of current and long-term programs of cooperation in the sphere of criminological provision of economic security; exchange of experience with organizations and conducting preventive activities in the sphere of economic security.

The study of the international aspect of ensuring criminal security in the sphere of the Ukrainian economy showed that there are a number of different forms of international cooperation in this area

(Sazonov, 2020). This is also particularly relevant in view of our country's accession to the ENTSO-E synchronous network of continental Europe, which took place on February 16, 2022, after Ukraine's application for accession to the European Union on February 28, 2022. The creation of appropriate criminological strategies that take into account foreign experience and international standards of economic security will provide an opportunity to timely identify potential socially dangerous risks and create measures and means to overcome them.

The European practice is more progressive in terms of protection of economic cyberspace, which is very important and valuable given that certain sectors of the economy are increasingly suffering from hacker attacks, as well as other criminal offenses committed with the use of computer technology.

Taking into account the international standards of criminological provision of economic security, the EU bodies, recognizing the serious and growing threat of international organized crime, primarily economic, to the very existence of the European Union, adopted a number of legislative acts aimed at combating corruption in the private sector of the economy, money laundering, illegal insider trading and fraud, equating financial and economic crime (Sazonov, 2020). These provisions are updated in the standards developed by the International Organization for Standardization and reflected in a number of national legal acts and documents. For example, the Decree of the President of Ukraine of September 30, 2019 No. 722/2019 "On the Sustainable Development Goals of Ukraine for the period up to 2030" states that the Sustainable Development Goals of Ukraine for the period up to 2030 are guidelines for the development of draft forecast and program documents, draft regulatory legal acts with the aim of ensuring a balance of economic, social and environmental dimensions in the sustainable development of Ukraine (Decree of the President of Ukraine No. 722/2019 "On Sustainable Development Goals of Ukraine for the period up to 2030" dated September 30, 2019). Thus, the document points to the need to ensure the normal functioning of society by synchronizing economic, social and environmental components. Certain international and European standards for ensuring economic security are also implemented in the Main directions of development of the system for preventing and counteracting the legalization (laundering) of proceeds from crime, the financing of terrorism and the financing of the proliferation of weapons of mass destruction in Ukraine for the period up to 2023, approved by the Order of the Cabinet of Ministers of Ukraine No. 435 of May 12, 2021, which states that the system of

prevention and counteraction to legalization (laundering) of proceeds of crime, financing of terrorism and financing of proliferation of weapons of mass destruction within the framework of the United Nations documents, international conventions ratified by Ukraine, the standards of the Financial Action Task Force (FATF) and standards equivalent to those adopted by the EU are recognized as an essential element of the economic security of a modern state (The main directions of the development of the system of prevention and counteraction to legalization (laundering) of proceeds of crime, financing of terrorism and financing of proliferation of weapons of mass destruction in Ukraine for the period up to 2023, approved by the Order of the Cabinet of Ministers of Ukraine No. 435-p dated May 12, 2021). It should also be noted that certain peculiarities of ensuring criminological protection of economic security are also provided for in the normative legal acts devoted to the implementation of anti-corruption policy, the liberalization of the visa regime for Ukraine by the European Union, as well as in Section VII ("Criminal offenses in the field of economic activity") of the Criminal Code of Ukraine.

## 5. Conclusions

Thus, in the course of the research it was possible to summarize that the platform of criminological provision of economic security is implemented through international and European standards of integration of national security protection.

The reproduction of modern information and technological trends in criminological practice brings Ukraine closer to the actualization of the needs of a modern European state.

Despite this positive situation, it is impossible to ignore a number of problematic aspects that hinder the development of the Ukrainian economy: 1) the lack of an established system of protection of information activities, which, as a result, can potentially destabilize the economic sphere; 2) the unavailability of specific measures and means of criminological influence on economic illegal activities; 3) low level of protection against criminal offenses in the field of economy committed with the use of computer technologies; 4) no unified vision of the strategy for combating criminal offenses in the field of economy.

This indicates the need to move away from rudimentary forms of economic security and give preference to more modern ones that meet the needs of the mentality of the Ukrainian state and its people.

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# PECULIARITIES OF FRESHWATER RESOURCES MANAGEMENT: NATIONAL AND EUROPEAN EXPERIENCE AND CURRENT TRENDS

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**Abstract.** *The subject* of the study is the current features of freshwater management in European countries and experience for Ukraine. *Methodology.* The study used general scientific methods, in particular: theoretical generalization; methods of positive and normative analysis and statistical analysis. The *goal* is to study the European experience in freshwater management and adapt it for Ukraine. *Research conclusion.* An analysis of the water supply of European households has been carried out and it has been found that there is no "water stress" under such conditions. However, with the global water scarcity resulting from population growth and urbanization, particularly tourism, in recent years, negative factors have particularly affected water use in small Mediterranean islands and in densely populated areas. To stabilize this situation, EU member states have been asked to report on each of the monitoring stations that have been removed from their monitoring network, the reason for such removal and the alternative stations installed in case of persistent pollution. It was found that trends can be calculated for 83% of groundwater stations (so far only 20% in Sweden) and 75% of surface water stations (but less than 50% for Greece, Hungary, Latvia, Malta, Slovakia and Sweden). The importance of freshwater and seawater remediation measures by EU Member States under Directive 24 to reduce the impact of eutrophication caused by nitrates or phosphorus is stressed. It was found that European integration strategies in the field of environmental protection are characterized by improving water quality and water management; environmental management and integration of environmental policies; ensuring air quality; waste management; reducing the use of genetically modified organisms. It is justified that to assess the effectiveness of the implementation of the environmental component (natural environment) in the Association Agreement, the authors will analyze Ukraine on the index of environmental performance (The Environmental Performance Index), which provides a quantitative basis for comparison, analysis and understanding of environmental indicators in 180 countries.

**Key words:** freshwater resources, management, European experience, Index of ecological efficiency.

**JEL Classification:** O13, O32, Q28

## 1. Introduction

Today, the prospect of water resources management, underlying the main strategic components of state water policy, is the introduction of an integrated water resources management system based on the basin principle, which meets the requirements of the EU Water Framework Directive (EU Water Framework Directive 2000/60/EC, 2006). Such a mechanism for water resources management is reflected in the Laws of Ukraine "On the Basic Principles (Strategy) of State Environmental Policy

until 2020" and "On the National Target Program of development of water and environmental improvement of the Dnieper River basin until 2021" (Law of Ukraine, 2012).

According to the Association Agreement between Ukraine and the European Union, Ukraine undertakes to bring its legislation closer to the EU legislation within the deadline from the date of entry into force of the Agreement (November 1, 2014) (Association Agreement between Ukraine..., 2021), on the one hand, and the European Union and its member states.

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Therefore, under such conditions there is a need to study general trends and peculiarities of freshwater management in Europe and Ukraine.

The Nitrates Directive requires Member States to develop and implement appropriate monitoring programs to assess the effectiveness of action programs. It sets out basic principles and criteria for water monitoring, but aspects such as the density of the monitoring network, stability and sampling frequency remain the responsibility of the Member States.

Despite the abundance of renewable water in Europe, signals from long-term climate and hydrological assessments, including population dynamics, show that between 1960 and 2010, Europe experienced a 24% decrease in per capita renewable water, especially among southern European populations.

At the same time, the Ministry of Environmental Protection and Natural Resources of Ukraine presented measures and strategies for European integration in the field of environmental protection. Strategies of European integration in the field of environmental protection are characterized by improvement of water quality and water management; environmental management and integration of environmental policy; ensuring air quality; waste management; and reduction of use of genetically modified organisms.

So, the purpose of the article is to study the European experience of freshwater management and adapt it for Ukraine.

## 2. European experience in freshwater management

Densely populated river basins in various parts of Europe, corresponding to 11% of Europe's total area, continue to be hotbeds of water stress, with 86 million inhabitants living in these areas in the summer of 2014. About 40% of the inhabitants of the Mediterranean region lived under water stress in the summer of 2014. Groundwater and river resources continue to suffer from overexploitation in many parts of Europe, especially in the basins of western and eastern Europe. On the positive side, water withdrawals decreased by about 7% from 2002 to 2014 (Indicator Assessment, 2021).

The agricultural area of the EU covers about 47% of the total area of the EU27 + the UK. From 2010 to 2019, agricultural production increased by 14.5%. It is estimated that livestock production is responsible for 81% of agricultural nitrogen entering water systems and 87% of ammonia from agricultural emissions into the atmosphere (Report from the Commission to the Council and the European Parliament..., 2021).

In Europe, the average per capita household water supply is about 102 l/person/day, which means that there is no "water stress. However, water stress conditions created by population growth and urbanization, especially tourism, have particularly affected small Mediterranean islands and densely populated areas in recent years.

The Commission's Joint Research Center has developed an online viewer that provides access to reporting data under the Nitrates Directive. Regional and even individual station water quality reports are available, as well as agricultural data.

For the first time, Member States were asked to report each monitoring station that was removed from their monitoring network, the reason for such removal and the alternative stations installed in case of permanent pollution. Over the last two reporting periods, trends could be calculated for 83% of groundwater monitoring stations (so far only 20% in Sweden) and 75% of surface water monitoring stations (but less than 50% for Greece, Hungary, Latvia, Malta, Slovakia and Sweden).

Regarding saltwater, it is a welcome development that the sharp 29% reduction in the total number of monitoring stations observed between 2008 and 2015 has been partially corrected by additional stations. Unfortunately, however, the number of saltwater monitoring stations remains relatively low in some Member States. Saltwater monitoring is very important to determine marine pollution and impacts on marine biodiversity.

From 2016 to 2019, 14.1% of groundwater stations still exceeded an average of 50 mg of nitrate per liter, which is comparable to the previous reporting period, when 13.2% of stations exceeded 50 mg/L.

Data on nitrate concentrations at EU level show that groundwater quality has improved since the Directive was adopted, but further improvement has been very slow since 2012. This can be interpreted as the low-hanging fruit that has already been harvested, and now more extensive measures are needed to improve the positive trend. A large percentage of groundwater monitoring stations still show levels exceeding the maximum 50 mg nitrate/L in Malta, Germany, Luxembourg, Spain, Portugal, and Belgium (Flanders region) (Report from the Commission to the Council and the European Parliament..., 2021).

Member States' water quality monitoring has improved with respect to assessing eutrophication as well as saline waters. Eutrophication is a serious problem in all types of surface waters, with inland, transitional, coastal and marine waters still seriously affected. Several Member States that stand out for their abundance of eutrophic waters are the Czech Republic, Finland, Denmark, Luxembourg, Belgium, Germany, Latvia and Poland.

Despite significant efforts by most Member States and farmers, who have respectively developed and implemented measures to reduce nitrate losses in water, water quality data show that the level of implementation and enforcement is still insufficient to achieve the objectives of the Directive, 30 years after its adoption and despite some progress:

- some member states have noted poor water quality throughout the territory and a systemic problem of managing nutrient losses in agriculture: Belgium (Flanders region), Czech Republic, Denmark, Germany, Finland, Hungary, Latvia, Luxembourg, Malta, Netherlands, Poland and Spain;
- some member states have "hot spots" where pollution is not adequately addressed: Bulgaria, Cyprus, Estonia, France, Italy, Portugal and Romania.

Therefore, some member states urgently need to take additional measures to achieve the goals of the Nitrates Directive, in particular Belgium, the Czech Republic, Luxembourg, Spain, the Netherlands and Germany, which are furthest away from these goals.

While there is no timeline in the Nitrates Directive for achieving water quality goals, the WFD goals for good environmental and chemical status must be achieved no later than 2027, and observed water quality trends show that this will not be achieved without radical changes in current measures.

The Commission will strengthen its actions to improve the implementation and enforcement of the Directive to achieve its goals. This is a prerequisite for achieving a 50% reduction of nutrient losses by 2030, as defined in the context of the EU Green Deal.

In 2022, the Commission will develop an Integrated Nutrient Management 33 Action Plan, building on the Zero Pollution 34 Action Plan. This will help coordinate efforts and will aim to address nutrient pollution at source, identify nutrient load reductions needed to achieve the EU Green Deal nutrient targets, promote markets for safe and sustainable reclaimed nutrients and improve livestock sustainability.

Significant progress has been made in the development of manure treatment technologies. Reduced nitrogen, which replaces inorganic fertilizers, reduces CO<sub>2</sub> emissions, while reduced phosphate reduces dependence on phosphate imports, and the remaining organic fractions can be used in local deposits. However, modern technologies are not yet widely used and there are a number of economic barriers related to the high cost of these processes, transportation costs and the frequent need to pay farmers to apply these products to their fields. In addition, the maximum level of nitrogen from manure that can be applied under the Nitrates Directive also includes processed manure.

In July 2022 the new Fertilizer Regulation 35 will expand the scope of the existing Fertilizer Regulation 36 from purely inorganic fertilizers to organo-mineral

and organic fertilizers, opening the way for the marketing of these treated organic fertilizers in the EU internal market.

Therefore, analysis of household water supply in Europe has shown that there is no "water stress" under such conditions. However, with global water scarcity resulting from population growth and urbanization, particularly tourism, in recent years, negative factors have particularly affected water use on small Mediterranean islands and in densely populated areas.

### **3. Personal management of freshwater resources in Ukraine**

According to the Ministry of Environmental Protection and Natural Resources of Ukraine, cooperation between Ukraine and the EU is aimed at:

- preservation, protection, improvement and reproduction of environmental quality;
- protection of public health;
- reasonable and rational use of natural resources;
- encouraging measures at the international level aimed at solving regional and global environmental problems (Report from the Commission to the Council and the European Parliament..., 2021).

Because of the enormous volumes of water withdrawn for hydropower and cooling, the hydromorphology and natural hydrological regime of rivers and lakes continue to change.

The implementation of the Agreement will take place through the creation of a strategy, and then the necessary laws and regulations through national reforms, not the other way around, and their implementation is carried out through the prism of the implementation of the Agreement, where the main focus is on the environmental component.

Given the need for a major overhaul of the legal framework to develop a new EU water policy, and based on consultations with a wide range of specialists, the Economic Commission for Europe proposed a new framework directive called Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (before that and in the future – the Water Framework Directive, WFD). The WFD establishes river basin areas defined not by administrative or political boundaries, but by the boundaries of the river basin as a natural hydrographic holistic entity.

European integration strategies for environmental protection are the ecological component (natural surroundings) in the Association Agreement with the EU.

Kovshun N. E., Piatka N.S. consider that "in Ukraine it is unpromising to be guided by budgetary funds in financial provision of environmental protection

measures. In addition, enterprises carry out environmental measures only if it is economically profitable for them. In Ukraine in the field of environmental protection, in order to meet international obligations, enterprises that need to bring their activities to high European standards, which requires significant costs, expect assistance from the state. That is why the legislative consolidation of economic incentives is the development of appropriate means, which would allow to solve the problem of financial provision of environmental protection through the diversification of funding sources." (Kovshun, Piatka, 2019)

To assess the effectiveness of the implementation of the environmental component (natural environment) in the Association Agreement, the authors will analyze Ukraine according to the Environmental Performance Index.

The Environmental Performance Index (EPI) provides a quantitative framework for comparing, analyzing and understanding environmental performance in 180 countries. The EPI evaluates and ranks these countries according to their environmental performance, using data from the last year, and calculates how these indicators have changed over the previous decade (The Environmental Performance Index, 2020).

The EPI Environmental Performance Indicators are a data-driven summary of the state of sustainability around the world. Using 32 EPI performance indicators, the EPI covers 11 categories of environmental and ecosystem resilience issues in 180 countries. The indicators provide a national measure of how close countries are to meeting policy goals. EPI offers a scorecard that identifies leaders and laggards in environmental performance and provides practical recommendations for countries seeking to move toward a sustainable future. The rankings are based on various sources and represent the most recently published data, often for 2017 or 2018.

Thus, the analysis does not reflect recent events, including the drastic reduction in air pollution in 2020 due to the COVID-19 pandemic or the extensive greenhouse gas emissions, Amazon fires in 2019. These indicators help identify issues, set goals, track trends, understand outcomes, and identify best policy practices. Good data and evidence-based analysis can also help government officials improve their policy programs, government communications with key stakeholders, and maximize the return on regular investment. EPI offers a powerful policy tool to support efforts to achieve the UN Sustainable Development Goals.

Development Goals and the movement of society toward a sustainable future. EPI's overall rankings show which countries are best at responding to environmental issues, chronic challenges facing each

country. Going beyond the overall scores and delving into the data to analyze performance by category of issues, policy goals, peer group proposals, and countries provides even more value for policymakers. Such a detailed view and a comparative perspective can help to understand the drivers of environmental progress and clarify policy choices.

Figure 1 analyzes the ranking positions of Ukraine and some countries of the world on the Environmental Performance Index in 2020 (The Environmental Performance Index, 2020).

According to the index of environmental efficiency in 2020 Ukraine ranks 60th, while in 2018 on this indicator Ukraine was in 109th place, which confirms the correctness of the course and policy on resource conservation. The ranking according to the index of environmental efficiency allows to determine the effectiveness by categories of problems, policy goals, which can be used for proposals to improve the management of ecosystems.

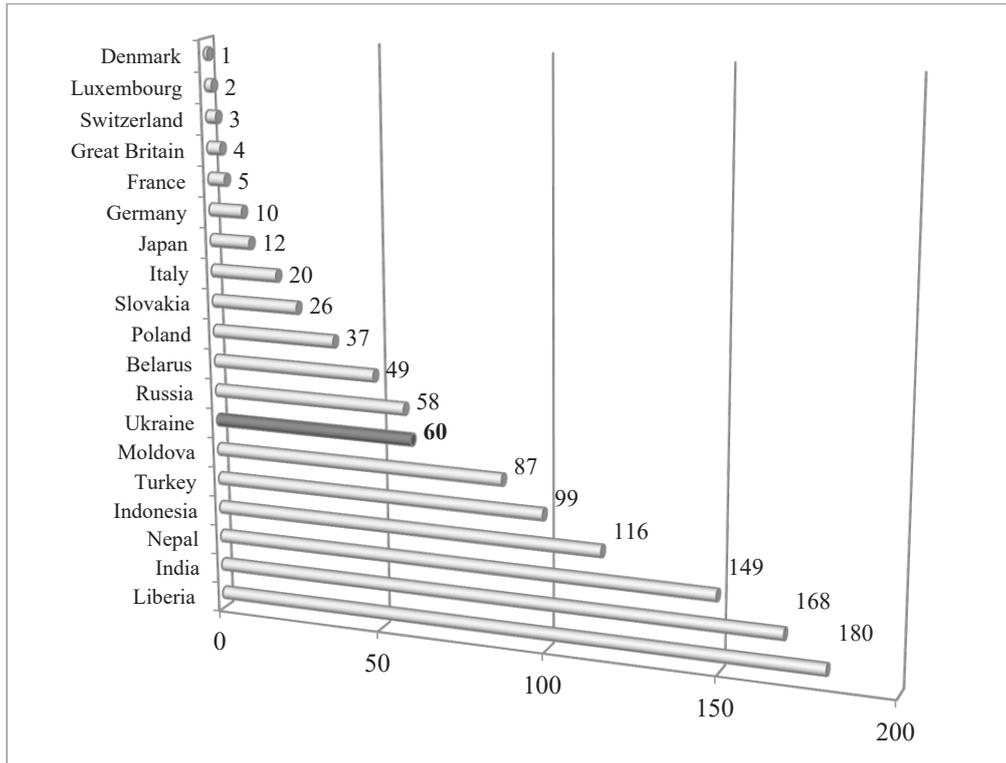
EPI 2020 comes in the midst of the COVID-19 crisis, which has challenged health systems and disrupted economic activity around the world. The global pandemic has clearly demonstrated the interdependence of all countries and the importance of investing in sustainability. The unintended consequences of stopping economic activity in many countries include drastic reductions in pollution and the return of wildlife. The EPI team hopes that this unexpected look at what a sustainable planet can look like from an environmental perspective-albeit at a terrible cost in terms of health and economic damage-will inspire the political change needed for a sustainable future that is both economically vibrant and environmentally sound.

The values of the 10 major categories of The Environmental Performance Index 2020 are shown in Figure 2.

As one can see, the values of the 10 major categories of the Environmental Performance Index in 2020 (The Environmental Performance Index 2020): agriculture is in the first position; climate change – 26; heavy metals – 42; biodiversity – 45; water resources – 60; pollution emissions – 64; sanitation and drinking water – 66; fishing – 71; air quality – 86; ecosystem services – 139.

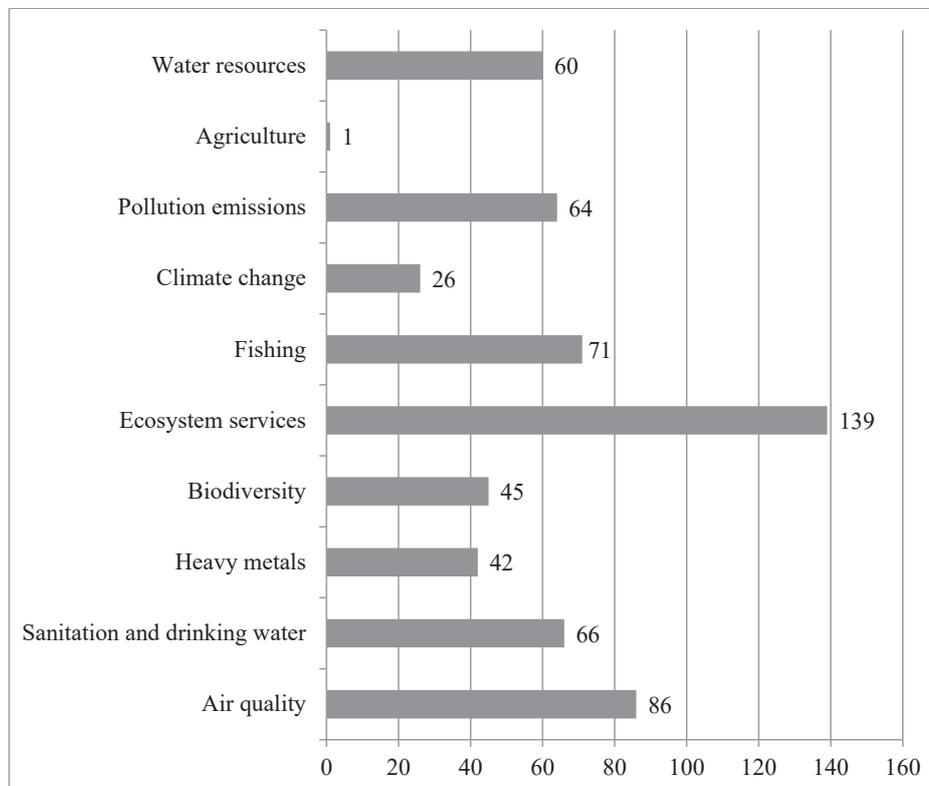
So, as can be seen, Ukraine has the worst positions in emissions, drinking water, fisheries, air quality and ecosystem services. Consider the economic instruments to stimulate green modernization of industrial enterprises (Figure 3).

The main environmental tools to stimulate green modernization of enterprises in the EU include: state aid, environmental taxation, tax incentives, soft loans, collateral system, grants, special funds. For Ukraine, promising tools are environmental taxation, the creation of a special



**Figure 1. Ranking positions of Ukraine and some countries of the world on the index of environmental efficiency in 2020 (The Environmental Performance Index 2020)**

Source: compiled by the authors (The Environmental Performance Index, 2020)



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Source: compiled by the authors (The Environmental Performance Index, 2020)

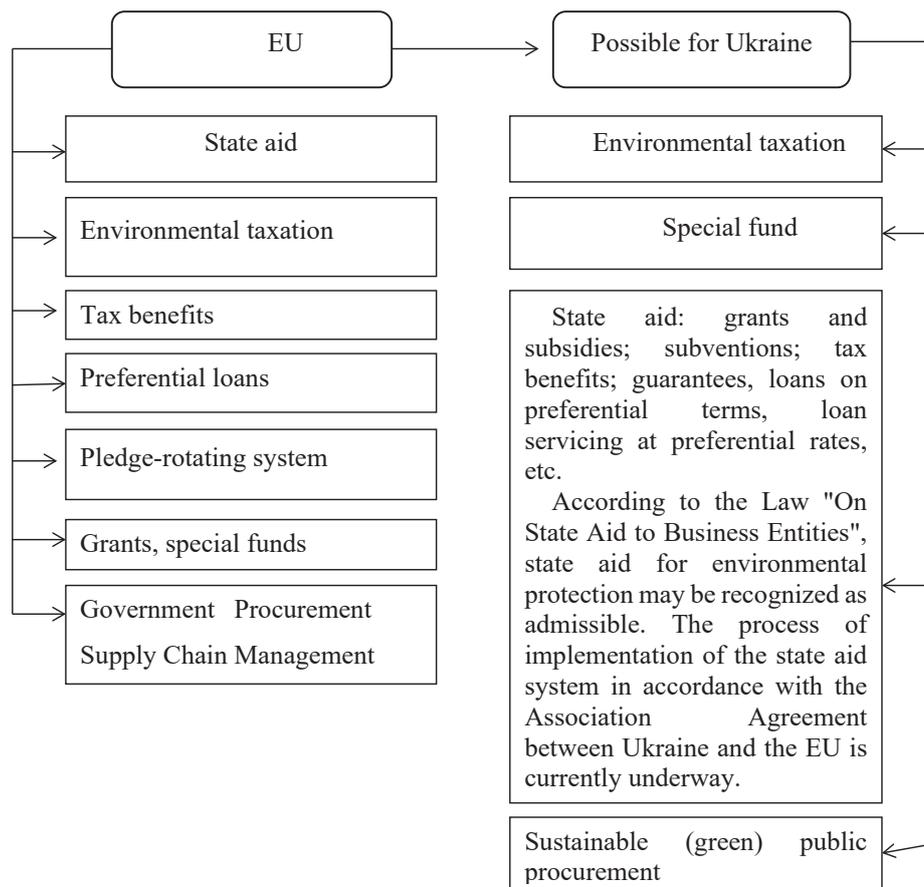


Figure 3. Economic instruments to stimulate "green" modernization of industrial enterprises

fund, permanent (green) public procurement and state aid.

In general, the main stimulating tool in the EU member states is tax policy (reducing the tax burden) when introducing resource-saving technologies.

Vdovenko N. M. and Korobova N. M. consider that "it is basic for all countries possessing biological resources to strive to establish various forms of payment for the extraction of biological resources in their waters, certain volumes of such resources by other countries, subject to mandatory environmental protection measures, and having a reproductive nature. At the same time, in the case of developed countries, monetary license fees are the main form of payment. In developing countries, there are other trends in the forms of payment for biological resources in their zones, which are directly related to solving socio-economic problems. It speaks about the development of coastal areas, employment level, development of national economy sectors, and improvement of protein balance of population's nutrition by taking water from natural water bodies. In some countries, there is an in-kind form of license payment)." (Vdovenko, Korobova, 2019)

During 2010–2020, the reduction of water intake from natural water bodies decreased by

4,894 million m<sup>3</sup>, the largest volume of fresh water was 4,457 million m<sup>3</sup> from surface sources. Also, the use of fresh water (including seawater) decreased from 9,817 million m<sup>3</sup> in 2010 to 7,238 million m<sup>3</sup> in 2020, or by 2,579 million m<sup>3</sup>.

In 2020, the largest volumes of water were used for industrial needs – 4,532 million m<sup>3</sup>, drinking and sanitary – 1,169 million m<sup>3</sup>, and irrigation – 1,452 million m<sup>3</sup>. The capacity of treatment facilities decreased from 7425 million m<sup>3</sup> in 2010 to 5142 million m<sup>3</sup> in 2020, or 2283 million m<sup>3</sup>.

In 2020, the largest volume of clean water discharged into surface water bodies without treatment was 3,216 million m<sup>3</sup>, treated according to standard – 1,426 million m<sup>3</sup>, polluted return water – 518 million m<sup>3</sup>, insufficiently treated – 418 million m<sup>3</sup>, without treatment – 100 million m<sup>3</sup>.

Hrabovska L. L. and Yefremova O. O. consider that "despite the significant economic downturn observed in Ukraine in recent years and accompanied by a general reduction in the use of fresh water, the volume of polluted (untreated and insufficiently treated) wastewater flowing into surface water bodies of the Dnieper basin has not virtually decreased–1.82billionm<sup>3</sup>,that is,theirshareinthetotalflow has increased by almost 1.15 times." (Hrabovska,

Yefremova, 2011) Under the conditions of Russia's war against Ukraine, the effective management of fresh water resources has become an acute problem precisely because it is important to develop an effective organizational and economic mechanism that will ensure access to water (Irtysheva, and etc., 2022).

Thus, the general trends and features of freshwater management in Europe and Ukraine, which determine the prospects for the use of European experience and its adaptation in modern conditions were identified.

#### 4. Conclusions

An analysis of the water supply of European households has been carried out and it has been found that there is no "water stress" under such conditions. However, with the global water scarcity resulting from population growth and urbanization, in particular tourism, in recent years negative factors have particularly affected water use in small Mediterranean islands and in densely populated

areas. In order to stabilize this situation, EU Member States were asked to report each monitoring station that was removed from their monitoring network, the reason for this removal and the alternative stations installed in case of sustained pollution. It was found that trends could be calculated for 83% of groundwater monitoring stations (so far only 20% in Sweden) and 75% of surface water monitoring stations (but less than 50% for Greece, Hungary, Latvia, Malta, Slovakia and Sweden). The importance of EU member states adopting freshwater and seawater remediation measures in accordance with Directive 24 to reduce the impact of eutrophication caused by nitrates or phosphorus is stressed.

It was found that European integration strategies in the field of environmental protection are characterized by improving water quality and water management; environmental management and integration of environmental policies; ensuring air quality; waste management; reducing the use of genetically modified organisms.

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## THE IMPACT OF TRANSACTION COSTS ON MANAGEMENT DECISIONS (ON THE EXAMPLE OF UKRAINIAN COMPANIES)

Olena Shevchuk<sup>1</sup>, Glib Mazhara<sup>2</sup>, Nataliia Semenchenko<sup>3</sup>

**Abstract.** The *purpose* of the article is to study the impact of transaction costs on managerial decision-making on the example of Ukrainian enterprises. The article notes that, despite the significant achievements of the institutional theory, there are still questions about the clarity of understanding of its key concepts and definitions, the content of transaction costs and the concept of their minimization, the expediency and efficiency of the existence of certain types of transaction costs. The *subject* of the study is the essence of transaction costs of the enterprise and their modern classification. The *methodological* basis of the study was an integrated approach to the essence and classification of transaction costs, as well as general scientific and special research methods: retrospective and systematic analysis, comparison and generalization, grouping and sampling, methods of building linear and nonlinear economic and statistical models with constraints. As noted above, the main issue of the study was the classification of transaction costs. The economic situation in Ukraine was assessed, which allowed to determine that transaction costs are quite high for enterprises due to: insufficient development of markets, unformed structure of institutions, complex and ambiguous legislation, significant tax pressure and existing facts of corruption. The authors noted that the list of components of transaction costs is constantly updated due to the complication of the socio-economic conditions for doing business associated with crisis-forming force majeure factors (in particular, the COVID-19 pandemic), which have become very significant for the world economy and have significantly changed approaches to the allocation of investment resources. As a result of the study, it is proposed to supplement the existing classification of transaction costs with costs associated with adapting to new business conditions ("adaptation cost"), which together characterize the ability of an enterprise to adapt to new conditions of functioning and development. The *main conclusions of the study* include the fact that, given current trends, reducing transaction costs is becoming a priority issue. At the same time, in the context of the proposed classification, a model for minimizing transaction costs was developed for the first time, which includes a modern classification of transaction costs and provides the possibility of their modeling for a more complete and logical calculation. According to the authors, the presented model will provide an opportunity to more correctly determine the effectiveness of management decisions related to investments in the core business of the enterprise. It is important to note that, given the basic provisions of institutional theory, a significant amount of transaction costs, in principle, can neutralize the investment process. Thus, the study is of both theoretical and practical importance and gives an idea of solving a number of both industrial and social problems and can become the basis for further research.

**Key words:** transaction costs, decision making, indirect optimization models, enterprise behavior.

**JEL Classification:** D23, D81, D83, M13, C10

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## 1. Introduction

Humanity is at a turning point in its development. The realities of industrial civilization are becoming a thing of the past, the cadence of capitalism is coming to an end, and new transformational processes are being formed under the influence of the fifth industrial revolution. They prevail in all spheres of human existence. Today, the transformation processes taking place in society form fundamentally new approaches to the functioning of complex socio-economic systems. New methods and techniques are being created to assess the feasibility and efficiency of resource use in conditions of their limited and gradual reduction.

It should be noted that previous achievements, which have determined the general trends in the implementation of the modern management paradigm, play a significant role in the formation of new approaches, and, most importantly for evolutionary changes, support this process and form the foundation of "new thinking". At the same time, it should be noted that the speed of events and processes that are taking place allows, in comparison with previous periods, to quickly identify the main trends that form the basis of the new paradigm and, accordingly, scientific thoughts and research.

It is important to note that currently in the Ukrainian economic space the issue of transaction costs management is of particular relevance. According to the authors, this is due, first of all, to the fact that in Ukraine there is a huge discrepancy between the institutional model and the use of the resource base and legal support to the strategic goals of the state development.

The shift in the structure of transaction costs towards a significant predominance of the public sector with the simultaneous protection of their own rights significantly complicates the management process, eliminates the ability of the enterprise to further minimize and control their level. In addition, the analysis of the current economic situation in Ukraine shows that administrative reforms related to the decentralization of public administration, changes in the administrative-territorial structure, powers of local governments and responsibilities of local communities significantly affect the management of transaction costs and the correctness of their calculation.

In addition, the modern process of transaction cost management is complicated by the impact of crisis-forming force majeure factors. Against the background of the existing methodological difficulties, in the absence of a unified approach to the definition of categories and types of transaction costs, a universal methodological basis for assessing their level at the enterprise, the inconsistency of the existing

information base (completeness, transparency, timeliness, objectivity) with the requirements of the analytical process, there is a need to study the impact of transaction costs on the cost of making management decisions at the enterprise.

## 2. Literature review

Today, a large number of scientists and specialists in the field of applied economics are engaged in the study of the impact of transaction costs on management decision-making in all areas of enterprise functioning.

For the first time, R. Coase (Coase, 1937, 1960) drew attention to transaction costs and described them. It is determined that when concluding any contract (transaction) it is necessary to have information, negotiate, supervise, establish relations, resolve differences. At the same time, T. Eggertsson (Eggertsson, 1987) noted in his works that within the framework of orthodox economic theory, which assumes the availability of complete information, the costs of obtaining it are not taken into account. As a result, the theory of transaction costs did not receive proper distribution for a long time. Weakliem D. L. (Weakliem, 1989), Ghoshal S., Moran P. (Ghoshal, Moran, 1996) argue that despite the theory's significant impact on managerial decision-making, some of the recommendations derived from this theory may not only be wrong, but also dangerous for corporate managers because of the assumptions and logic on which it is based. They provide evidence in favor of building a completely different theory, more adapted to "organizational economics".

Contrary to these approaches, Nobel laureate D. North (North, 1990), after carefully studying the work of R. Coase (Coase, 1960), identified the fundamental component of transaction costs, which gave him the opportunity to justify the viability of the institutional theory. The combination of the theory of human behavior with the theory of transaction costs and the theory of production during the study of the American market allowed the author to conclude that each transaction is always accompanied by certain costs, which are based on two main components:

- 1) information search costs associated with determining the useful qualities of the object of exchange;
- 2) costs of ensuring rights and their observance during the conclusion of agreements, which are associated with the presence of institutions, the role of which is to minimize costs due to the reduction of uncertainty during the interaction of subjects.

On this basis, the author concluded that the theory that does not take into account their functioning does not correspond to economic realities.

Williamson O. E. (Williamson, 1981, 1990), Robins J. A. (Robins, 1987), Pratten S. (Pratten, 1997), Beccerra M., Gupta A. K. (Beccerra, Gupta, 1999) drew attention to the need to apply a transactional approach to understanding the essence of the functioning of an economic organization. Comparing non-traditional approaches to organizational forms of the firm and the market with new contract-theoretical approaches, the author distinguishes the theory of disposal rights, the economic theory of agency relations, as well as the approach based on transaction costs. This comparison allowed the author to conclude that the theory of disposition rights is mainly based on retrospective analysis of institutional mechanisms, while the economic theory of agency relations focuses on the development of incentives in advance (ex ante, as costs associated with the preparation and execution of transactions); and the approach based on the theory of transaction costs emphasizes the importance of the organizational structure ex post – the costs that arise after the signing of agreements due to the violation of the mechanism of interaction and leveling its consequences with the maximum preservation of their own interests at the stage of contract execution.

Hennart, J.-F. (Hennart, 1988) consider the application of transaction cost theory of joint-stock for joint ventures. A distinction is made between "scale" joint ventures, which arise when parent companies try to internalize a failing market, but inseparability due to economies of scale makes full ownership of the relevant assets inefficient, and "network" joint ventures, that arise from the simultaneous failure of markets for servicing two or more assets, when these assets are firm-specific public goods and the acquisition of the firm that owns them will entail significant management costs, the author proves that excessive transaction costs in intermediate markets lead to the fact that economic agents choose to manage through equity stakes rather than through signing contracts.

Nooteboom B. (Nooteboom, 1993) in his work investigates the differences in the factors that determine the transaction costs of "threshold" costs at the stages of contact, contract and control and related to the position of the firm size. On the basis of which the author concluded that depending on the field of activity, experience and training, transaction costs of firms are determined by limited rationality, opportunism, uncertainty and transaction specificity of assets.

Lesmond D. A., Ogden J. P., Trzcinka C. A. (Lesmond, Ogden, Trzcinka, 1999) in their paper argue that transaction costs are important for many empirical analyses, but we do not always have the opportunity to estimate them, and those that are available are quite expensive to acquire and difficult

to use. Therefore, they propose a model for estimating the efficiency of transaction costs based on the use of time series of daily securities returns and zero returns.

Anup Madhok (Madhok, 1996) developed his vision of complementing the theory of transaction costs with the theory of organizational learning, where the firm is considered as a set of knowledge and processes underlying it. Considering the impact of the resource attributes of the firm on managerial decisions, as well as the associated difficulties of contracting, the author expanded the focus of the study from minimizing the costs associated with the organization of activities within a particular management system to the management of the value embedded in the knowledge base of the firm.

In recent years, the choice of threshold parameters by firms has become the subject of careful study in the field of information services. Thus, Laura Poppo and Todd Zenger (Poppo, Zenger, 1998) developed a model of comparative institutional effectiveness. Based on models of knowledge and measurement costs, the authors investigated the impact of exchange features on the effectiveness of markets and hierarchies as governance institutions.

The work of Meyer, K. E. (Meyer, 2001), who analyzes the impact of transaction costs on business organization in the conditions of a protracted transition period, deserves special attention. The results are of practical importance for multinational companies that are part of transition economies and need to adapt their strategies to local institutions and reduce their dependence on highly imperfect markets.

The question of choosing a method of entering a foreign market was also considered in the work of Brouthers, K. D. (Brouthers, 2013), who proved that companies whose choice of method could be predicted using an extended model of transaction costs showed significantly better results (financial and non-financial) than companies that did not use it.

Trevor L. Brown and Matthew Potosky (Brown, Potosky, 2003, 2005) examine contract management at the government contracting level and note that when governments enter into contracts for the provision of services under conditions associated with the risk of default, they use various monitoring techniques to increase the ability to monitor and adjust the work of suppliers. As a result, the authors prove that the monitoring process significantly increases transaction costs and sometimes leads to incorrect redistribution of public resources, which indicates institutional imperfections.

What is very interesting in each study is the combination of different directions, which until now remained largely independent of each other.

Thus Husted B. W., Folger R. (Husted, Folger, 2004) combined: organizational justice and transaction cost economics. The result of these studies is a model of transaction costs based on a more complete description of human psychology acting in exchange relations. They prove that transaction costs often arise due to the difficulty of assessing the fairness of the exchange of goods and services. In addition, the relationship between the governance mechanism and the perception of fairness is governed by the elements of interactive fairness that characterize the exchange.

Jeonwook Kim and Joseph T. Mahoney (Mahoney, 2005) explore the need to apply the theory of property rights to explain business situations where inefficient economic results are maintained on the volume of transaction costs.

The above list of works, of course, is not exhaustive, but it confirms the relevance of the chosen topic, its practical significance and wide scope of application, since transaction cost economics explains organizational decisions and final productivity. But the scale of the effect shows that there is still much to learn (Crook, Combs, Ketchen, Aguinis, 2013).

The purpose of the transaction costs item for making managerial decisions (on the example of Ukrainian enterprises).

Thus, the main objectives of the article are as follows:

1) theoretical substantiation of the impact of transaction costs on managerial decision-making on performance.

2. Hence, the goals of the article are:

2) to supplement the existing classification with transaction costs associated with adaptation to new economic conditions;

3) to develop a model of minimizing transaction costs and compare the results of the enterprise with transaction costs that most fully reflect the efficiency of investments;

4) to assess the return on investment, taking into account transaction costs.

### **3. Institutional approach to determining transaction costs**

One of such fundamental achievements, which makes it possible to form a logical basis for understanding the complex processes of modernity, forms the philosophy of perspective, is the assimilation of the theory of institutionalism.

The institutional school is based on an expanded interpretation of the nature of the enterprise, including the analysis of internal and external factors of influence, possible solutions to the problems of organization, planning, control, motivation.

According to the institutional theory, an enterprise is a hierarchical structure based on a system of rules that ensures interaction between its employees. At the same time, the company is considered as an alternative to the market mechanism of concluding transactions in order to save transaction costs. Such costs are determined by the emergence of situations of uncertainty about the external environment for competitors and their behavior in the market space. Thus, the main task of the institutional paradigm of enterprise development is to analyze its behavior under conditions of incomplete information, "market failures" or "uncertainty" ("insufficiency") (Coase, 1960; Eggertsson, 1987).

In contrast to the neoclassical paradigm, where transaction costs are not considered, representatives of the institutional direction focus on the internal components of the enterprise, which characterize the costs of business operations and are based on certain rules and regulations of staff interaction. Thus, the company is considered as a separate institution, where rules and regulations simplify decision-making processes and increase the ability to meet the interests of various economic agents (Weakliem, 1989). At the same time, relying on the optimization tools of the neoclassical paradigm, representatives of the institutional theory see the limitation of the expansion of enterprises in the significant costs of management and control. In the context of significant expansion of the enterprise, transaction costs tend to zero, while management costs increase significantly (Coase, 1937). As a result, there is a risk of reducing the individual contribution of the employee due to the inability to control the overall result. Therefore, the economic development of the enterprise depends on the ratio between internal and external transaction costs. At the same time, a significant drawback of the institutional paradigm is the difficulty of formalizing data that are subjective and difficult to quantify. In addition, the new institutional economic theory, despite significant achievements, remains controversial in terms of the clarity of understanding of its key concepts and definitions, the content of transaction costs and the concept of their minimization, the feasibility of some of them, the efficiency and profitability of transaction costs, etc.

Thus, all of the above confirms the relevance of the topic of the chosen research and provides an opportunity to outline its direction, namely to explore some aspects of minimizing transaction costs. It is necessary to study the components of transaction costs that significantly affect these processes in order to build a correct mathematical model that will allow to study both aspects of minimizing transaction costs and compare them with the final result of any economic system.

#### 4. Components of transaction costs

Taking into account the study of the essence of transaction costs and factors that directly affect their volume, it is believed that they can be classified by sources of occurrence:

##### I. Costs of searching for information

Information search costs (costs of searching for buyers or sellers, costs of obtaining information about them, obtaining information about the market situation, costs of maintaining a marketing service, advertising, telephone and postage costs, etc.). This component of transaction costs occupies a special place among the studies of leading scientists and specialists, since depending on the institutional environment of economic systems, their structure changes. Analysis of recent scientific publications on this issue shows that considerable attention is paid to it with the definition of "information aberrations" that form the market environment of the state and increase the level of transaction costs.

Thus, insufficient, incomplete and non-transparent information leads to additional costs associated with the purchase of goods at higher prices than possible in a given market and the sale of products at prices lower than possible. Thus, economic entities should compare the benefits of better terms of purchase and sale with the costs of searching for information and loss of time for the transaction. Please note that in the article we emphasize that the inherent nature of transaction costs in itself is a significant limitation when making decisions on the establishment and further functioning of the enterprise and its management decisions as such. Thus, the above specificity indicates that they will always be greater than 0, and their list will constantly change (transform). Form the conditions for the above information, the formula

$$P_1 \geq \sum_i^I C_i E_i \quad (1)$$

where  $I$  – the number of information types;

$P_1$  – possible benefit from better terms of purchase;

$C_i$  – the cost of the  $i$ -type of searching information;

$E_i$  – the efficiency of  $i$ -type of searching information,

in its turn it can be described in the following way, formula 2:

$$E_i = \sum_{j=1}^J A_i^j N_i^j \quad (2)$$

where  $J$  – the number of searching days;

$A_i$  – completeness of the received information of the  $i$ -type in  $j$  day, which can be calculated as the ratio of the current amount of information ( $Ap$ ) and the full informing ( $A$ );

$N_i^j$  – the efficiency of  $i$ -type of searching information in  $j$  day.

It all comes down to a general model, formula 3:

$$P_1 \geq \sum_i^I C_i \sum_{j=1}^J \frac{Ap_i^j}{A} N_i^j \quad (3)$$

Summing up, formula 4:

$$P_1 \geq \sum_i^I \sum_{j=1}^J C_i \frac{Ap_i^j}{A} N_i^j \quad (4)$$

##### II. Costs associated with negotiating and concluding agreements

Costs associated with negotiating and concluding transactions (costs of negotiating the terms of the transaction, legal due diligence, managerial costs, representation costs, choice of the form of the transaction, costs of legal or illegal execution of the transaction, travel expenses, translation services).

Some experts distinguish between negotiation costs and transaction costs. It should be noted that today Ukraine has extremely complex and unclear legislation, the rules of which are constantly changing. Therefore, Ukrainian companies need to spend a lot of time and resources to study, legally justify and conclude contracts that would satisfy both parties and have one interpretation from both economic and legal points of view.

The conditions for the above information will be formed:

$$P_2 \geq C_p + C_y \quad (5)$$

where  $P_2$  – possible benefits from negotiating and concluding agreements;

$C_p$  – costs associated with concluding agreements;

$C_y$  – costs associated with conducting agreements;

Each cost, in its turn, consists of:

$$C_y = \sum_{w=1}^W SW * F_w L_w \quad (6)$$

where  $W$  – the general amount of personnel involved in the negotiation process;

$SU$  – coefficient of the processes of concluding complexity;

$L_w$  – regulated time spent by employee;

$F_w$  – hourly rate of employee.

$$C_p = \sum_{u=1}^U SU * F_u L_u \quad (7)$$

where  $U$  – the total number of personnel involved in the negotiation process;

$SU$  – the coefficient of the complexity of the negotiation process;

$L_u$  – time spent by employee;

$F_u$  – hourly rate of employee.

Bring together everything to the general model:

$$P_2 \geq \sum_{w=1}^W SW * F_w L_w + \sum_{u=1}^U SU * F_u L_u \quad (8)$$

**III. Costs of measuring quality**

Costs of quality measurement (costs of product quality assessment). They mainly include the costs of special equipment that provides quality control, standardization costs.

According to the authors, these costs include the costs of obtaining the right to produce products under a well-known brand, as this requires the enterprise to comply with the quality standards set by the integrator company, the costs associated with measuring the quality of goods, concluding contracts for the provision of services.

Form the conditions to the above information:

$$P_3 \geq \min \{Or; Kup\} + \min \{Fr; Br\} \quad (9)$$

where  $P_3$  – possible benefit from measuring quality;

$Or$  – costs associated with renting special equipment to measure quality;

$Kup$  – costs associated with the purchase of special equipment for measuring quality;

$Fr$  – costs associated with obtaining the right to produce products under a well-known brand;

$Br$  – costs associated with creating and promoting your brand;

Each of these can be calculated in the following way:

$$Or = \sum_{q=1}^Q (D_q + O_q)V_q \quad (10)$$

where  $Q$  – the number of rent days;

$D_q$  – the cost of rented equipment in q-day;

$O_q$  – the cost of personnel that is recruited in q-day;

$V_q$  – the number of worked hours in q-day.

$$Kup = DD + DDD + \sum_{qq=1}^{QQ} O_{qq}V_{qq} \quad (11)$$

where  $QQ$  – the number of working days;

$DD$  – the cost of equipment that is bought;

$DDD$  – the cost of education of personnel for work with the new equipment;

$O_{qq}$  – the cost of personnel who are hired in qq-days;

$V_{qq}$  – the number of worked hours in q-day.

$$Br = Reg + Roz \quad (12)$$

where  $Reg$  – initial funds to open a company;

$Roz$  – the costs of the company development.

$$Fr = B * FR \quad (13)$$

where  $B$  – the number of days;

$FR$  – the cost of the day of the franchise.

Thus, concluding the given above material.

$$P_3 \geq \min \left\{ \sum_{q=1}^Q (D_q + O_q)V_q; DD + DDD + \sum_{qq=1}^{QQ} O_{qq}V_{qq} \right\} + \min \{B * FR; Reg + Roz\} \quad (14)$$

This specific linear model can be used in order to analyze parameter 3, costs of measuring quality.

**IV. Specification costs and costs for protection of property rights**

Expenses for specification and protection of property rights, which include the costs of establishing property rights, losses from poor specification of property rights, losses from violation of property rights and their restoration, acquisition of licenses, obtaining a legal address, opening of bank accounts, costs of courts, arbitration, time and resources necessary to restore the rights violated during the execution of the contract, loss of property rights from unreliable protection and costs of registration of the enterprise, costs associated with the establishment of the enterprise, change of ownership and organizational and legal structure of the enterprise during its re-registration.

Thus, for the period from 2017 to 2020, the number of natural persons-entrepreneurs (PE) in Ukraine increased significantly from 1466803 in 2017 to 1599755 in 2020 (Ghoshal S., & Moran P., 1996), due to significant policy changes in the field of small and medium enterprises (SMEs). In particular, through:

1) improvement of adaptive public administration.

Namely, improving the institutional and legal framework for SMEs by combining institutional reforms with financial and technical support from external donors, which led to an increase in the index from 2.45 to 3.5;

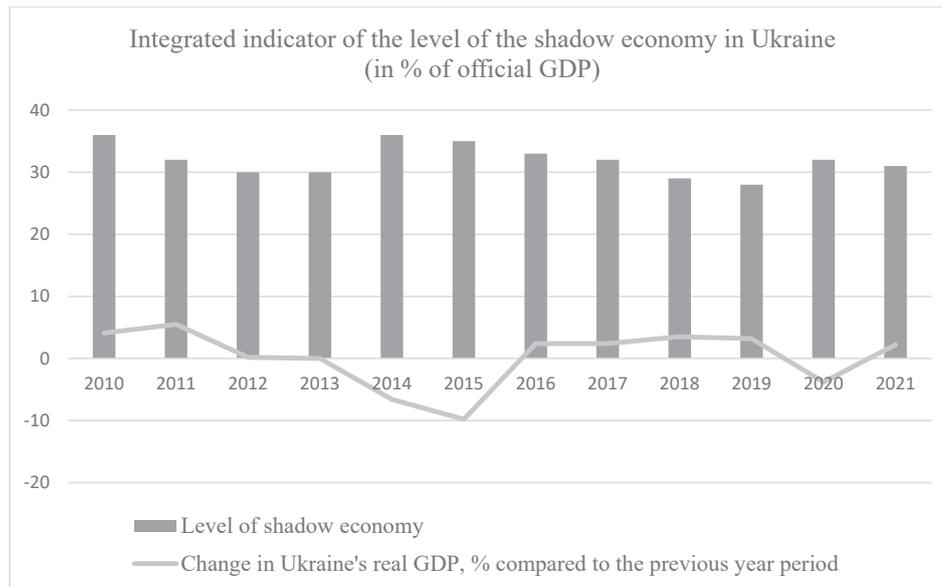
2) through the development of human capital by upgrading the skills of SME employees by improving key competencies, which led to an increase in the entrepreneurship training policy index from 2.25 to 3.98;

3) improved access to finance for SMEs, which led to an increase in the index from 3.22 to 3.31;

4) by supporting innovations and entrepreneurship through the development of SME support infrastructure, which is due to the presence of business centers (329 as of January 2019), business incubators (62), technology and science parks (79) and national industrial clusters (20), which led to an increase in the innovation policy index from 1.86 to 2.28 (North, 1990).

As for Ukraine, the parameters of this group of costs will be quite significant and will require constant monitoring by the company. The authors adhere to the principle that calls these costs "the cost of compliance with the law", which consists of Hernando de Soto's definition of the cost of access to the law (Williamson, 1981).

However, it should be noted that the costs associated with continuing to operate within the law (tax costs, compliance with labor laws, legal costs, etc.) are significant. Due to the corruption of certain links of reproduction in society, significant tax pressure (and hence – due to high transaction costs),



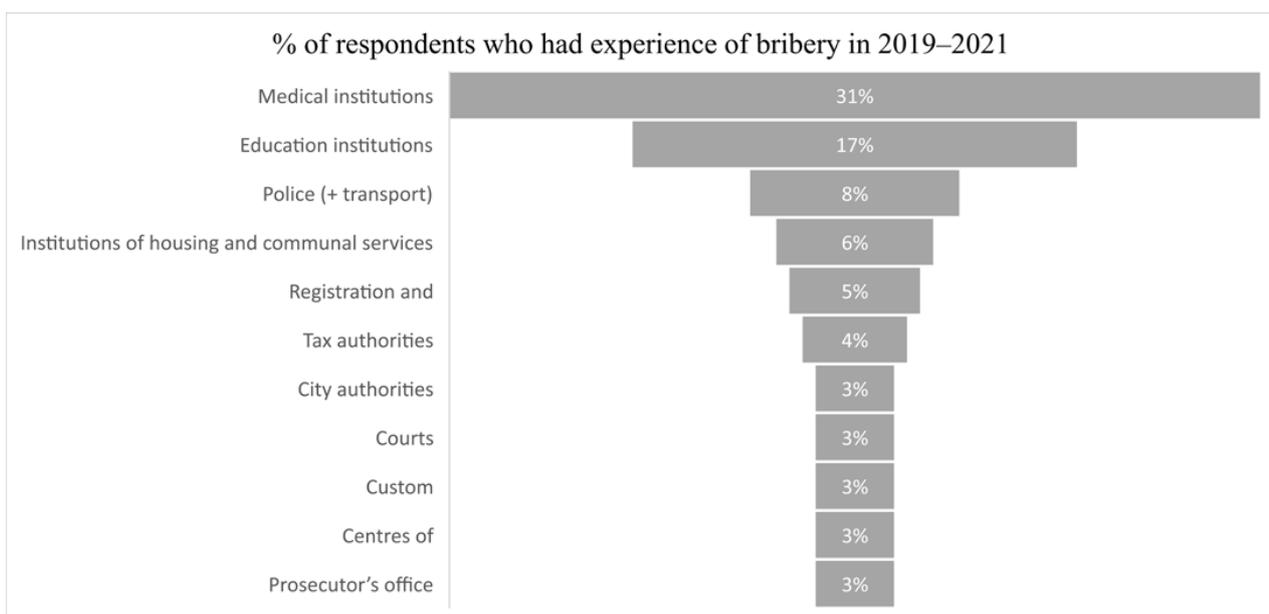
**Figure 1. Integral indicator of the level of shadow economy in Ukraine**

Ukrainian companies are often forced to transfer their activities to the shadow economy (Figure 1).

As can be seen in Fig. 1, the integrated indicator of the level of the shadow economy according to the calculations of the Ministry of Economic Development of Ukraine in 2021 amounted to 31% of gross domestic product (GDP), which is 1% less compared to the previous year. This is primarily due to the adaptation of Ukrainian business to unpredictable quarantine restrictions. In particular, in the third quarter of 2021, GDP amounted to UAH 1498.359 billion, so the size of the shadow economy for this period can be estimated at

UAH 464.491 billion (Ghoshal, Moran, 1996). Based on the data of the State Statistics Committee on the number of enterprises in Ukraine, each enterprise accounts for an average of UAH 323,000, as well as due to the abuse of monopoly pricing position of certain business entities, etc.

In addition, the indicators that increase the number of transaction costs include the scale of corruption in Ukraine (Figure 2). Thus, according to the National Anti-Corruption Bureau of Ukraine, over the past two years (from 2019 to 2021), 41% of surveyed business executives and 39% of surveyed citizens have faced corruption in their professional



**Figure 2. Percentage of respondents who had an experience of bribes from 2019 to 2021**

activities and paid bribes in the housing and communal services sector (6% of respondents), when obtaining registration and permits (5%), in tax authorities (4%), 3% each – when applying to city authorities, passing customs control, in administrative service centers and when applying to the prosecutor's office (Williamson, 1990).

Based on the volumes that business owners assume within this issue; the list of transaction costs can also be added – the cost of overcoming administrative barriers built by the state on the way of doing business (administrative costs). If to examine the number of state-owned enterprises, despite the reforms, the number of decentralized enterprises remains quite large for our country, so there is no reduction in transaction costs (Figure 3). As a result, administrative barriers have become full-fledged sectors of the economy that live by their own laws.

Therefore, it can be recognized that companies will work in the legal field only when the comparison of transaction costs in legal and illegal business is in favor of the former.

Conditions will be added to the above information:

$$P_4 \geq \min\{Leg; NLeg\} \tag{15}$$

$P_4$  – possible benefit from better property rights;  
 $Leg$  – costs associated with running a legal business.  
 $NLeg$  – costs associated with doing illegal business.

Explain what was mentioned above,

Each aspect of the business can be considered separately

Business will choose the minimum cost rather than a direct cost comparison. Therefore, take into account the mathematical expectation of the function  $NLeg$ .

$$P_4 \geq \min\{Leg; NLeg + M[NLeg]\} \tag{16}$$

$M[NLeg]$  – is the mathematical expectation of shadow business, which is calculated as the product of the probability of paying a fine by the amount of penalties (ST) in variable directions.

**V. Costs of monitoring and preventing opportunistic behavior**

Costs of monitoring and preventing opportunistic behavior (costs of controlling the implementation of contracts, ensuring the risks of their non-fulfillment, costs of preventing such behavior of counterparties (monitoring) and staff) (losses associated with strikes of staff, late fulfillment of obligations to suppliers).

In the framework of building a more accurate model of transaction costs, it should be noted that these costs are also divided into different parts, such as costs associated with monitoring opportunistic behavior and costs associated with its prevention. Opportunistic behavior is considered to be the behavior that consists in avoiding the fulfillment of the terms of the agreement in order to make a profit at the expense of the interests of partners.

Form the conditions for the above information, for this use the standard formula for the Poisson distribution of the above possibilities in time:

$$P_k = \frac{e^{-n} n^k}{k!} \tag{17}$$

For  $Z$  take losses from the occurrence of an adverse event

Then,

$$P_5 \geq Z \sum_{k=0}^{\infty} \frac{e^{-n} n^k}{k!} \tag{18}$$

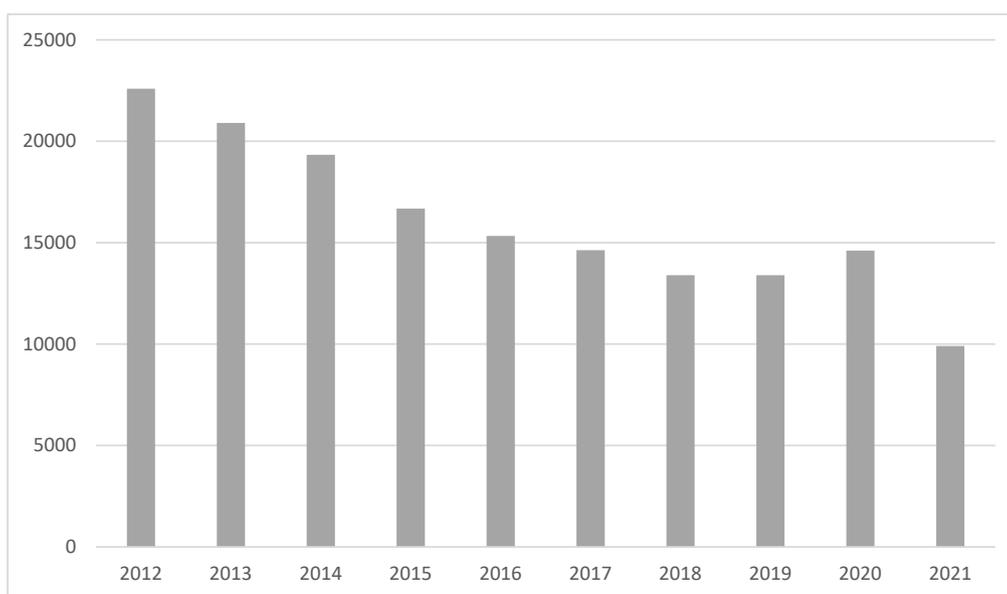


Figure 3. Number of state enterprises

**VI. Costs of protection against third parties**

Expenses for protection against third parties (the state). That is, the costs of protection against other persons (other than the parties to the agreement) who claim a share of the benefits from the implementation of the provisions of the agreement.

In addition, it is advisable to add to this list the costs associated with adapting to new operating conditions ("adaptation cost", costs of additional staff training, psychological adaptation costs, pandemic costs). They, like some transaction costs, can be divided into endogenous and exogenous.

Costs associated with innovations (costs of commercialization of innovations, costs of providing the innovation process with professional staff, costs associated with the transition to innovation-oriented management of enterprises and making appropriate decisions on their further development). Among the most important tasks of adaptation to innovations is the formation of a new type of employees in the

country, characterized by high competence, taking into account high general education and professional training.

The conditions for the above information will be formed:

$$P_6 \geq \sum_{a=1}^A \frac{C_a}{\ln(e_a^g)} \tag{19}$$

where  $P_6$  – possible benefit from the adaptation

$A$  – the number of adaptation types;

$C_a$  – the costs connected with the adaptation of a-type;

$\ln(e_a^g)$  – the level of training that can be achieved by a-type of,

where  $g \in \{0 \dots 1\}$  – the level of training.

**5. Model of minimization of transaction costs**

Formulate a generalized nonlinear model, which includes all the above indicators and problems, as follows:

$$\begin{aligned} \sum_{p=1}^6 P_p \geq & \sum_i^I \sum_{j=1}^J C_i \frac{Ap_i^j}{A} N_i^j + \left( \sum_{w=1}^W SW * F_w L_w + \sum_{u=1}^U SU * F_u L_u \right) \\ & + \left( \min \left\{ \sum_{q=1}^Q (D_q + O_q) V_q; DD + DDD + \sum_{qq=1}^{QQ} O_{qq} V_{qq} \right\} \right. \\ & \left. + \min\{B * FR; Reg + Roz\} \right) + (mmin\{Leg; NLeg + M[NLeg]\}) \\ & + Z \sum_{t=0}^k \frac{e^{-n} n^k}{k!} + \sum_{a=1}^A \frac{C_a}{\ln(e_a^g)} \tag{20} \end{aligned}$$

This model summarizes all 6 criteria and can be used to calculate the right-hand side (factors) and make a decision on the transaction costs of governance. Depending on the result, different solutions can be chosen.

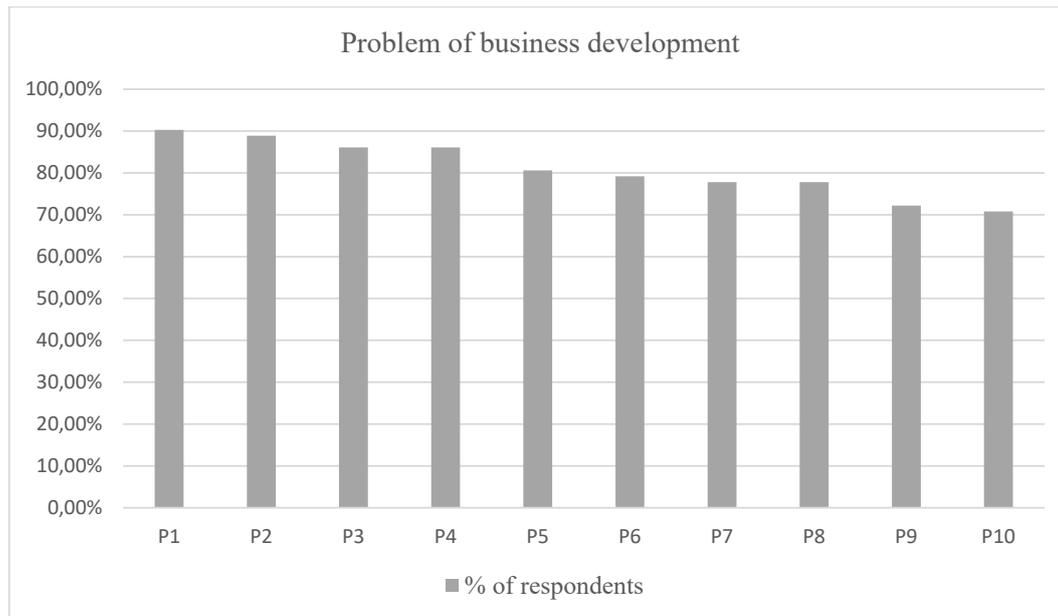
At the same time, it is very difficult to investigate all the problems that hinder the development of business and significantly affect not only the final result of the enterprises, but also generally exclude the expediency of their opening and further functioning in our country. At the same time, the most common and important problems faced by domestic enterprises in their activities include: weak protection of property rights by state authorities (P1 90.30%), high level of corruption of state authorities (P2 88.90%), tax system – types and rates of taxes (P3 86.10%), high payroll charges (P4 86.10%), insufficient access to credit resources (P5 80.60%), tax system – tax administration procedures (P6 79.20%), low law-abidingness of

citizens and businesses (P7 77.80%), excessive state intervention in the regulation of economic relations (P8 77.80%), improper implementation of national legislation by state authorities and local self-government (P9 72.20%), lack of practice of transferring state functions to self-regulatory organizations (P10 70.80%) (Figure 4)

Thus, the study of the classification of transaction costs makes it possible to state that all of them are quite high at Ukrainian enterprises. The reasons for this are insufficient market development, unformed structure of institutions, complex and ambiguous legislation, significant tax pressure, and corruption.

**6. Conclusions**

1. The study underlined the relevance of the chosen topic and provided an opportunity to determine the impact of transaction costs on management decisions on performance.



**Figure 4. Rating of problems that hinder business development**

2. The assimilation of the theory of institutionalism has allowed to supplement the existing classification of transaction costs associated with adaptation to new business conditions. These include "adaptation costs", additional staff training costs, psychological adaptation costs, pandemic costs, which together characterize the ability of an enterprise to adapt to new conditions of functioning and development.

3. In the context of the proposed classification, a model of minimization of transaction costs has been developed, which includes all the above indicators and problems and makes it possible to make a model for correct and logical calculations.

4. The application of the proposed model makes it possible to compare the results of the enterprise with transaction costs, which most fully reflect the efficiency of investments.

5. The practical significance of the study lies in the possibility of a realistic assessment of the return on investment not only due to the classical theory, which defines the main components of the production process, but also taking into account the theory of institutionalism, including costs that can devalue the investment process.

6. Thus, it is concluded that taking into account current trends, quality becomes an integral component of competitiveness and that is why reducing transaction costs becomes a priority.

7. Since a clear understanding of the essence of transaction costs and their types makes it possible to solve a number of problems of both production and social nature, the results of the analysis become the basis for further research.

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# TEAMWORK AS A COMPONENT OF SOCIAL COMPETENCE OF YOUNG SCIENTISTS

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**Abstract.** The research satisfies the current world trends in future jobs, where team work is considered as one of the significant soft skills till 2030. The *purpose* of the paper is to identify the key team roles, which have leading impact on social competence of young scientists in Ukraine. The novelty of the research is represented by the created theoretical model of social competence and its connection with team work. The proposed model includes such blocks as: approaches to definition, structural elements in combination with evaluation criteria, types of an individual's social competence, functions and levels of social competence as well as approaches to social competence research. The *object* of the scientific research is the process of using team work tools in social competence management of young scientists' teams. The research methodology includes such methods: comparative analysis, critical analysis, descriptive analysis, factor analysis, and cluster analysis. The research is based on the results of the special direction of the mass sociological survey of young scientists in Ukraine. The limitations of the research are that the period of gathering data covers 2020 year before the war in Ukraine. The Belbin's approach to team roles was taken for researching the current state of team work as an important part of social competence of young scientists in Ukraine. The obtained *results* confirmed quite equal distribution of managers' types in the teams of young scientists. The most important team roles are Implementer and Team-worker that corresponds to the young scientists' basic functions. But, such team roles as Monitor-evaluator, Resource Investigator and Plant require better development. The *practical value* of the research for the young scientists' community is in the use of the levels of team-role orientations in building the young scientists project teams and developing their social competence, which gives the opportunity to improve the education and training of young scientists. The possible directions of the research development are studying of the other approaches to team management, stress management and emotional well-being of young scientists. The possible ways of developing team work in particular and social competence in general in the process of education and training of young scientists are the implementation of special modules of soft skills development.

**Key words:** team work, social competence, young scientists, team roles.

**JEL Classification:** I21, J24

## 1. Introduction

Young scientists as an important group of science in any country is transforming today under the influence of general global trends in the development of society.

The social competence of young scientists trained by educational institutions is now more important than ever for both successful professional and personal development. The importance of social competence is presented in many modern national and international documents and reports, such as: "Proposal for a Council of Europe Recommendation on Key Competences for Lifelong Learning, 2018/0008 (NLE)"

(2018); The World Economic Forum Report "The Future of Jobs" (2018); Laws of Ukraine "On Higher Education" (Verkhovna Rada of Ukraine, 2014), "On Innovation Activity" (Verkhovna Rada of Ukraine, 2002); project "Realization of the potential of young scientists in the context of integration of science, education, business" (Shkoda et al., 2020), etc.

Young scientists are at a sensitive age for the formation of social competence. In addition, the contextual nature of cooperation and postgraduate studies or work as a teacher in a higher education institution provides an opportunity to form social

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competence that will remain relevant in the future life and activities of the individual.

According to a current LinkedIn survey, for example, soft skills as part of social competence are growing in importance for business success for 80% of respondents, with 89% noting the lack of soft skills among the failed hires in their organization, and 92% saying that soft skills are as important or even more important than hard skills (WEF 2019). The term 'soft skills' hardly does justice to the complex combination of abilities it describes: empathy, emotional intelligence, creativity, teamwork, collaboration and communication, to name but a few.

This coincides with one of the observations of the World Economic Forum's Future of Jobs Report (2018), which refers to the importance of "non-cognitive soft skills (that enable) people to use their unique human abilities."

The challenge for employers, especially in the field of young science, is that soft skills as part of social competence can be difficult to identify in the recruitment process. Unstructured assessment of soft skills prior to hiring is a significant problem: 68% of respondents told LinkedIn (WEF 2019) that the main way they are assessed is by identifying social cues during the interview.

**Research question:** Today, the world economy is entering a new era of global economic relations, which largely requires workers with new competencies in both EU and non-EU countries, including Ukraine. At the same time, the EU is promoting the European Commission's Proposal for a Council of Europe Recommendation on Key Competences for Lifelong Learning, 2018/0008 (NLE), where social competence is declared as one of the key competences to improve the European Framework of Key Competences.

In this study, it is necessary to consistently address the following research question: "How does teamwork affect the social competence of young scientists in Ukraine? What are the ways to develop social competence of young scientists in the educational process in Ukraine?"

## 2. Theoretical basis

Social competence is usually considered as social adaptation, performance of social roles, balance between social requirements and personality traits, social behavior, social reality, mastering social experience as a general, collective, integrative concept that indicates the level of socialization of a person, in particular, professional, and has characteristics inherent in wide spheres of human life (Zarubinska, 2010), including social responsibility.

In the scientific literature there are four general approaches to the operational definition of social

competence (Rose-Krasnor, 1997): 1) specific skills; 2) sociometric status; 3) relationships; and 4) functional outcomes. When using the specific skills approach to social competence, the following attributes are distinguished: social, cognitive, emotional, perceptual-motor and self-systemic. The status approach to social competence is a sociometric assessment that reflects the combined judgment of peers, which is a generalization of the behavioral and affective components of social competence. This approach also demonstrates good temporal stability. But, Rose-Krasnor L. (1997) does not prove that popularity among colleagues will predict further success. In this context, the author suggests that the popularity of a young scientist in the group does not prove his/her further professional success.

The transactional nature of social competence is considered within the relationship-based approach to social competence. It is manifested in both friendship and commitment indices of social competence. According to this approach, social competence depends on the relationships of young scientists, which in turn depend on the skills of both relationship partners. These relationships can be horizontal or vertical (Hartup, 1989). In the context of the education and training of young scientists, horizontal relationships can be considered as relationships with other young scientists, where all the relationship partners have approximately the same level of required skills. Instead, vertical relationships can be considered as relationships with a teacher or any other person who has a higher level of expertise.

The specificity of the functional approach lies in the definition of social goals and objectives. Researchers (McFall, 1982; Rose-Krasnor, 1997; White, 1979) believe that the functional approach also focuses on the results of social behaviour, as well as on the processes that lead to these results.

Ma H. K. (2012) considers three important aspects of social competence, which are related to (1) the ability to build positive and healthy interpersonal relationships and resolve interpersonal conflicts, (2) the development of a clear self-identity in general and a group or collective identity (e.g., professional identity) in particular, and (3) the orientation to be a responsible citizen in one's society and a concerned citizen in the world.

A. Ilie (2010) believes that social competence should be seen as a complex system of social cognition, social motives, social abilities, traditions and skills, and social experiences. It includes the ability to act in a socially acceptable way (sincerity, ability to play roles), cooperation skills (respect for others, sensitivity, freedom from prejudice), establishing contact (creating, developing and breaking up teams, expressing feelings and opinions),

persuasiveness (impression that makes on others, charisma).

Social competence is defined by D. Euler & A. Bauer-Klebl (2008) as the ability to interact purposefully with others on professional, social or personal topics in specific types of situations. B. Greimel-Fuhrmann (2013), who agrees with the previous definition, emphasizes that social competence enables competent communication with other people.

Acmeological research adds to the structure of social competence, in addition to knowledge, skills and abilities, also a spiritual, personal, motivational and value component, which involves social responsibility and the desire for self-realization of the individual in the profession and society as a whole (Zinkivskyj, Mirskykh, 2008). However, in the author's opinion, social responsibility and professional responsibility fit into the functional approach to the interpretation of social competence, as their presence contributes to the achievement of social goals and solving social problems.

According to I. B. Zarubinska (2010), the personal component of social competence involves the following abilities and characteristics of the personality: empathy, tolerance, general analytical abilities, internal locus of control, positive self-concept and, accordingly, adequate self-esteem, self-respect, ability to emotional self-regulation. According to the author, these components of the personal component of social competence (Zarubinska, 2010) largely correlate with the components of social competence within the framework of Rose-Krasnor's (1997) specific skills approach.

Having analyzed the works of Varetska O. V. (2014) and Zarubinska I. B. (2010), it should be noted that the activity component of social competence includes cognitive, value-motivational, communicative, operational-technological, evaluative, reflective aspects. Each of these components of the activity component of social competence has its own elements, which can also be considered as evaluation criteria.

There are several criteria for distinguishing the types of social competence of a person in the literature. The most optimal, according to the author, is the classification with the participation of consciousness (Trukhin, 2005): unconscious competence, conscious competence, conscious incompetence and unconscious incompetence. That is, a person may or may not be aware of his or her social competence or incompetence.

In the context of social competence, the difference between these two classifications of its types is that, for example, a person who realizes his/her social competence can equally perform both productive (innovative, unusual) tasks and reproductive (repetitive, technical) tasks. Whereas a person who

does not realize his social competence will more often perform reproductive tasks. The one who is not aware of his social incompetence will tend to overestimate his efforts in performing the tasks, and the one who is aware will tend to underestimate them.

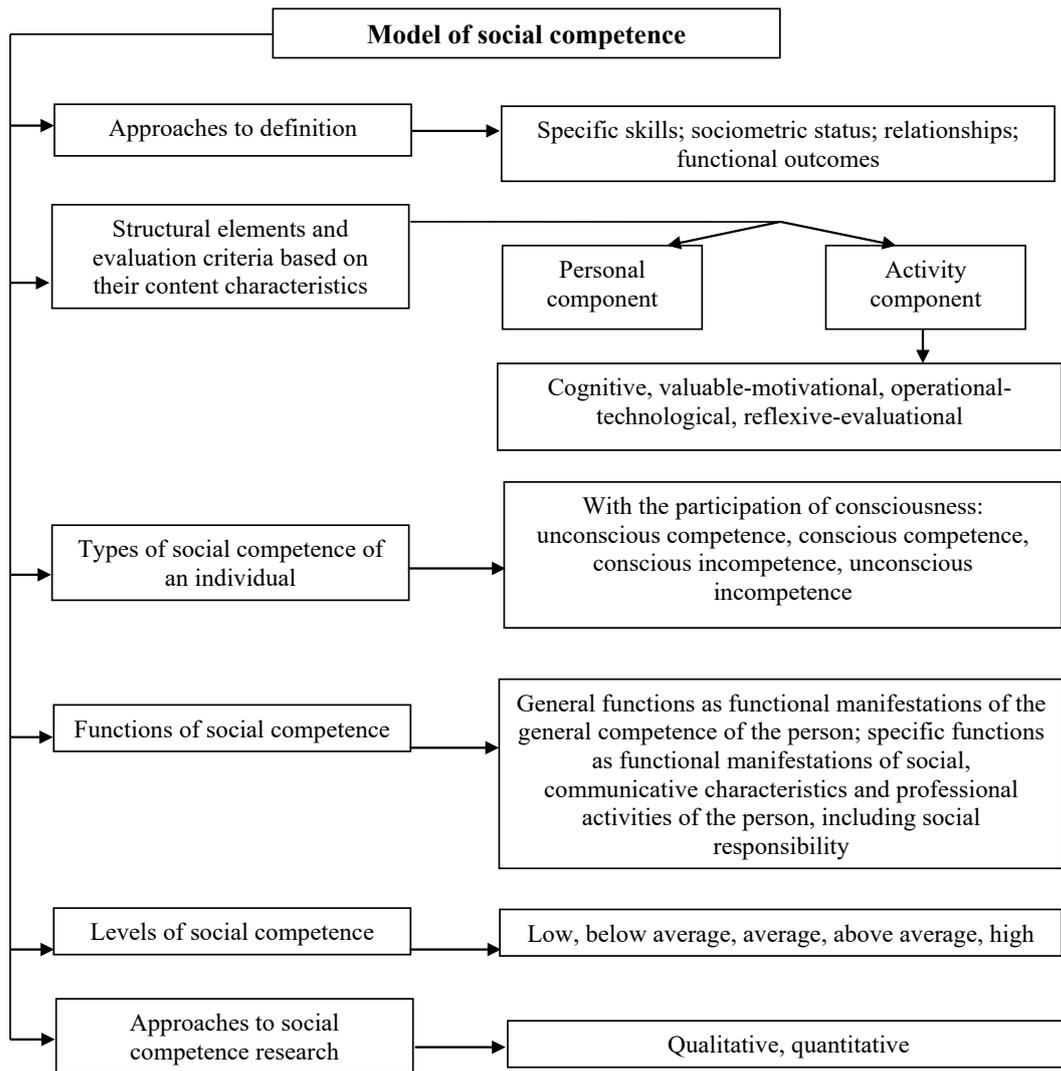
Based on the analysis of theoretical sources, the authors propose the following model of social competence (Figure 1).

According to the definition of the World Economic Forum (WEF, 2019), social competence includes such components as leadership, which belongs to the personal component of the proposed model (Figure 1), as well as teamwork, which belongs to its activity component. That is why the authors drew attention to the relationship between teamwork and social competence.

Erpenbeck and Rosenstiel (2003) consider social competence as one of the four types of competences and define it as a person's inclination to communicate and cooperate (understanding others, developing others, service orientation, using diversity, political awareness, influence, communication, negotiation and disagreement resolution, leadership, catalyst for change, networking, cooperation and collaboration, teamwork). Emotional intelligence as a component of social competence was considered as a basis for the development of organizational leadership during the Covid period in educational institutions (Semenets-Orlova et al., 2021) and can be applied to the target group of young scientists. Particular attention was paid to educational changes (Semenets-Orlova, 2017) as a driver of social competence transformation. The potential of young scientists is considered by researchers (Gernego, Shkoda, Savych, 2021) as an important element of strategic human capital management.

The social competence of young scientists is an integrative qualitative category, a personal formation that combines a value understanding of social reality, specific personal qualities, abilities, social knowledge, skills, abilities as a guide to action, subjective readiness to apply social experience in the main spheres of human activity, the ability to make socially promising transformational influences in the scientific field, to analyze their consequences (Tyulpa, 2020).

There is also an approach that considers the social competence of young scientists within the educational and qualification framework. In particular, Monnier M., Tschöpe T., Srbeny C. et al. (2016) in their study, based on the educational qualification framework and the competencies specified in it, define social competence as a dynamic cognitive concept, that is, something that can be studied. They believe that modeling and measuring social competence is possible only if the focus is on basic "social and emotional-cognitive dispositions" rather



**Figure 1. Model of social competence**

Source: created by the authors on the basis of (Varetska, 2014; Rose-Krasnor, 1997; Zarubinska, 2010)

than on social behaviour. Social competence is a multidimensional structure that determines the interaction of many competences: communication, assertiveness, ability to accept criticism, etc., and depends on the values, attitudes of the persons involved, as well as on the rules, standards and expectations of professional behavior. The researchers note that socially competent behavior can mean very different things depending on the context and situation.

The formation of each component that is part of the structure of social competence of young scientists is associated with the formation of its characteristics and properties as part of a holistic system and involves taking into account a number of criteria. The content of criteria and indicators is determined by the desire for self-realization, the presence of optimal personality qualities. Also, the criteria for the formation of social competence of young scientists were determined on the basis of a holistic, systematic understanding

of the socialization of the individual, the allocation of its functional and structural components, its definition as a process and result of socializing influences, the adoption of professional and moral values during professional and personal actualization (Tyulpa, 2020).

Formation of social competence of a person takes place in a team (group). It is through interaction in the group that the basic foundations of social competence are accumulated: social knowledge and the ability to apply them in practice. This approach allows to consider social competence as a component of the educational process and as an integral result of such processes as education, development, self-development, communication and self-realization (Riabukha, 2017).

The importance of joint teamwork is most clearly underlined by Henry Ford's statement that the beginning is together, progress is together and success

is together (Rahimić, Perla, 2022). This is practically impossible without a clear division of roles in the team. The idea of group roles was developed in the "Team Wheel" model developed by Margerison (2002). The management process in this model is divided into eight work functions and one area of coordination activity, which is called "networking" / "communication". Symbolically, the model is represented as a wheel with eight segments and a core. In accordance with these eight core functions, eight types of individual strengths, or team roles, are fixed. A separate role for "rallying" is not allocated, as it is believed that this type of activity can be performed by any team member with developed communication skills.

Another well-known approach dedicated to the distribution of team roles is the team roles of R.M. Belbin (2010, 1996). In teams of young scientists, it is also possible to involve participants belonging to action-oriented roles (Shaper, Implementer, Completionist, Finisher), human-oriented roles (Coordinator, Teamworker, Resource Explorer) and cerebral roles (Organizer, Observer, Evaluator, Specialist). In this study, Belbin's approach was investigated by the authors on the example of a target group of young scientists.

### 3. Methodology

Theoretical part: **Comparison of literature** sources on the following questions: "What is the relationship between teamwork and social competence?" "Is teamwork as a component of social competence important for young scientists?" "How can we promote the development of social competencies in the education and training of young scientists?" "What are the challenges facing Ukraine in the development of social competence in the education and training of young scientists?"

In the practical part the authors used the Belbin Team Role Inventory (BTRI) based on the Role theory proposed by R. Belbin (Belbin, 2010). Statistical data processing was performed using the SPSS statistical software package (v. 22), which included descriptive statistics, factor and cluster analyzes. The sample included 1201 young scientists (respondents were surveyed in 2020 online via Google form).

### 4. Results

In this study, the authors for the first time identified the orientations of young scientists to team roles (coordinator, shaper, organizer, Monitor evaluator, Teamworker, implementer, resource researcher, finisher) according to the approach of R. M. Belbin (2010, 1996).

The analysis of role team orientations of young scientists in training (Table 1) shows that in general

young scientists are oriented to all team roles, although some of them are more popular than others.

Table 1

**Levels of team-role orientations of young scientists (% of the total number of respondents)**

Team roles	Levels		
	High	Middle	Low
Implementer	58.6	28.8	12.6
Teamworker	56.0	32.2	11.8
Coordinator	23.8	42.2	34.0
Finisher	23.5	37.2	39.3
Monitor evaluator	19.7	43.2	37.2
Resource investigator	19.4	46.6	34.0
Shaper	17.4	41.7	40.9
Organizer	16.0	34.5	49.5

Source: composed by the authors based on the research results

The study found that the heads of educational organizations consider the most important team role to be the role of the Executive. A high level of orientation to this role is observed in 58.6% of respondents, which indicates that young scientists have well-developed organizational and coordination skills, i.e., the ability to transform ideas into specific tasks and organize their implementation.

The second most important team role was the role of "Teamworker", which is oriented by 56.0% of respondents. This team role contributes to reaching agreement in the team, removing misunderstandings, knowledge of the needs and problems of the teaching staff.

This confirms the correspondence of the team roles "Implementer" and "Teamworker" to the main functions of young scientists.

At the same time, much fewer young scientists are oriented towards a more "leadership" team role of the Coordinator. Thus, only 23.8% of respondents were highly oriented towards this team role.

It should be noted that somewhat similar data were obtained in other studies of heads of educational and scientific institutions (Karamushka & Fil, 2007). The researchers found that a small number of educational managers are oriented to the team role of the Coordinator (20.58% of respondents have a high level of orientation to this role). Scientists explain this fact by the formalized structure of educational managers, when the main work tasks and decisions are given from the top.

Also noteworthy is the fact that only 23.5% of respondents have the command role "Finisher" at a high level. That is, there is a problem with the implementation of the tasks. This situation, which is quite common in the work of young scientists, may be caused by the need for young scientists to perform different jobs simultaneously when they lack time,

energy and/or resources. In our opinion, the role of the finisher is important for the full cycle of organizational activities.

Also, young scientists have weak orientations to the team roles of "Monitor evaluator" and "Resource investigator". Only 19.7% and 19.4% of respondents have a high level of orientation to these roles, respectively, although these team roles reflect important functions of young scientists, such as resource search, creation of favorable conditions for new activities, and evaluation of work.

No less disturbing, according to the authors, is the weak orientation of young scientists to the team roles of Shaper and Organizer – only 17.4% and 16.0% of respondents have a high level of orientation to these roles, respectively. This indicates that young scientists have rather weak abilities to unite the efforts of the entire teaching staff and generate new ideas.

Particularly notable is the fact that the least important for young scientists was the team role of the Organizers, although this role is relevant for new and innovative organizational activities and creative approach of scientists to work. Taking into account the above, it can be argued that there is a need to strengthen the orientation of young scientists to the team role of the Organizers.

Thus, the data obtained, according to the authors, indicate the need for a certain leveling of team roles performed by young scientists for their flexible use in specific professional situations. This is especially true for the roles of Monitor evaluator, Resource investigator and Organizer, which are responsible for the innovation activities of organizations.

Since the team-role complementarity (interchangeability) is an important principle of teamwork in educational organizations, the authors conducted a factor analysis of the data reflecting the orientation of young scientists to the main team roles.

**Factor analysis** identified three leading factors that reflect the orientation of young scientists to the

main team roles (Table 2). These factors describe 50.77% of the total variance and include the most closely related indicators.

**Factor 1 ("Initiation")** explains 18.52% of the total variance of the data, which is bipolar and combines the following team roles: a) on the positive pole – the role of the Organizer (0.580); b) on the negative pole – the role of the Teamworker (-0.743).

The *positive pole* of this factor is the orientation of young scientists to a team role, which ensures the creativity of the team and the generation of innovative and non-standard ideas (Organizer).

This factor's *negative pole* is related to emotional leadership, which reach agreement in the group, clears up misunderstandings, and is concerned with the needs and problems of team members (Teamworker).

**Factor 2 ("Shaping")**, which explains 17.53% of the total data variance and is also bipolar, reflects another set of team roles that are necessary for the successful work of teams in the young scientists' teams, namely: a) at the positive pole are the roles of Shaper (0.523), Coordinator (0.464), and Monitor evaluator (0.441); b) at the negative pole is the role of Implementer (-0.787).

This factor's *positive pole* reflects young scientists' orientation to the team roles that provide scientists' leadership and team-members' joint efforts (Shaper), scientists' ability to highlight different points of view and make well-balanced decisions (Coordinator), as well as scientists' ability to analyze situations, make logical conclusions, and provide control (Monitor evaluator).

This factor's *negative pole* is related to young scientists' orientation to the team roles that are responsible for the transformation of ideas into specific tasks and for the accomplishment of these tasks (Implementer).

**Factor 3 ("Search")** explains 14.72% of the total data variance and is also bipolar, combining the following team roles: a) at the positive pole is resource Investigator (0.800); b) at the negative pole is Finisher (-0.567).

This factor's *positive pole* reflects the young scientists' orientation to the team role that ensures team's interaction with the external environment (Resource investigator).

This factor's *negative pole* is related to the young scientists' orientation to the team role that encourages the team to do everything on time and to complete the job (Finisher).

Thus, the results of factor analysis demonstrated the possibility of a certain "compression" of team role positions, which, according to the authors, can be the basis for modernization of the classical eight-role structure of management teams in educational organizations (Belbin, 2010). However, the roles

Table 2

**Young scientists' orientations to team roles (based on the results of factor analysis)**

Team roles	Factor 1	Factor 2	Factor 3
	Initiation	Shaping	Search
Organizer	0.580		
Teamworker	-0.743		
Shaper		0.523	
Coordinator		0.464	
Monitor evaluator		0.441	
Implementer		-0.787	
Resource investigator			0.800
Finisher			-0.567

Source: composed by the authors based on the research results

that belong to opposite poles are obviously directly opposite. Therefore, in situations where team members have to perform several roles simultaneously, such performance becomes impossible.

Further, according to the results of factor analysis, cluster analysis was conducted, which allowed to identify four types of heads of educational organizations with appropriate management styles and orientations to team roles: organizing, forming, researching and initiating (Table 3).

Table 3

**Young scientists' manager types (in relation to their team-role orientations)**

Factors	Clusters			
	Organizing	Shaping	Researching	Initiating
Initiation	-0.57839	-0.43392	-0.41580	1.18575
Shaping	-0.38105	1.23621	-0.75490	0.03549
Search	-1.13413	0.27067	0.81047	-0.15306

Source: composed by the authors based on the research results

As can be seen from Table 3, the types of young scientists who are oriented towards certain "extended" team roles are distributed as follows.

The **first type (organizing)** includes young scientists who have a high negative average value of the factor "Search" and a slightly lower negative value of the factor "Initiative", which indicates a tendency to perform structured work to its completion within the established limits. The factor "Formation" is not manifested.

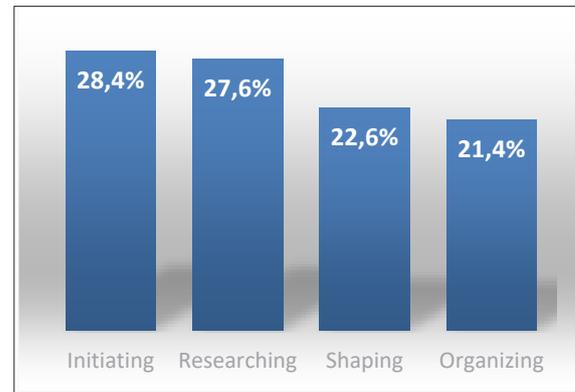
The **second type (shaping)** is characterized by a high average value of the factor "Shaping" and insufficiently expressed by other factors. That is, representatives of this type are focused on leadership, uniting the efforts of team members, interest in different points of view to make informed decisions, control over work. At the same time, such managers are not inclined to search and research.

The managers of the **third type (researching)** have high values on factor "Search" and high negative values on factor "Shaping" with insignificant values on factor "Initiation". That is, young scientists of this type look for options, resources and means to achieve goals in the external and internal environment. At the same time, they are not oriented to developing good relationships in the team and generating new ideas and approaches.

The managers of the **fourth type (Initiating)** are characterized by high values for the factor "Initiation" and low values for other factors. That is, young scientists belonging to this type are creative, generate innovative and non-standard ideas in the team, have a rich imagination, and are able to solve non-standard problems. However, they are not able to find resources and build relationships.

The authors believe that young scientists of organizing and forming types use mainly traditional management styles in their work, while managers of research and initiative types use mainly innovative management styles.

The quantitative distribution of young scientists' management styles in team relation to young scientists' team roles is given in Figure 2.



**Figure 2. Quantitative distribution of management styles of young scientists in the team depending on the team-role orientation of managers (% of the total number of respondents)**

Source: composed by the authors based on the research results

As can be seen from Figure 1, 21.4% of respondents belong to the organizing type and are quite organized, able to create a favorable working atmosphere in the team and interested in the results of work. 22.6% of young scientists belong to the forming type and are characterized by the ability to transform intentions into concrete action plans and complete the tasks. Almost every third young scientist (27.6%) belongs to the research type and is able to establish links with the external and internal environment in order to find new opportunities. Leaders of initiative type make up 28.4% of the total number of respondents and are innovators and generators of new ideas, as well as creators of friendly relations between all team members.

Thus, the data obtained indicate that a little less than half of young scientists (44.0%) use traditional management styles, and a little more than half of them (56.0%) prefer innovative management styles, which indicates a certain need for the development of such an element of social competence as Teamworking in the community of young scientists in Ukraine.

### 5. Conclusions

Teamwork is an important element of social competence of young scientists in Ukraine. In the theoretical substantiation of this work, the authors proved that social competence is formed in a team and created a model of social competence. Teamwork

belongs to the activity part of social competence. That is why in an additional survey, in cooperation with the NGO "ReSURS", a study of team roles was conducted according to the method of R.M. Belbin. The results of this study revealed in more detail and confirmed the main results of the main mass survey of young scientists of the project "Realization of the potential of young scientists in the context of integration of science, education and business", where Teamwork is one of the most developed soft skills of young scientists (Shkoda et al., 2020) at the maximum level. The results of the study, obtained by the authors using cluster analysis, showed that the types of managers are quite evenly distributed in the teams of young scientists: Initiative (28.4%), Research (27.6%), Shaping (22.6%) and Organizing (21.4%). Factor analysis showed some compression of team roles in the teams of young scientists. But, in general, young scientists need

better development of such team roles as Monitor evaluator, Resource investigator and Organizer to increase their social competence.

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# FOREIGN EXPERIENCE IN PREVENTING MILITARY AND ECONOMIC CRIMES

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**Abstract.** The *purpose* of the study is to highlight the problematic issues of foreign experience and ways to prevent military and economic crimes. *The main content.* The article analyzes foreign countries, including the countries of the European Union. *Methodology:* the methodological basis of the study is the dialectical method of scientific knowledge, through the application of which the legal, functional, organizational and procedural aspects of methodological approaches to understanding the problematic issues of foreign experience and ways to prevent military and economic crime are considered. *Conclusions.* Based on the analyzed foreign experience in the prevention of military crime, the necessity of creating in Ukraine a special state body in the structure of the Armed Forces of Ukraine, the main tasks of which should be: determining the main directions of state policy in the field of crime prevention in the Armed Forces of Ukraine; conducting nationwide research to identify the level of latent crime in the Armed Forces of Ukraine; coordination of the activities of state structures and law enforcement agencies to implement measures to combat and prevent crime in the Armed Forces of Ukraine; generalization of the practice of combating crime in the Armed Forces of Ukraine and organization of international cooperation on combating and preventing crime in the military sphere, etc.

**Key words:** crime prevention, military and economic crimes, prevention, war in Ukraine.

## JEL Classification:

### 1. Introduction

The unstable position of Ukraine in the world political and economic arenas has led to an aggravation of the crime situation in the country. A separate and rather urgent problem has become a sharp increase in the number of criminal offenses of an economic nature, as well as particularly serious crimes committed by servicemen of the Armed Forces of Ukraine.

The year 2012 was a turning point for the Ukrainian army from the economic point of view, as for the first time the state budget actually allocated UAH 14.7 billion (0.98% of Ukraine's GDP) for the expenditures of the Ministry of Defense of Ukraine. However, even this amount of money is not enough, as the sustainable development of the Armed Forces of Ukraine requires 1.45% of GDP (21.8 billion UAH). It is also necessary to bring the structure of expenditures in the military sphere closer to the best world standards, according to which the ratio of expenditures on the maintenance of military personnel,

their training and development of weapons and military equipment should be 50%: 20%: 30%, respectively (in Ukraine in 2012 this ratio was as follows: 82%: 5.7%: 12.3%).

According to the Scientific Centre for the Prevention of Corruption in the Security and Defense Sector, as of 2018, 2% of whistleblowers disclosed corruption in the ATO and military units; 22% of reports concerned other offences rather than corruption (Dmytrenko, 2022).

Strengthening the rule of law, prevention of war crimes, especially under martial law, remains extremely important for Ukraine.

The Concept of implementation of the state policy in the field of crime prevention identifies the main problems that need to be addressed, including: imperfection of legal, organizational, financial, personnel, information support for crime prevention; inadequate level of comprehensive preventive measures aimed at eliminating the causes and

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conditions of crime, as well as preventive work with persons prone to commit them.

Despite the current state of war in Ukraine, the issue of prevention of military and economic crimes is insufficiently researched.

The purpose of the study is to consider the criminological vector of the problem of prevention of military and economic crimes through the prism of analysis of foreign experience of prevention.

## 2. Literature review

Insufficient research into the problems of crime prevention in the armed forces and the validity of countermeasures has an extremely negative impact on the effectiveness of the Armed Forces of Ukraine.

In criminology, normative legal acts, scientific literature, the terms "prevention", "avoidance", "suppression" and "preventive measures" are used which are similar in meaning. Some scholars distinguish between the terms "prevention" and "preventive measures", associating them with different levels, directions and types of activities. Thus, A. F. Zelinsky defines the concept of "crime prevention" as "a system of measures taken by society to curb the growth of crime and, if possible, to reduce its real level by eliminating and neutralizing its causes and conditions that contribute to it, as well as by preventing and suppressing certain specific crimes." (Kovalova, 2020)

The relationship between the concepts of "prevention", "termination" and "prevention" was most accurately, according to the authors, revealed by Y. F. Ivanov and O. M. Dzhuzha, who understand crime prevention as a multi-level system of state and public purposeful measures to detect, eliminate, neutralization of the causes and conditions of crime. On this basis, prevention is considered as an activity to eliminate, neutralize or weaken the factors that give rise to crime or contribute to it.

Termination consists in actions aimed at stopping criminal activity that has already begun and preventing the occurrence of a criminal result. Prevention is the activity of the state and society aimed at keeping crime at the lowest possible level by eliminating its causes and conditions, as well as preventing and stopping specific criminal offenses.

Depending on the hierarchy of causes and conditions of crime, there are three main levels of its prevention: general social, special criminological and individual, which were considered in Chapter 3 of the thesis.

The main task of the Armed Forces of any state is to defend its sovereignty and protect it from acts of aggression both from other states and within its borders from various dangers (e.g., terrorist groups, etc.). The creation, maintenance and use of the armed forces is the right of the state, which allows

it to remain independent and realize its national interests. The army as an institution of the state appeared with the emergence of the first states of the world. At the same time, the first need for legal regulation of the responsibility of servicemen for military criminal offenses arose (Dmytrenko, 2022).

Not only Ukraine, but also a number of other countries are engaged in the reform of the Armed Forces, and therefore borrowing positive experience of forming their own Armed Forces, solving social problems among officers dismissed from the army, creating a small professional army with highly qualified specialists, etc. is an extremely important task, especially in the current conditions in Ukraine.

## 3. Materials and methods

The study is based on the work of foreign and Ukrainian researchers on methodological approaches to understanding the problematic issues of preventing military and economic crimes.

With the help of the epistemological method, the essence of methodological approaches to understanding the problematic issues and prevention of war crimes was clarified, thanks to the logical and semantic method, the conceptual apparatus was deepened, the essence of the concepts of problematic issues and ways to prevent war crimes was determined. Using the system-structural method, the constituent elements of methodological approaches to understanding the problematic issues of international experience and ways to prevent war crimes are investigated. The structural-logical method is used to identify the main problematic issues of international experience and ways to prevent war crimes.

## 4. Results and discussion

According to the materials received from the "White Book" of the Armed Forces of Ukraine, in 2018, information on 57 persons who committed criminal corruption offenses (in 2017 – 64 persons) was processed, including: 6 criminal offences were registered in the Unified Register of Pre-trial Investigations related to misappropriation, embezzlement or seizure of property by abuse of office (Article 191 of the Criminal Code of Ukraine); 1 – abuse of power or official position (Art. 364 of the Criminal Code); 22 – acceptance of an offer, promise or receipt of an undue advantage (Art. 368 of the Criminal Code), which are quantitatively the most common in the Criminal Code; 18 – abuse of influence (Art. 369-2 of the Criminal Code); 6 – theft, misappropriation, extortion of military property or taking possession of it (Art. 410 of the Criminal Code), 4 others.

In 2018, court verdicts (decisions) against 30 people (in 2017 – against 81 people) came into force, including: 24 were convicted (3 – to imprisonment for a fixed term, 18 – to a fine, 3 – released from punishment). In addition, 6 proceedings were closed (2 – amnesty, 2 – expiration of the statute of limitations, 1 – change of circumstances, 1 – due to death).

In 2018, 27 persons were dismissed from military service in the Armed Forces of Ukraine for official offences, including: 16 were deprived of military rank and 11 were brought to disciplinary responsibility. Decisions on 15 persons are still being made by the courts.

Participated in 182 official investigations and anti-corruption inspections (32 in 2017). Losses to the state were prevented as a result of the detected facts of corruption offenses in the amount of about UAH 27.4 million (in 2017 – UAH 22 million). The management of state-owned enterprises was checked for conflicts of interest related to their private enterprises or corporate rights (364 persons were checked, 11 of them were found to work part-time, 45 (12%) – have private enterprises in their personal ownership). According to the decision of the Ministry of Defence leadership, materials on 51 persons were sent to law enforcement agencies, 18 persons were dismissed from their positions (Dmytrenko, 2022).

Misuse of budget funds is another criminal offence that is often committed in the Armed Forces of Ukraine.

Illegal use of budget funds today is a negative phenomenon of social reality, which has become widespread in many sectors. The illegal use of budgetary funds is of particular relevance in the Armed Forces of Ukraine.

Embezzlement of state finances allocated to the Ministry of Defence of Ukraine in the context of the ATO/JFO has increased the threat to national security and unity of our state, increased losses of personnel of the Armed Forces of Ukraine, complicated their modernization and reform. The prevalence of this phenomenon actually contributes to the violation of the constitutional rights of all citizens of Ukraine, as the state is unable to properly finance certain areas of foreign and domestic policy (Dmytrenko, 2022).

According to the military prosecutor's office, during 2010-2014, the number of criminal offenses related to the illegal use of budget funds in the Armed Forces of Ukraine increased by almost 2.5 times: from 31 to 72, respectively. During 2016–2020, their number almost tripled.

According to the international organization Transparency International and NATO experts, about 30% of the budget of the defense sector

of our country is stolen by corrupt officials (Dmytrenko, 2022).

The results of inspections of financial and economic activities of the Armed Forces of Ukraine also testify to the scale of the phenomenon of illegal use of budget funds in the military sphere. Thus, during 2010–2012, in certain areas of the Ministry of Defence of Ukraine, the control and audit bodies found financial violations and criminal offenses related to the illegal use of budget funds totaling UAH 1.3 billion, including those that led to losses of more than UAH 200 million (Dmytrenko, 2022).

In most countries of the world military criminal law is an independent branch of legislation. Exceptions are the CIS and Baltic countries, the republics that were part of the former Yugoslavia, as well as Bulgaria, Hungary, Vietnam, People's Republic of China, Mongolia, Poland, Romania, Czech Republic, Sweden. In these countries, provisions on military criminal offences are included in the texts of criminal codes in the form of separate sections, paragraphs or chapters. In the criminal codes of the CIS countries this section is called "Crimes against military service". In Ukraine it is Chapter XIX of the Special Part of the Criminal Code of Ukraine, which is entitled "Criminal offences against the established order of military service (military criminal offences)" (Articles 401-435) (Dmytrenko, 2020).

In most states, including Ukraine, Azerbaijan, Belarus, Kazakhstan, the Russian Federation, etc., the norms of military-criminal law are directly included in the criminal codes, in connection with which there is a fixed concept of military-criminal misconduct, military crime or crime against military service, and they have no fundamental differences between them, including with the definition of military-criminal misconduct formulated in our legislation and set forth in Article 401 of the Ukrainian Criminal Code (Dmytrenko, 2022).

In the countries of the Anglo-American (Great Britain, Ireland, Canada, Australia, New Zealand, etc.) and Romano-Germanic (Germany, France, Italy, Spain, the Netherlands, Austria, Switzerland, etc.) legal families, as noted above, issues related to military-criminal offenses are not regulated by criminal codes (some of them do not have a criminal code as such). In these countries military-criminal law has become an independent branch of law. At the same time in the legislation of this group of countries there is no unified approach to the definition of the term "military-criminal offenses" (Dmytrenko, 2022).

Thus, for example, in the United States, counteraction to offenses in the military sphere and the issue of criminal and disciplinary responsibility of

servicemen is provided by a huge number of norms of military legislation, among which one of the main places is occupied by the Uniform Code of Military Justice (1951).

The analysis of this legal act gives grounds to assert its punitive nature, since in fact 40% of its norms out of 140 articles reveal the essence of punishable acts, sanctions for their commission and punishment. In addition, the U.S. Uniform Code of Military Justice does not contain the concept of a military criminal offense or crime, but does disclose the concept of a "subject of a military criminal offense," which includes a person who has committed a criminal offense as defined in Title X of this Code, and/or a person who aids, abets, counsels, commands, provides, or ensures the commission of the act, if the act is primarily committed by him (Article 77). (Uniform Code of Military Justice, 1951)

There is no definition of the term "military criminal offence" in France, where the main source of military criminal law is the Code of Military Justice. (Code de Justice Militaire, 2006)

There is no definition of the concept of "military criminal offence" in the UK, whose main legal act in this area is the Armed Forces Act (Code de Justice Militaire, 2006). Despite this, the British Armed Forces Act implements the principle of the priority of criminal law over criminal procedure and other norms. The first section of the document (Articles 1-49) contains exclusively criminal-law provisions. It is devoted to the formulation of criminal offences and general issues of military-criminal law. (Armed Forces Act, 2006)

In Germany, in the normative legal act *Wehrstrafgesetz* (Law "On Military Punishments"), the norm defining the concept of a military criminal offense, although it exists (§2), is formal and refers to the Special part of this law. (*Wehrstrafgesetz*, 1957)

This law (*Wehrstrafgesetz*) (Law on Military Punishments) is the main source of military criminal law; the scope of its action is limited to the criminal offenses formulated in the second part of this law and entitled "War crimes". (*Wehrstrafgesetz*, 1957)

Analyzing the above international normative legal acts, we cannot but agree with Ya. S. Kulkina that in modern conditions the norms of national and foreign military criminal law remain an important legal means of protecting military service relations from criminal encroachments and protecting the interests of the state in military sphere. The attention of legislators of various states is focused on this, as evidenced by its dynamic development. (Dmytrenko, 2022)

Analysis of foreign experience in combating crime shows that in modern conditions criminal manifestations pose a real threat to democratic development and national security in most countries

of the world. Criminal elements, with close interregional and international ties, are increasingly directing their efforts at establishing control over the most profitable areas of economic relations. (Dmytrenko, 2020)

Thus, the absence of a unified national concept of combating crime and the lack of coordination between the national, regional, and branch state programs of social prevention in the corresponding areas do not contribute to the prevention of crime among servicemen in the country. This situation does not correspond to the proclaimed constitutional provisions on a social, democratic and law-governed state, since the current situation does not take into account the realities of today, since the fight against war crimes has long ago become a global world problem, which has become not only national, but also international, transnational in nature. (Dmytrenko, 2022)

Over the past decade, there has been an upward trend in the level of crime in this area worldwide, and at the same time there has been a lack of social and legal control measures for the growing criminalization of social relations. In Ukraine there is no approved at the state level concept of combating crime, which is due to many economic, social, political, legal and other features and contradictions of the development of market relations in the country: the creation of a system of criminal justice has not been completed; the development of national legislation continues; state institutions are introduced, which should meet the best European and world standards in this sphere of social relations. (Shkuta, 2020)

In the early 2000s, the dynamics and trends in crime around the world remained virtually unchanged. The activities of organized criminal groups are becoming more and more sophisticated. This situation occurred in spite of the considerable system of international organizations and institutions to combat war crimes, including: The General Assembly, the Security Council, the Secretariat (sector) for Crime Prevention and Criminal Justice, the Economic and Social Council, the International Court of Justice, the Commission on Crime Prevention and Criminal Justice (created in 1991 from the Committee on Crime Prevention and Control), regional UN research institutes and centers, etc. (Dmytrenko, 2022)

It is extremely alarming that military crime is growing every year in the world as a whole. For example, according to official data, over the past 10 years the main indicators of this type of crime have been increasing in a large part of European countries.

A significant contribution to the fight against crime in the world is made by international non-governmental organizations: the International Association of Penal Law; the International Association of

Criminology and others. A special place is given to the International Criminal Police Organization (Interpol). The fight against crime at the regional level is supported by the Council of Europe (Parliamentary Assembly, Committee of Ministers, European Committee on Legal Cooperation, European Committee on Crime), the Central Criminal Police Agency (Europol).

The analysis conducted by A. M. Klochko testified that the most achievable forms of sharing experience in the fight against crime are: exchange of information on ways of committing, concealing and detecting criminal offenses; special literature; results of scientific research; delegations of practitioners and scientists, etc. The exchange of experience is facilitated by: joint preparation of collections of research papers, scientific and educational literature; information, proposals, and draft legislation; increased international specialization and cooperation in the development of measures aimed at eliminating the causes and conditions that contribute to crime; joint research and implementation of research; and agreement on current and future plans to combat crime among military personnel. (Dmytrenko, 2022)

In France, the National Council for Crime Prevention was created, composed of members of parliament, mayors, ministers, experts and representatives of the business community. The head of the National Council for Crime Prevention, both general and military, is the Prime Minister of the country.

The Council carries out the following tasks: finances crime prevention programs; informs the public about the state of crime; develops national crime control policies; and stimulates state anti-crime initiatives. (Dmytrenko, 2022)

In Britain there is a Standing Conference on the Prevention of Military Crime, which includes representatives of the Confederation of British Industry, the Chamber of Commerce, trade unions, and the Association of Chief Police Officers. This organization includes working groups that specialize in preventing crimes among members of the armed forces. (Dmytrenko, 2022)

A significant achievement of the system of prevention of criminal offenses in developed foreign

countries should be recognized as its thorough legal support. State programs include determining the areas of sociological research, developing their methods, training personnel, financing, organizing and conducting preventive measures with an emphasis on early prevention. (Dmytrenko, 2021)

Programs often include a system of special measures of criminological prevention related to criminal, procedural and penitentiary law. A characteristic feature of the fight against crime among military personnel in the United States in recent decades is the desire for centralized planning and coordination of this sphere of activity, the creation of special bodies for this purpose and giving them fairly broad powers. (Arkusha, 2019)

Similar bodies have been established in many countries around the world that systematically analyze the state of affairs in the area of preventing military-criminal offenses and make appropriate recommendations to government structures for making appropriate decisions. For example, Austria has an advisory service for crime prevention with 143 regional offices; Belgium has a High Prevention Council; Denmark has a High Prevention Council with 46 organizations. (Dmytrenko, 2022)

Therefore, strengthening the rule of law and the prevention of war crimes remains a very topical problem that requires a separate scientific study and legal regulation.

## 5. Conclusions

Thus, based on the above, it can be concluded that, using the analyzed foreign experience of prevention of military crimes, it seems necessary to create in the structure of the Armed Forces of Ukraine a special state body, whose main tasks should be: to determine the main directions of state policy in the field of prevention of crime in the Armed Forces of Ukraine; conducting nationwide research to identify the level of latent crime in the Armed Forces of Ukraine; coordinating the activities of state structures and law enforcement agencies in implementing measures to combat and prevent crime in the Armed Forces of Ukraine; generalizing the practice of combating crime in the Armed Forces of Ukraine and organizing international cooperation to combat and prevent crime in the military sphere, etc.

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